Excavations at Cheeseman's Green

The Development of Prehistoric, Romano-British and Medieval Landscapes

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Excavations at Cheeseman's Green: The Development of Prehistoric, Romano-British and Medieval Landscapes

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1. Introduction

Between 2010 and 2019 Wessex Archaeology carried out a programme of archaeological works on a 170 ha development site at Cheeseman's Green, south-east of Ashford, Kent, centred on NGR 602500 139700 (Fig. 1.1). The works, which comprised trial trench evaluations, strip-map-and-sample excavations and watching briefs, revealed evidence for activity dating from the Mesolithic to the post-medieval period, with important evidence for inhabitation and mortuary activity in the Mesolithic period and a particular emphasis on the occupation and organisation of the landscape in the late prehistoric and Romano-British periods.

Background

Prior to Wessex Archaeology's works the site had been subject to a desk-based assessment and walkover survey (Sparey-Green 2004) and a geophysical survey (Stratascan 2004). These preliminary works, combined with two phases of trench evaluation (Wessex Archaeology 2011; 2012), led to the identification of a number of areas of archaeological potential (Areas 1–7, totalling 7.9 ha) which were then subject to excavation; subsequently, two areas of controlled ground reduction were subject to a watching brief (Areas 8 and 9, totalling 2.7 ha) (Wessex Archaeology 2014a) (Fig. 1.2). Some of the Areas comprised more than one block – Areas 3E (east) and 3W (west), Areas 4N (north) and 4S (south), and Areas 9A–9E.

Subsequently, a further geophysical survey (Wessex Archaeology 2014b), covering 3.2 ha to the south of Area 7, revealed several pit-like anomalies, and a third phase of evaluation was undertaken in two fields at the south-west of the development site (Wessex Archaeology 2014c). On the basis of these works two further areas (Areas 10E and 10W, totalling 3.1 ha) were subject to strip-map-and-sample excavation (Wessex Archaeology 2015), and another two small areas (Areas A and B) subject to watching brief, giving a total area subject to excavation of approximately 11 hectares.

Further phases of work took place south of Area 6 and east of Areas 7 and 10. Two episodes of trial trench evaluation were followed by targeted phases of strip, map and sample excavation at Ponds A-C and Area 11 Plots B1–B3 (Wessex Archaeology 2017a), totalling some 3.6 hectares. A third phase of trial trench evaluation took place in Area A1 (Wessex

Archaeology 2017b), followed by evaluation of Areas B4 and B5 (Wessex Archaeology 2018) and B6-B8 (Wessex Archaeology 2019) covering an area of 6.3 hectares.

The Areas, which were distributed over approximately 2.3 km east–west by 1.3 km north–south, flanked the north-west flowing East Stour River, lying either on the valley floor at around 38 m OD (Areas 4N, 5, 8 and 9A–9E) or on the areas of slightly raised ground which flank it. These include, to the south-west, a low ridge (up to 40 m OD) between the river and a low-lying area now drained by the Ruckinge and Bilham Dykes (Areas A1, B4–B8, 2, 3E and 3W, 4S, 6, 7, and 10E, 10S and 10W), and a small elevated area (up to 39 m OD) to the north of the river (Area 1). The geology is mapped as Weald Clay Formation (Mudstone) with alluvium on the valley floor (British Geological Survey on-line viewer) (Fig. 1.2).

The site lies within the parishes of Sevington to the north, Kingsnorth to the south-west and Mersham to the south-east, in the Hundred of Chart and Longridge. It is bounded to the north and west by the A2070 and to the east by Waterbrook Avenue. The projected line of a Roman road between Lympne and Maidstone passes to the south of the site.

It occupies a landscape that has been subject in recent years to a number of large-scale archaeological excavations related to developments around Ashford (Fig. 1.1), including the construction of the High Speed 1 (HS1). These have revealed evidence of extensive occupation spanning the late prehistoric and early Romano-British periods. They include Middle/Late Iron Age to early Romano-British settlements at Waterbrook Park (Wessex Archaeology 2008a; Gittins *et al.* in prep.) and south-east of Park Farm (Powell 2012), and another with evidence of high status burials at Brisley Farm (Stevenson 2013). An extensive Romano-British settlement was excavated at Westhawk Farm (Booth *et al.* 2008). Other sites of this broad period in the area include Foster Road (Powell 2010; Powell and Birbeck 2010), Orbital Park (Philp 1991), West of Blind Lane, Sevington (Oxford Archaeology 1999), and Boys Hall Moat (Booth and Everson 1994).

Site Phasing

The long-term occupation and use of the landscape around the site, as evidenced by features and finds of multiple periods – prehistoric and historic – created a number of difficulties both

in dating individual features and in providing a coherent phasing for the numerous enclosures, field systems and other land divisions recorded across the site.

The archaeology is dominated by ditches, which vary considerably in their form, alignment and arrangement. Some define identifiable enclosures of varying date, size and function, but the majority appear to be field drainage or boundary ditches. Most are straight, and in some areas (eg, Areas 2, 4S, 10E and 10W) their rectilinear arrangement appears to represent relatively coherent and extensive field systems. Others are curving, although rarely conforming to the local topography, and there are also many relatively short lengths of ditch with no obvious spatial relationships to other features. In some areas of the site (eg, Areas 1, 3E, and 7) there is a very high density of ditches, with many of them intercutting, indicating multiple phases of landscape organisation.

The phasing of these features is difficult for a number of reasons. The clay geology and alluvial soils present over much of the site frequently made it difficult to distinguish between the fills of intersecting ditches, and even in some cases between the fills of ditches and the natural into which they were cut. In those areas with high densities of ditches, confidently determining the courses of individual ditches, and establishing their stratigraphic relationships, was often difficult, and in many cases there remains some uncertainty about the recorded relationships.

The quantities of datable finds varied considerably between the ditches. Considering the often predominantly agricultural function of the features it is not surprising that some contained no datable material, and often no finds at all. Moreover, given the long-term occupation and agricultural exploitation of this landscape (including probably manuring) it is also not surprising that where finds were present, the assemblages frequently included both residual and intrusive materials due to the frequent intersection of features of different dates, and the potential disturbance of ditch fills by scouring and clearing. For example, the ditches in what appears to be a very regular field system in Area 2 produced only 18 sherds of pottery, but these included sherds of Middle Bronze Age, Early/Middle Iron Age, Late Iron Age/early Romano-British, Romano-British and early medieval date.

In addition, the often chronologically undiagnostic nature of many of the pottery forms and fabrics, in both the late prehistoric ceramics and that material which continued in use largely unchanged from the Late Iron Age into the early Romano-British period, often limited the capacity for pottery to provide clear phasing evidence. This is especially the case

where, in some areas of the site, it is evident that the Late Iron Age and early Romano-British period witnessed a number of phases of landscape reorganisation.

The site-wide phasing presented below, therefore, must remain tentative, and its interpretation will inevitably be informed by the results of subsequent episodes of fieldwork.

2. Mesolithic and Neolithic

Mesolithic

The first inhabitation of the area around the East Stour that left any significant archaeological trace took place in the Late Mesolithic. A scatter of struck flint amounting to some 6644 pieces was recovered from across the Areas, and while not all of this need be of Mesolithic date the majority of it has technological and typological features which place it firmly in that period.

The whole assemblage is discussed in detail in Chapter 6 but in summary, traits indicating a Mesolithic origin for much of the material include microliths (36 examples of varying types), tranchet axes (23 examples), eight truncations, and a ratio of blade and bladelet cores to flake cores of 1:2.4. Evidence of tool manufacture and maintenance are also present in the form of axe thinning flakes and tranchet blade resharpening flakes, and a single microburin. Although the numbers of true blades and bladelets compared to flakes is 1:16, a high proportion of the flake material derives from industries geared towards the production of blade blanks using a combination of both hard and soft hammers (see Chapter 6: worked flint).

The material was concentrated in the centre of the site, in Areas 4N and 9A in an area of slight topographical relief – perhaps in the order of only a few tens of centimetres - from the relatively flat floodplain of the East Stour, although tranchet axes in particular were found across the investigated areas. Although pieces were retrieved from later features, the bulk of the material was contained within a layer directly beneath the ploughsoil.

The significance of this deposit and the prevalence of lithics within it had been identified during the evaluation (Wessex Archaeology 2011) when a quantity of worked flint in mint condition was recovered from trenches in Area 4N. During subsequent mitigation, flint repeatedly weathered out of the stripped surface of Area 4N: this material was hand-collected over a period of several weeks as more material became apparent at the surface. Subsequently, test pitting was employed in order to accurately record the location of artefacts and to ascertain the vertical distribution of lithics through the layer. In total, 53 test pits (1 m^2) were hand-excavated in 100 mm spits (Fig. 2.1).

The east- and westward limits of the flint scatter were broadly defined by the limits of Area 4N in each direction, as quantities of lithics in Areas 9D and 9B (to the west and east respectively) were much lower. To the south, no comparable material was recovered from the higher ground in Area 4S on the opposite side of the modern machine-cut channel carrying a branch of the East Stour. To the north, Mesolithic activity extended for approximately 100 metres in a narrow diffuse spread of lithics into Area 9A, where material visible on the surface of the silts was 3-dimensionally recorded (Fig. 2.1).

The flint-bearing layer (16003/50017) was primarily composed of silt with some slight clay content which increased with depth. With the exception of the upper 0.4 m, the sequence was fluvial/alluvial in nature, and contained no evidence of standstill phases, stases, or land surfaces. Towards the base of the sequence were one or two thin (centimetre scale) layers of perfectly sorted silt interleaved with sand; this silt almost certainly wind-blown loess. Although it had probably settled in standing water (as suggested by the sharply-bounded coarse lamination with fine sands), it remains perfectly sorted without any significant clay content, and has not been reworked alluvially from existing sediments.

The presence of loess, a product of Glacial conditions, strongly supports a Pleistocene date for the lower sequence, whilst the lack of cryoturbative features suggests an end-Pleistocene date. A broadly late Devensian date for the sequence therefore seems to be reasonable.

During test-pitting, the flint artefacts were found to be concentrated within the upper 0.2 m of the sediments in Area 4N (16003), densest at the top, with the number of artefacts falling off quite sharply down profile. The flints therefore appear to have translocated downwards somewhat, almost certainly due largely to the action of earthworms. There is very little likelihood of significant lateral movement, and no mechanism by which lithics had been ‘washed’ in or disturbed by significant alluvial action; in terms of horizontal distributions they can be considered to be more-or-less *in situ*.

Although, as noted above, the upper layers of the underlying geological deposits are alluvial in deposition, at least in part aeolian, and either way very likely to be loess-derived, by the Late Mesolithic it is almost certain that the sediments would have formed a stable land-surface, possibly somewhat drier than the immediate surroundings and supporting slightly different vegetation due to the slight topographical relief and increased permeability of the silty substrate compared to the surrounding clays.

Careful observations of the exposed ploughsoil removed from Area 4N revealed only a little lithic material of a rather different nature, and it therefore appears that the level of the machine-stripped layer 16003 was at a comparable level to the Mesolithic ground surface, protected from the plough by a modest build-up of sediment since the Mesolithic. This material may have accumulated as a result of overbank flooding events, or – perhaps more likely given the apparent lack of Holocene alluvium elsewhere on the wider site – from wind-blown (aeolian) deposition.

The level at which lithics began to be encountered is therefore likely to have been the ground surface (or close to it) during the Late Mesolithic, and indeed the ground level appears unlikely to have changed significantly over the last 11,000 years or so.

Magnetic susceptibility survey

No Mesolithic features were visible at the level of the machined-stripped surface in Area 4N (although see below for contemporary features elsewhere on site). However, the quantities of lithic material present, and the lesser quantities of burnt unworked flint which were also recovered, led to the presumption that there may have been hearths present within the area. The absence of visible indications of any burning could have been due to the lack of significant amounts of clay minerals within the upper sediments (which give the familiar fired clay/reddening effect upon heating), rather than because of a real absence of hearth-related features.

In order to test for significant amounts of burnt soil which can remain within former hearth areas, a magnetic susceptibility survey was undertaken. Although dispersed through the profile by small-scale bioturbation and pedogenesis, any such soil should have a heightened magnetic susceptibility, indicative of burning (Clark, 1996; Scollar *et al.*, 1990). It was hoped that correlation of magnetic susceptibility with flint distribution may allow hearths to be identified.

Method

A magnetic susceptibility survey was undertaken using a Bartington MS2 meter and field coil (MS2D), which allows for rapid survey and instant assessment of results in the field. The calibration of the sensor assumes that the sample size is infinite and therefore the calibration is best expressed in volume susceptibility units; χ x 10-5 SI (dimensionless SI units).

The survey was undertaken on a 2x2 m grid across Area 4N, across the stripped surface of 16003. Where visible features of other periods of activity were present, readings were taken but were omitted from the results (tree-throw holes in particular contain old topsoil material, which is itself a source of heightened magnetic susceptibility).

Results

Values of χ obtained were between 3 and 20 x 10-5 SI. The results are plotted in Fig. 2.2. The χ survey data need to be interpreted with caution, since not only are the values of χ quite low, but it should also be kept in mind that on this palimpsest site the results will include enrichment from all periods.

No definite indication of burning (eg, a hearth) is present across the survey area, but there are concentrations of χ enrichment in some areas, particularly to the northern corner of the site. No correlation with the distributions of burnt or worked flint were observed.

Cremations

Remarkably, the lithic material dating to the Late Mesolithic was accompanied by contemporary archaeological features (Fig. 2.3). Two widely-separated cremation graves lay some 356 m apart, and were radiocarbon dated to the Late Mesolithic, one in Area 9D (50160) and the second in Area 3W (50921).

Area 3W cremation burial 50921

In Area 3W an irregular discrete feature (50921) was interpreted as a shallow pit or tree hollow. 0.50 by 1.3 m in plan, it contained 207 g of cremated human bone from an adult (possibly female) aged 25–40 years. No material accompanied the burial, which returned a radiocarbon date of 5990–5800 cal. BC (SUERC-75539, 7019 ± 30 BP).

Area 9D cremation burial 51060 (context 51061)

In Area 9D feature 51060 was a shallow (0.09 m deep) circular pit 0.50 m in diameter. Its single fill (50161) contained 372 g of cremated human bone representing the burial of an adult aged 21–35 years. Also included in the grave were almost 50 hazel nut shell fragments (weighing 0.7 g) along with a fairly large amount of charcoal. The shell may represent food residues of gathered nuts, thrown onto the fire during the mortuary ceremony or placed there as food offerings. Alternatively, although less compellingly, they may have been incidentally

burnt as part of hazel wood collected as fuel for the cremation together with the wild plant remains (a small number of dock seeds and a possible seed of cleaver) in the sample.

Animal bone consisted of four fragments of roe deer (part of the lower forequarter and left hindquarter), indicating that parts of the animal, possibly even a whole carcass, had been placed on the pyre, perhaps as a food offering. A piece of long bone shaft 45 mm long had been split along its length and worked into a flat facet along one edge. Although broken at both ends it tapers, presumably towards a point (Fig. 2.4). Basic bone points of this nature have been recovered from other Mesolithic sites, including for example at Thatcham in Berkshire (Wymer 1962, 351–3).

The burial has been dated to *5620-5480 cal. BC* (see López-Dóriga, below) on the basis of a series of dates on both human bone and hazel nut shell (SUERC-64210, 6730 ± 28 BP: 5720–5560 cal. BC; Poz-80116 6500 ± 40 BP: 5560-5360 cal. BC; Poz-80222, 6650 ± 40 BP: 5640-5480 cal. BC and UBA-32261, 6492 ± 36 BP: 5530-5370 cal. BC). Although the dates are not in strict agreement it is likely that the dates on the human bone have provided an artificially older result, either due to dietary effects caused by the consumption of marine protein or, more likely, due to an old-wood effect associated with the use of reused timber or from long-lived species of tree as fuel in the cremation pyre.

The two Late Mesolithic burials from the site join the only other cremation burial of this date currently recorded from the mainland British Isles from Langford, Essex, which consisted of the remains of an unsexed individual of more than 8 years of age (Gilmore and Loe 2015). The remains of one other burial were also reported from Hermitage, Co. Limerick, Ireland in 2009. Numbers from elsewhere in Europe are similarly sparse; cremation is generally encountered on mortuary sites which also feature burial of the unburnt corpse, the latter appearing to form the predominant rite (Grey Jones 2011). Of the >100 sites listed by Grey Jones (2017) from which human remains of this date have been recovered, 13 included cremated remains – of approximately 20 individuals, the majority of which were adults, including similar numbers of males and females.

Neolithic

No features dated to the Neolithic period, and the only evidence of inhabitation in the area at this time took the form of stray finds of lithics recovered from the subsoil of from later

features. Diagnostic artefacts included leaf-shaped, transverse and barbed-and-tanged arrowheads, indicating a low level of activity throughout the Neolithic period, probably related to hunting activities on the floodplain of the East Stour. Other less certainly Neolithic flint artefacts indicate an intermittent and low level of activity over perhaps two millennia: these are discussed in Chapter 6.

A small circular pit in Area 11 (56253) contained three fragments of comb-decorated Beaker pottery. Its function is uncertain.

3. Early Bronze Age and Late Prehistoric

The Early Bronze Age was represented by a single urned cremation burial recorded during the evaluation (in trench 202). It is possible that the small round barrow ring ditch in Area 10W also dates to this period, although only Middle Bronze Age pottery was recovered from it. Most of the evidence for Late Bronze Age activity came from Area 10E, in the form of a small oval enclosure and associated features; the rest of the evidence was dispersed across the site. The Early and Middle Iron Age saw the continuation from the Bronze Age of low-level activity widely spread across the site, and suggesting a pattern of dispersed open settlement.

By the Late Iron Age, however, there was evidence much more intensive exploitation of the landscape, including the creation of field boundaries. An extensive rectilinear field system of probable late prehistoric date was identified in most areas of the site, and while such field systems have been dated to the Middle/Late Bronze Age at other sites in the area, the bulk of the dating evidence here suggests a Late Iron Age date.

Early Bronze Age

A small oval grave (20204, 0.4 m by 0.5 m) containing an Early Bronze Age urned cremation burial (20205) was recorded in evaluation trench 202, west of Area 4S (Figs 3.1 and 3.30). The burial, of a woman aged 21–35 years, had been made in an upright Collared Urn. The dark ashy backfill (20206) surrounding the urn contained abundant charcoal and a small amount of further cremated bone; smaller quantities of charcoal and cremated bone were also recovered from the grave's upper fill (20207). Sherds from a second vessel were recovered from all three contexts, including in the mouth of the urn, possibly functioning as some form of lid (see McKinley in Chapter 6).

Middle Bronze Age

Diagnostic Middle Bronze Age pottery was only recovered in a few contexts, and although a small quantity of pottery was only datable as either Middle or Late Bronze Age most of this material was found with diagnostic Late Bronze Age sherds, and it is generally considered to be of that date (see Late Bronze Age).

Area 10W

A small ring ditch (55068), 6.5 m in external diameter, lay near the top of the south-west-facing slope of the ridge south-west of the river valley, in Area 10W (Figs 3.2–3.4). The ditch was irregular in outline and appeared to have been heavily truncated, surviving to between 0.2 m and 0.8 m wide and 0.1–0.3 m deep, with a variable profile and mostly a single fill; a charcoal-rich primary fill (55058) was recorded on the north-east side. The ditch contained 11 sherds of Middle Bronze Age pottery and three more identifiable only as prehistoric, as well as five pieces of struck flint.

There were no traces of a barrow mound (or external bank), but just west of centre inside the monument there was a small irregular feature (55381), 0.2 m by 0.4 m and 0.1 m deep with steep sides and a flat base. Its charcoal-rich fill (55066) contained seven Middle/Late Bronze Age fingertip-impressed rim sherds (and an intrusive medieval sherd). Although no human bone was recovered from anywhere in the monument, it is possible that feature 55381 represents the base of a truncated cremation grave containing an urned burial, or some other form of significant placed deposit.

A similar small feature (55069) lay 25 m south-west of the round barrow (Fig. 3.2). It was a subcircular cut, 0.45 m wide and 0.15 m deep, the lower fill of which (mainly on the eastern side) surrounded a mass of charcoal, 0.3 m wide (Fig. 3.5). The charcoal deposit (55070) was ringed on its northern side by a large piece of flint-tempered Middle Bronze Age pottery. The charcoal was interpreted in the field as an *in situ* burnt post, within a posthole, but an alternative interpretation is that the pottery is all that remains of a truncated inverted urn placed over a deposit (possibly bagged) of pyre debris; given the complete absence of cremated bone, this feature may have contained a placed deposit employing some of the symbolism of mortuary ritual (the urn and the charcoal) but not directly mortuary-related.

A pit (55104), 70 m to the south of the barrow (Fig. 3.2), contained two Middle/Late Bronze Age sherds, as well as 15 sherds dated only as early prehistoric and two as prehistoric. The association of these sherds suggest that this feature could be broadly contemporary with the barrow. It was 1.1 m wide and 0.45 m deep, with concave sides and a possible posthole cut into its base, and had four fills, the second of which was rich in charcoal (Fig. 3.3). There were three other possible postholes (none excavated) in the immediate vicinity of the pit – as

well as many others across the area – and it is possible that some of these also belong to this phase.

Two small adjacent pits (55093 and 55112), 50 south-east of the barrow (Fig. 3.2), contained pottery possibly also of this date. Both were 0.35 m in diameter and no more than 0.2 m deep. Feature 55112 contained 47 undiagnostic and abraded body sherds in fabrics similar to those used for more diagnostic Middle Bronze Age vessels; it also produced a piece of burnt animal bone. Feature 55093 contained two further small abraded sherds and a piece of fired clay.

Other Evidence

The lower part of a Middle Bronze Age vessel (ON 853) was found apparently placed in a pit (50273, 0.4 m in diameter and 0.1 m deep) in Area 3E (Fig. 3.6). Although the top of the vessel had been truncated by ploughing, there was no evidence that it had contained any cremated human remains.

A residual rim sherd from a Middle Bronze Age Deverel-Rimbury style Bucket Urn was recovered from a Romano-British ditch (41105) in Area 7, while another Middle Bronze Age sherd was recovered from an otherwise undated curving ditch (40197), 0.8 m wide and 0.6 m deep, on the northern edge of the same area; this ditch does not appear to spatially related to any of the other features apart from a similar, undated ditch (41119) which followed its outer edge, and its dating on the basis of a single sherd is necessarily tentative. Two further sherds of probable Middle Bronze Age date were recovered from the subsoil in this area.

A single sherd of Middle Bronze Age pottery (9 g) and two sherds inexactly dated to the Middle/Late Bronze Age (13 g) were recovered from the fills of a Romano-British penannular ditched enclosure (56517) in Area 11 (Fig. 5.15).

In that same area, a small assemblage of pottery (64 sherds, 262 g) could be characterised only as late prehistoric, much of it redeposited in later features. Six sherds of possible Middle/Late Bronze Age date were recovered from pit 56170 (Fig. 5.13), cut by late Romano-British enclosure ditch 56277. Other finds from the pit included worked and burnt flint and fired clay, while two small Romano-British sherds (5 g) may have been intrusive. A further 46 highly abraded body sherds (150 g) came from pit 56957, 28 m to the south-west (Fig. 5.13).

Late Bronze Age

Although a few pieces of Late Bronze Age metalwork and a small number of Middle/Late Bronze Age finds were recovered across the site, all the diagnostic Late Bronze Age pottery came from a relatively small number of features in Areas 10E and 10W, suggesting only localised occupation of the landscape during this period.

Areas 10E and 10W

The majority of the Late Bronze Age features were clustered around, and included, three lengths of gully, one of them re-cut, forming an oval structure (55277) 15 m long (WNW–ESE) and 10 m wide (Fig. 3.7) in Area 10E. There was a 2 m wide gap at the north-west end, and wider gaps of at least 5 m and 7 m at the north and south-east, respectively; in each of the latter one terminal was apparently cut by a ditch (101504) of the late prehistoric field system (see below). Together the gullies, which were 0.2–0.5 m wide and 0.1–0.2 m deep, contained 18 Late Bronze Age sherds, along with small quantities of worked flint and fired clay.

There were numerous discrete features (pits and postholes) both inside the structure and to its south (as well as unexcavated possible features). The postholes were concentrated around its south-west side, many either cut by and cutting the two phases of the re-cut gully, and their distribution suggests that most of them were directly associated with the structure. It is possible, however, that some of the other features either pre-dated the structure's construction, or postdated its abandonment. It may be significant, for example, that, in contrast to the gullies, the pottery in these discrete features was predominantly Late Bronze Age (510 sherds compared to only 20 Middle/Late Bronze Age sherds) which could indicate that structure 55277 pre-dated much of the activity at this location.

Other features inside the structure included three shallow cuts (55272, 55274 and 55366), all approximately 1 m diameter and 0.1 m deep. Two of them (55272 and 55366) had a charcoal-rich fills which contained small quantities of pottery, fired clay and worked flint. A more substantial oval pit (55307), 1.6 m by 2.4 m and 0.5 m deep, with steep concave sides and flat base, lay in the wide gap between the gullies on the south side (Fig. 3.7). It had a

sequence of six fills, from two of which were recovered 356 Late Bronze Age sherds (2015 g), along with small quantities of animal bone, fired clay and struck flint.

A group of three shallow intercutting features lay just outside the northern gap in the oval structure (55298, 55301 and 55304), the stratigraphically latest of which (55301) contained 77 Late Bronze Age sherds (184 g) from its upper of two fills.

To the south of the structure there was a line of five shallow pits. Three of them were intercutting, the northern of which (55265) contained 19 Middle/Late Bronze Age sherds (75 g) and one intrusive medieval sherd; the other two (55627 and 55629) contained small numbers of sherds datable only as prehistoric. Oval pit 55292 contained 48 abraded Late Bronze Age body sherds, while pit 55283 at the south-west contained five Late Bronze Age sherds.

Other features in the wider group contained no pottery, but a small pit (55288) adjacent to pit 55283 contained over 2 kg of fired clay, some with wattle impressions; further small quantities of fired clay, animal bone and struck flint were recovered from some of the other features. Together, the nature of the finds in these features suggest settlement activity in the vicinity, although the oval form of structure 55277 would be atypical for a roundhouse, and it may have had some non-residential function.

Approximately 60 m south of the oval structure was another small cluster of postholes and short curving gullies which, although undated, could belong to the same phase (Fig. 3.7 inset); the layout of the gullies, although extending south of the excavation area, may have been in a similar oval arrangement, although this is partly obscured by ditches of the late prehistoric field system (see below). Among these features were six postholes on an arc with a projected diameter of 6.4 m; five of them, spaced 1.1–2.2 m apart (centre to centre), lay along the north-east quadrant, the sixth lay at the south-west; they were 0.3–0.65 m in diameter and up to 0.2 m deep. It is possible that they represent part of a small circular post-built structure (55379), although, unlike those associated with structure 55277 they do not match the curvature of the adjacent gullies (55253). All four lengths of gully – gully 55295 and 55378 at the north, both intersecting at the west with field system ditch 55188 (below) and not recorded to its west, and 55191 and 55194 to the south, both continuing outside the excavation area – had terminals at their eastern ends, indicating that the possible structure(s) they formed had an east-facing entrance. An additional posthole, a small pit and two unexcavated features lay within the interior.

Approximately 30 m north-east of oval structure 55277 there was a group of seven postholes (55227), six of them on a rough arc, suggesting a possible structure. Three of them contained very abraded sherds of possibly Late Bronze Age pottery (79 sherds), including sandy wares which might push the group towards the Early Iron Age (see Jones in Chapter 6); three also contained fragments of fired clay. Seven Late Bronze Age sherds were also recovered from a pit (55114), 0.9 m wide and 0.25 m deep, 70 m north-west of this structure.

There were many other discrete possible features across these areas, only a small sample of which were excavated and very few of which contained reliable dating evidence. A number of the undated features contained small quantities worked flint and fired clay, and some had evidence of *in situ* burning (as found in pits more widely across the site). Some, therefore, could belong to this period, although many could equally be associated with the late prehistoric field system which was well defined in this part of the site (see below), or indeed with Romano-British and medieval activity for which there was also some evidence.

Immediately to the south of Area 10 E, in the Bilham Farm evaluation area, two trenches contained evidence that may belong to this same phase (Fig. 5.10). In trench 1072 a partly-exposed curving gully (107204) with several possible internal features, may have been a portion of another roundhouse. In trench 1073, two opposed lengths of curved ditch (107310 and 107312) form parts of a small ring ditch approximately 3m in diameter. A small discrete feature towards the centre had been almost entirely destroyed by land drains.

Other Evidence

A Late Bronze Age copper alloy spearhead (ON 33, Fig 3.8) was recovered from the subsoil towards the north-east of Area 1 on the line of a later trackway (see Fig. 3.14). Three other Late Bronze Age copper alloy objects – two small ingot fragments and a socketed tool, possibly a punch – were recovered together, perhaps elements of a dispersed hoard, from the subsoil in Area 4.

A few further sherds of Middle/Late and Late Bronze Age pottery were recovered from Areas 2, 3E and 7, and trench 196 (ditch 19604, see Fig. 3.30) – ie, on the slightly raised ground on the south side of the river valley. Most of them were clearly residual in later features, and even where no other dating evidence was present, such as in pit 51141 (in Area 2, see Fig. 3.11 inset), which contained two small Middle/Late Bronze Age sherds, the pottery

does not securely date the feature. The same applies to a second pit (51087), 23 m to the south-west, which also contained a Middle/Late Bronze Age sherd, along with pieces of struck flint and charcoal. However, this material does at least indicate some level of activity in this area, and given the large number of unexcavated features it is possible that this was more substantial that the meagre evidence suggests.

More significant was a group of up to ten Middle/Late Bronze Age fired clay cylindrical loomweights, seven of them almost complete, placed in a shallow pit (16005) on the valley floor, in Area 4N (Figs 3.9 and 3.32); 34 pieces of struck flint were also recovered from the same fill (16022). The pit's lower fill (16006) contained a small quantity of charcoal and fired clay fragments, but no signs of *in situ* burning. The recovery of such a group of loomweights might suggest that this was the actual location of a loom, although the feature was largely isolated, with no associated settlement evidence in the vicinity. The feature did lie close to a number of ditches forming part of a field system, and a significant quantity of struck flint (162 pieces) was recovered from the terminal of the adjacent ditch (16270, below). While there is no evidence from this site that the field system is of later Bronze Age date, this cannot be entirely ruled out (see Late Prehistoric Field System, below).

A small quantity of pottery (40 sherds, 195 g) has been dated as Late Bronze Age/Early Iron Age. Given the dearth of evidence for both Late Bronze Age and Early Iron Age activity over most of the site, this material is hard to place, although its general distribution (as predominantly residual finds) is similar to that of the other Bronze Age material. Apart from 12 sherds in a Late Iron Age ditch in Area 1, the rest was recovered from Areas 3W, 4S and 7. Seven sherds were from an otherwise undated posthole or small pit (16151) in Area 4S (see Fig. 3.30). Six, however, were from a length of curved gully in Area 7 (see Fig. 3.13), probably a roundhouse (41112) within which an internal posthole or small pit (40011) contained seven Early/Middle Iron Age sherds, suggesting that the sherds in the gully were also of Iron Age, rather than Late Bronze Age, date (see Early Iron Age, below).

Late Prehistoric Field System

It is widely accepted that later prehistory saw the first large-scale formalised division and enclosure of the landscape in southern Britain, with the creation, from the Middle Bronze Age onwards, of extensive ditched field systems, frequently rectilinear or coaxial in form. Such

field systems have been recorded in Kent (Champion 2007, 100–3), as well as widely within the Thames valley and further afield (Yates 1999; 2001), and it has been suggested that a number of the ditches recorded at other sites in the Ashford area – at Westhawk Farm and Brisley Farm, some 2 km west of the site, and at Foster Road, 700 m to the north-east – were components of such later Bronze Age field systems.

At all these sites the ditches in question shared the same general orientation, with one axis aligned broadly north-west to south-east. In none of them, however, was secure dating evidence recovered. At Westhawk Farm, the ditches were distinguished from the stratigraphically later, Romano-British ditches, by their lighter coloured fills, a similar fill being noted in a pit containing undiagnostic flint-tempered pottery of possible Middle Bronze Age date (Booth *et al.* 2008, 365). At Brisley Farm, too, where there was a small number of shallow Middle to Late Bronze Age features, the ditches were stratigraphically early and contained light coloured fills, from which were recovered ten sherds of pottery, including abraded flint-tempered sherds and Late Iron Age sherds regarded as 'intrusive' (Stevenson 2013, 22). At Foster Road, sherds of Middle/Late Bronze Age (and later prehistoric) pottery were found in the secondary and upper fills of one of the stratigraphically early ditches, which may have been associated with a roundhouse and hearths of the same date (Powell and Birbeck 2010, 6–7).

No field system clearly datable to the later Bronze Age was recorded, however, at excavations south-east of Park Farm (Powell 2012), where a small assemblage of Middle–Late Bronze Age pottery was recovered mainly from pits. While there were a number of ditches sharing broadly the same orientations as the suggested field system at the other sites, those whose relationships were established were not generally stratigraphically early, and the pottery evidence from them did not indicate a later Bronze Age date.

The situation is similar at Cheeseman's Green, where extensive arrays of ditches were recorded, but only some of which could be securely dated – as either Late Iron Age, Romano-British, medieval or post-medieval. However, a significant number, recorded in almost all areas of the site, shared the same axes as those recorded on the other Ashford sites and could be viewed as components of an extensive rectilinear field system (Fig. 3.10). While some of these ditches, too, were shown to be stratigraphically early, it is also the case that many of their potential stratigraphic relationships were not securely established.

Moreover, many of them were only surveyed, and of those that had slots excavated in them a majority produced no artefactual dating evidence, nor materials suitable for radiocarbon dating. Furthermore, the relatively frequent occurrence of both residual and intrusive materials in features across the site means that where pottery was recovered it often cannot be considered as constituting secure dating evidence.

Given the expected orientation of such a later Bronze Age field system, there is the danger of too readily assigning to it those ditches which simply conform to that alignment and for which there is no clearly contrary dating or stratigraphic evidence. Given the density of ditches in some areas of the site, it is only to be expected that some will share the same broadly north-west to south-east orientation, simply be chance. Moreover, the orientations of some ditches may simply reflect the general topography, such as the line of the low ridge on the south-west side of the East Stour River, and indeed the broadly north-west to south-east (albeit meandering) course of the river itself, although later Bronze Age field systems often appear to have been laid out largely without reference to the local topography.

In Areas 1 and 3E ditches that were clearly later in date had similar orientations. Even the modern layout of fields on the south-west side of the valley, with its origins at least in the post-medieval period as indicated by historic mapping, is largely arranged around the same axes, as in Area 4S. Furthermore, the Roman road between Lympne and Maidstone, which passes 200 m to the south-west of the site (Fig. 1.1), is similarly orientated ESE–WNW and may have influenced the orientations of fields in the Romano-British and later periods.

Despite this, however, it does appear that a significant number of ditches recorded across the site, some of them stratigraphically early, can be assigned with some confidence to an extensive and relatively early rectilinear field system, comparable to those suggested at other Ashford sites. While, therefore, this field system might reasonably be expected to be of later Bronze Age date, such a date cannot at present be sustained on the evidence from this site, and it is suggested that this site-wide phase of land division occurred instead around the transition of the Middle and Late Iron Age (see Late Iron Age).

Early and Middle Iron Age

The Early and Middle Iron Age saw the continuation from the Bronze Age of low-level activity widely spread across the site, and suggesting a pattern of dispersed open settlement.

While some features could be securely dated to the Early Iron Age, others could only be assigned an Early/Middle Iron Age date. Only 48 sherds of diagnostic Middle Iron Age pottery were recovered, and none of these came from clearly identifiable Middle Iron Age features. For this reason these two periods are considered together.

There is little evidence for enclosure or landscape division during these periods, although the substantial quantities of pottery datable only as Middle/Late Iron Age raises the possibility that at least by the end of the Middle Iron Age there was a significant increase in settlement activity on the site, including, particularly on the north side of the valley in Area 1, the construction of enclosures; this activity is described in the Late Iron Age section (see below).

Area 1

There was no evidence for Early Iron Age activity in Area 1. However, 75% (by numbers of sherds and weight) of the small assemblage of diagnostic Middle Iron Age pottery from the site came from four features in Area 1, possibly indicating a shift in the main focus of activity towards the north side of the valley (the rest came from Area 3E). However, in three of these features – ring gully 18680 and ditches 18166 and 18632 (Fig. 3.14) – the sherds comprised only a small component of larger Middle/Late Iron Age assemblages. They may therefore date either to the end of this period, or the start of the Late Iron Age, around the time when the processes of enclosure and land division appear to have started; this landscape organisation is considered in the context of the Late Iron Age (see below). In addition, a pit or posthole (2309) half-sectioned during the evaluation and later re-excavated (as 18316) produced six Middle/Late Iron Age sherds (see Fig. 3.16).

Area 2

In the south-western corner of Area 2 a length of shallow curving gully, with a projected internal diameter of 11.4 m, indicates a probable roundhouse (51176), the south-western part of which lay outside the excavation area (Fig. 3.11). The gully, which was 0.3–0.5 m wide and no more than 0.1 m deep, appeared to have been truncated at the south-east, although a

short linear feature (51077), 1.4 m long, 0.6 m wide and 0.2 m deep, lying on the same arc, may mark the southern terminal of an east-facing entrance.

Together, the gully and feature 51077 contained seven sherds of Iron Age pottery (of Early/Middle, Middle/Late and general Iron Age date), suggesting a Middle Iron Age date for the roundhouse. However, the gully also contained three Late Iron Age/early Romano-British sherds which could either indicate a later date, or alternatively be intrusive – some level of early Romano-British activity at this location is indicated by the presence of a Romano-British sherd (along with 15 Late Iron Age/early Romano-British sherds) in a pit (51001) within the area enclosed by the roundhouse gully. There was also a cluster of postholes in the interior, one (50993) containing a single small Iron Age sherd, but the rest were either undated or not excavated.

Area 3W

With only one exception a small 8 m wide cluster of nine pits (51196) in Area 3W, some of them intercutting, contained Iron Age pottery (total 3567 g) – 238 Early Iron Age sherds, 48 Early/Middle Iron Age and a further 40 dated only as Iron Age (and one as late prehistoric) (Fig. 3.12). The pits were 1–2.1 m wide and 0.4–0.7 m deep, with one or two fills; other finds comprised small quantities of worked flint, burnt flint, animal bone and charcoal. A further possible pit in the cluster was not excavated; a short length of undated gully (51163) extended north of the cluster, and 6 m further north there was a group of unexcavated possible features (including an angled linear feature and possible pits or postholes) which may also be associated.

The two pits at the east of the group were on particular note. Pit 50899, which was 1.1 m wide and 0.4 m deep, contained parts of three inverted, near-complete Early Iron Age vessels (ONs 906, 907 and 909; 167 sherds, 1890 g), apparently deliberately placed. Pit 50949, 0.4 m by 0.7 m and 0.1 m deep with a single charcoal-rich fill but no signs of *in situ* burning, contained 87 sherds (834 g) from at least four coarse- and fine-ware vessels, along with two pieces of struck flint and a small quantity of animal bone.

The very localised character of this group suggests that all the features were associated and probably of Early Iron Age date, perhaps indicating a focus of settlement on the ridge to the immediate south. The only other potentially Early Iron Age pottery from this western part

of the site were two Early/Middle Iron Age sherds from a ditch (51177) considered likely to be part of the late prehistoric field system (below), 250 m to the south-west in Area 2 (see Fig. 3.24), and two residual in a Late Iron Age ditch (50596) 60 m to the east in Area 3E (see Fig. 3.26). As noted above, most of the diagnostic Middle Iron Age pottery was found in Area 1, but 12 sherds from a single Middle Iron Age vessel were found in a ditch (50864) considered likely to be part of the late prehistoric field system, also in Area 3E (see Late Iron Age, below; Fig. 3.26).

Area 4S

There was a cremation burial of an individual aged over 15 years in grave 16164, along with a small quantity of pyre debris. There are no other known contemporary features in the area (Fig. 3.30). The grave was heavily truncated, measuring 0.5 m in diameter but only 0.04 m deep. A sample of the bone was radiocarbon dated to the Middle Iron Age, 360–110 cal. BC (SUERC-64209, 2173 ± 27 BP). Although the grave contained one small sherd (4 g) of Iron Age pottery and a piece of fired clay the burial appears to have been unurned.

Area 5

There was an unurned cremation burial of an individual aged 25–44 years in grave 15049, along with a small quantity of pyre debris, in the eastern part of Area 5 (Fig. 3.33). The grave was heavily truncated, measuring up to 0.4 m wide but only 0.03 m deep. A sample of bone was radiocarbon dated to the Middle Iron Age, 370–170 cal. BC (SUERC-63877, 2201 ± 29 BP). There were no other clearly contemporary features recorded in the area, although a number of undated features in the same area could be of the same period, as well as those containing Late Iron Age/early Romano-British and Romano-British pottery (see below).

Area 7

The remains of a possible roundhouse (41112) in Area 7 are of probable Early Iron Age date (Fig. 3.13). The roundhouse, defined by a 6 m long curving gully 0.4–0.6 m wide and up to 0.2 m deep, had a projected internal diameter of 5.5 m. There were three postholes within its

interior, one of which (40011) contained seven Early/Middle Iron Age sherds. These, combined with the Late Bronze Age/Early Iron Age sherds from the gully (see above), suggest an Early Iron Age date for this structure. There was a possible shallow pit (40013) near its centre, and another posthole (40023) on the line of the gully at the north-east; neither contained any finds.

There was a thin scatter of other discrete features of possible Middle to Late Iron Age date across Area 7, including three small pits at the south-east (Fig. 3.13 inset). Pit 40034 contained one Early/Middle Iron Age sherd, pit 40045 contained one small prehistoric flint-tempered sherd and four pieces of worked flint, and pit 40052 contained one Iron Age sherd and four pieces of worked flint. There was also a larger but shallow oval pit (40390), 1.1 m by 1.7 m and 0.2 m deep, which contained four Middle/Late Iron Age sherds, two pieces of flint and a fragment of animal bone. In the centre of the area, a small pit (41011), 0.15 m deep and heavily truncated by a Romano-British hollow (below), had a charcoal-rich lower fill containing a single Iron Age sherd. There were also two small shallow features in the north-west of the area. Pit 41024, the base of which had been reddened by heat, had a charcoal-rich lower fill and an ashy upper fill, contained six late prehistoric sherds. Pit 41082, which also contained burnt material, contained four Iron Age sherds.

Area 11

A small assemblage of Middle/Late Iron Age pottery (77 sherds; 590 g) was recovered from features in and around a Late Iron Age/Romano-British enclosure (56901/56902) towards the eastern end of Area 11 (Fig. 5.12). Seven sherds (29 g) came from pit 57065, cut by the second phase of the enclosure's ditch on its eastern side (Fig. 5.14). Five Romano-British sherds (10 g) were also recovered, but these may have been intrusive. A further 12 Middle/Late Iron Age sherds came from a slot (57014) excavated through the same ditch nearby and another 42 sherds came from a small pit or post hole (57016) seen only in section in the same slot.

Two Middle/Late Iron Age sherds were recovered from pit 57022 (Fig. 5.13). The pit cut an undated gully and was in turn cut by Late Iron Age/Romano-British pit 57025. The remaining 14 sherds were redeposited in later features, 12 of them (85 g) in Romano-British penannular ditch 56517 (see Fig. 5.15 and below).

Late Iron Age

Pottery and Phasing

A proportion of the Iron Age pottery assemblage (809 sherds, 6082 g) could be dated only to the Middle or Late Iron Age, with much of this material (76% by weight) coming from Area 1. As noted above, in three features it was found in association with diagnostic Middle Iron Age sherds, but it was found much more commonly on its own or associated with Late Iron Age sherds, suggesting a phase of activity commencing around the transition of the Middle and Late Iron Age.

Furthermore, because many Late Iron Age pottery forms and fabrics continued to be used well into the Romano-British period, a wide range of features across the site were dated principally by pottery only to the Late Iron Age or early Romano-British period, and the assemblage is dominated by material of 1st century BC to 1st century AD date. In some contexts such material was found alongside either diagnostic Late Iron Age or Romano-British material providing some evidence for an either pre- or post-Conquest date. Where this was not the case, the phasing of such features, which frequently comprised intercutting ditches, relies largely on their stratigraphic relationships (where these were recorded) and their spatial relationships.

Given the evident continuity of occupation and exploitation of parts of the landscape from the Iron Age into the Romano-British period, the distinction between pre- and post-Conquest features should not be over-stressed. Nonetheless, the start of the Romano-British period clearly heralded important social, political and economic changes which must be reflected in the archaeological record, and therefore the attempt has been made to distinguish Late Iron Age from the early Romano-British features. However, the uncertainties inherent in this process should be borne in mind in the following section.

Area 1

Area 1, which occupied the southern end of an area of slightly elevated ground on the north side of the river valley, contained an array of overlapping ditches representing different phases of enclosures, field systems and trackways (Fig. 3.14). A number of lengths of curving

gully represent up to eight roundhouses, while numerous postholes, some in apparent groups, suggest the presence of other structures. An unexcavated length of curving feature (504), with a projected internal diameter of approximately 4 m, was recorded during the evaluation towards the north of the area and interpreted as a possible roundhouse gully, but was not further identified during the excavation.

Few of the relationships between ditches were securely established, hampering the phasing of activity in this area, and many of the ditches contained pottery with a range of dates, generally spanning the Middle/Late Iron Age through to early Romano-British periods. Nonetheless, the available stratigraphic and finds evidence, combined with the spatial arrangement of these features, suggest a number of broad phases of Late Iron Age activity, including settlement, enclosure and landscape organisation.

Phase 1: open settlement and enclosure

Clear evidence for the chronological relationships between settlement structures (roundhouses and granary-type four-post structures) and the multi-phased ditches was limited, although the weight of that evidence points to a relatively early period of open settlement spread along the lower part of the slope at the edge of the valley floor, prior to any ditched division of the landscape (Fig. 3.14). This settlement appears to have its origins around the transition of the Middle and Late Iron Age, but given that this landscape underwent two (possibly three) later phases of reorganisation during the Late Iron Age, it seems likely that this period of settlement was relatively short-lived.

Not all the structures, however, need have been contemporary: five of the roundhouses contained no dating evidence, and while at least two of them appear to pre-date the establishment of the rectilinear field system (below), one, distinguished from the rest by its position within a small rectangular enclosure, appears to post-date it; this latter roundhouse (18680) and its enclosure are described later (see Phase 3, Fig. 3.21).

Open settlement

Roundhouses

The seven roundhouses tentatively assigned to this phase were distributed over a distance of 120 m in a rough south-west to north-east line along the base of the south-east-facing slope, from the south-west 18674, 18682, 18680, 18542, 18687, 18698 and 18688 (Fig. 3.14). They

varied in size, with projected internal diameters of their gullies ranging from 3 m (18542) up to 8 m (18698), indicating a range of probable domestic and ancillary structures. In no cases were the circuits of their gullies complete, due both to truncation and their intersection with other features. All but one of them (18674) could potentially have had entrances facing east or south-east, the most frequent orientation for roundhouse entrances. There were occasional pits and postholes within their interiors but none were demonstrably associated with them. Three of the roundhouse gullies contained pottery.

As noted above a small quantity of Middle Iron Age pottery was recovered from this area, indicating at least some level of activity in this part of the site during this period. One sherd came from roundhouse gully 18680, found along with seven Middle/Late Iron Age sherds, and roundhouses 18674 and 18682 also contained small quantities of Middle/Late Iron Age pottery. This raises the possibility that at least one of the roundhouses, and possibly more, is of Middle Iron Age date, although the weight of the evidence would suggest a date either late in that period, or perhaps more likely in the Late Iron Age.

It is also unclear whether any of these roundhouses were directly associated with any of the phases of landscape organisation and division represented by the many intercutting ditches in the area; these are interpreted as belonging to a set of clustered enclosures, a rectilinear field system, a valley-floor enclosure and a trackway (see below, Fig. 3.17). All but two of the roundhouses (18542 and 18688) had gullies (or projected extents) which either intersected with these ditches, or were positioned in locations incompatible with some of their use. There were no roundhouses inside the subrectangular enclosure in the southern part of the site.

Roundhouse 18674 was cut on its north-eastern side by a short length of ditch (18703) interpreted as part of the rectilinear field system (Phase 2, below), and on its western side by a substantial ditch (18697) marking the valley-floor enclosure (Phase 3, below), although neither relationship was securely established. The roundhouse gully, which contained three Middle/Late Iron Age sherds, was 7.4 m in internal diameter, its single exposed gully terminal suggesting that the entrance faced just east of north. Four small features, including an undated posthole, were recorded in its interior.

Roundhouse 18682 was represented by three short lengths of gully, with a projected internal diameter of 3.7 m; it contained four Late Iron Age sherds. An undated posthole near its centre may be associated. Its projected extent spanned the line of trackway ditch 18667

(Phase 2), while on its northern side its relationship with an undated ditch (18306), possibly part of the rectilinear field system, was not established.

Roundhouse 18680 was represented by a length of gully of variable width (0.2–0.8 m) with a projected internal diameter of 5.2 m, defining the northern side of the structure. Its western end was cut by a short length of ditch (18425) possibly associated with the rectilinear field system, while its eastern end was cut by trackway ditch 18667. The projected extent of the roundhouse would also have intersected with ditch 18697 of the large valley-floor enclosure.

The smallest possible roundhouse (18542) was represented by a curved length of shallow undated gully, under 0.2 m wide, with a projected internal diameter of just 3 m. It cut a posthole (18449) containing Middle/Late Iron Age pottery, but did not intersect with any of the ditches.

Roundhouse 18687 was represented by a length of undated gully with a projected internal diameter of just 6.5 m; at the north-west this would probably have intersected with the ditch of the valley-floor enclosure (18697)

The gully of roundhouse 18698, which was 7.1 m in projected internal diameter, had a slightly out-turning terminal on its eastern side possibly indicating an east-facing entrance. It contained no finds and there were no internal features, but its position between trackway ditches 18667 and 18700 indicates at least that the roundhouse and trackway were not contemporary.

The most easterly roundhouse (18688), 6.4 m in internal diameter, was also undated. It had the most complete circuit, and although the northern of its gully terminals was truncated by modern disturbance, the position of the other suggests that the entrance probably faced between east and south-east. Two small features lay within its interior.

Post-built structures

Numerous discrete possible features were recorded in the area around the roundhouses, nearly all on them at the base of the slope rather than on the valley floor. The majority of those that were excavated proved to be undated pits or postholes, but although some were in relatively dense clusters, few recognisable post-built structures could be discerned in their arrangement.

However, one four-post granary-type structure (18679) was identifiable near the south-eastern edge of the excavation (Fig. 3.15). It measured 2.3 m by 2.9 m (measured from

the centres of the postholes) with postholes averaging 0.5 m in diameter and 0.3 m deep with near-vertical sides and each with a clearly visible central post-pipe. Together the features produced just three small sherds, two of general Iron Age date and one Late Iron Age/early Romano-British. Although it lay within the area of the valley-floor enclosure (see below), it also fell largely within the suggested area of open settlement. It was orientated in line with the topography (which was also mirrored in the orientations of many of the ditches).

A second possible granary-type structure (18690) lay 25 m to the north-north-east (Fig. 3.16). This consisted of four small features, 2.6 m square, within a possible group of five; the fifth feature (2309/18316) lay 2.7 m to the north-east, in line with the square setting and appearing to be associated with it. The features in the square setting were less clearly identifiable as postholes, averaging 0.9 m wide and 0.25 m deep, with less regular profiles. Moreover they all had much smaller (but in three cases deeper) cuts (or post-pipes) on their edges, three on their north-western sides, and one at the south-west. These smaller cuts formed a much less regular square shape. Identifying any similar post-pipe in the fifth feature was hampered by the fact that this feature was part-excavated during the evaluation. Together the square setting produced seven sherds of mostly Late Iron Age pottery, and an iron blade (ON 34), while the fifth feature (as noted above) contained sherds of Early/Middle and Middle/Late Iron Age date. Although this structure clearly lay within the area of the settlement's roundhouses, it could also have been located within a small field within the later rectilinear field system; its position between trackway ditches 18667 and 18700 (below), however, indicates that it was not contemporary with the trackway.

An L-shaped arrangement of three further postholes (18262, 18449, and 18475), 0.5–0.7 m wide and all over 0.4 m deep, could represent a structure of similar size (Fig. 3.14). A relatively small possible feature (0.4 m diameter) was surveyed near the position of the expected fourth posthole, but was not excavated. As noted above, posthole 18449 was cut by the gully of roundhouse 18452; it contained two Middle/Late Iron Age sherds and another seven were recovered from posthole 18475. Alternatively, it is possible that posthole 18262 formed part of a north–south line, 14 m long, of at least six similarly sized (although generally shallower) undated postholes.

Other features

Three short lengths of Late Iron Age ditch (18470, 18677 and 18684) were recorded in the area of open settlement and could be associated with it, as they have no clear relationship with the later phases of landscape organisation (Fig. 3.14). In addition, there was a spread of soil between roundhouses 18681 and 18682, into which was cut a cluster of features (including pit 18433, postholes 18440 and 18494, and other features of uncertain nature and extent – 18427, 18429, 18435 and 18704), which between them contained 30 Middle/Late Iron Age sherds.

Clustered enclosures (Phase 1)

A number of ditches in the southern part of Area 1 defined a subrectangular enclosure which appears to be part of a larger aggregation of adjoining enclosed spaces (Figs 3.14 and 3.17). The subrectangular enclosure was bounded around most of its circuit by ditches 18665, 18666 and 18694, the line of the latter apparently altered at some time. At the south-east the enclosure was defined by what appears to have been the northern corner of an associated enclosure (ditch 18669) extending south beyond the excavation. The arrangement of these ditches suggests that ditch 18669, which was of a similar scale to ditch 18665, was either in existence or planned when the subrectangular enclosure was constructed.

Another enclosed space abutted the subrectangular enclosure to the south-west. This was defined at the north by two divergent cuts (18632 and 18597) which merged 7 m west of ditch 18666, before curving to the south. The northern (18597) of these two arms cut ditch 18666, suggesting that it represents a subsequent slight modification. Although only 1 m wide at its northern end, ditch 18597 widened to 3 m towards the south. The terminal of a further ditch (18166) parallel to its southern end (but largely truncated by a later ditch) may be associated, possibly defining the end of a wide trackway running from the south 4.7 m. A wide post-medieval drain (not excavated) near the southern edge of the excavation cut many of the ditches in this part of the area; although the ditches were not recorded in the narrow strip to its south they are assumed to have continued out of the excavation area.

The subrectangular enclosure measured 40 m long (north-north-west to south-south-east) by 25–32 m wide, with almost straight sides and rounded corners. Its ditch was most substantial around the north-eastern part of its circuit (18665) where it averaged around 2 m wide (in comparison to 1 m around the rest of the circuit) and was up to 0.9 m deep. There was a 2.4 m wide break in the ditch approximately midway along the enclosure's western

side, which may originally have been a point of external access, although if the south-western enclosure was a later addition, as appears from its position, the gap would subsequently have provided only an internal access point. The 9 m wide break at the south of the subrectangular enclosure gave access to the southern enclosure.

Of the 185 sherds (1480 g) of pottery from these ditches, all but eight were either Middle/Late Iron Age (109 sherds), Late Iron Age (31 sherds) or Late Iron Age/early Romano-British (37 sherds); of the rest three were Early/Middle Iron Age, one Middle Iron Age, three Iron Age, and one (intrusive) Romano-British. The bulk of the material (84% by weight) came from ditch 18669 and from the nearby terminals of ditches 18665 and 18694, possibly indicating a focus of settlement close to the southern edge of the excavation.

A number of discrete features were surveyed inside these clustered enclosures, although they formed no recognisable structures; of the small sample that were excavated most were undated. Among the most notable was a small pit (18125), 0.45 m in diameter and 0.23 m deep, near the north-west corner of the subrectangular enclosure, which contained the remains of three Late Iron Age vessels (total 5764 g), two of them nested inside a large storage jar (Fig. 3.18), possibly a ritual deposit. Four other features inside the enclosure (pits 18137 and 18230, and possible tree-throw holes 18254 and 18299) contained relatively small quantities of Middle/Late or Late Iron Age pottery.

There was a tight cluster of 14 possible postholes on the eastern side of the southern enclosure. They too formed no recognisable pattern, but of the two that were excavated, posthole 18115 contained 1372 g of fired clay from three triangular objects (either loomweights or the perforated corners of possible oven plates), along with 13 sherds of Middle/Late and Late Iron Age pottery; an adjacent posthole (18015) contained a sherd datable only as Iron Age. However, it is uncertain whether any of these features were directly associated with the clustered enclosures, or with earlier or later phases of activity; there were comparable apparently random spreads of similar features around the enclosures, mostly unexcavated or undated, although a few were of Late Iron Age date.

Although these enclosures intersected with a number of ditches representing other phases of activity, few stratigraphic relationships were established between them, and their suggested phasing is based largely on their spatial relationships. However, ditch 18665, on the eastern side of the subrectangular enclosure, was cut by a much shallower ditch (18668) suggested as belonging to the late prehistoric field system (Phase 2), while the edge of south-

eastern enclosure ditch (18669) was just clipped by valley-floor enclosure ditch (18670) (Fig. 3.17 Phase 3).

Phase 2: rectilinear field system

As discussed above, a number of ditches in this area (Fig. 3.17 Phase 2) conform to a more extensive site-wide pattern of rectilinear field system ditches which in many respects resembles those interpreted elsewhere as being of later Bronze Age date (Fig. 3.10). However, few intersections between these and other ditches were excavated, and although the pre-excavation survey suggests that the field system ditches were generally stratigraphically early, such relationship cannot be relied on in the absence of excavation (in some cases excavation resulted in the surveyed relationships being reversed). In addition to those ditches which conform to the two main axes of the field system, a number of others with less regular lines are tentatively included as they appear to have some spatial relationship to examples assigned to the field system, and may indicate its modification over time.

The ditches appear to define a series of fields of different sizes, although the intermittent nature of some of the ditches in the centre of the area may indicate a level of truncation during machine stripping that had completely destroyed some ditches; many of the evaluation trenches in this area revealed short lengths of possible field system ditch which were not subsequently recorded during the excavation, although the very straight projected lines and regular spacing of some of these (Fig. 3.17) may indicate some other, probably more recent date.

Moreover, a significant number of other (possibly later) ditches, many of them sharing the dominant north-east to south-west orientation, may either obscure or have destroyed some of the field system ditches. This may be the case, for example, towards the north-east where two relatively small fields (both approximately 30 m wide), separated by parallel ditches possibly forming a narrow (2 m wide) trackway, appear to be open to the south-east at the base of the slope on the edge of the valley. Three of the ditches (18684, 18685 and 18514) intersected with (and were surveyed as being cut by) much larger ditches (18697 and 18656, Fig. 3.17 Phase 2) running along the edge of the valley floor, but were not recorded to its south-east. This suggests a number of possibilities: that the fields' south-eastern boundaries were not visible cutting the fill of larger ditches; that they were cut (and destroyed) by the

larger ditches; that they were open at the south-east; or that their south-eastern boundaries were not visible on the valley floor, perhaps sealed by alluvium.

A fourth field ditch (18675), however, was seen to extend 6 m to the south-east of the ditch 18697 (Fig. 3.14). Ditch 18675 may have replaced, or been replaced by, two lengths of ditch (18676 and 18678) running on a slightly different line which were separated by a 1.8 m wide possible entrance gap. What appears to have been a larger field to the southwest of ditch 18675 was bounded at the base of the slope by ditch 18673; this terminated 12 m from a short length of ditch (18703) running south-west from ditch 18675, leaving a wide possible entrance between the field and the valley floor.

Further towards the south-west there was a less regular arrangement of ditches, which nonetheless appear to be spatially consistent with the otherwise rectilinear field system. Three ditches (18010, 18695 and an unexcavated ditch running perpendicular between them) formed three straight sides of a large field 65–68 m wide (north-east to south-west). At their south-eastern ends, however, ditch 18010 and 18695 both curved in towards each other, while the south-eastern side of the field, at the base of the slope, appears to be defined by a fourth ditch (18668), also with a curving line.

At its eastern end ditch 18668 terminated just short of ditch 18010, but at its western end it passed 5 m from the curving end of ditch 18695, forming a narrow funnel-shaped entrance into the field. A third ditch (18170), parallel to the ditch 18668 at this point, also ended within the entrance gap, possibly defining a narrow (2.5 m wide) trackway running from the valley floor to the entrance into the field.

The relationship between the field system and the open settlement on which it appears to have been imposed is ambiguous (Fig. 3.14). It is possible, for example, that the two small fields towards the north-east were laid out in part to enclose elements of the settlement – one of those fields, for example, contained three of the smaller roundhouses (18542, 18680 and 18682), while at the north-east roundhouses 18688 and 18698 might be seen as occupying separate fields; roundhouse 18674, however, was cut by a possible field system ditch.

It is also notable that these ditches appear to cut across those of the earlier clustered enclosures at the south of the area, and it may be significant that ditch 18668 bisected the earlier subrectangular enclosure, passing through the narrow entrance gap on its western side and cutting across ditch 18665 on its eastern side. The field system clearly represents a major and much more extensive organisation of space within the landscape than these localised

enclosures, although the location of the possible trackway running north from the valley floor closely matches of that leading into the south-western enclosure, possibly reflecting some continuity of landuse.

The field system ditches were broadly similar in size and depth, most being 0.8–1.2 m wide and 0.3–0.5 m deep. Those along the edge of the valley floor, however, were generally larger (1.7–3 m wide), with ditch 18673 showing evidence for having been recut at its north-eastern terminal (flanking the entrance). Ditches 18668 and 18170 both widened towards the south-west.

The relatively small quantity of pottery (80 sherds, 513 g) recovered from these ditches was almost exclusively Middle/Late Iron Age (89% by weight). Two sherds were Iron Age, two were Late Iron Age/early Romano-British, and three (all from the terminal of ditch 18170 where it was cut by a later but unexcavated ditch) were Romano-British. Ditch 18676 contained a flint axe (ON 37), evidently residual. The only other finds from the field system ditches were four pieces of struck flint and small quantities of animal bone, fired clay and slag.

Phase 3: valley-floor enclosure and trackway

Although the orientation of the rectilinear field system in this area largely matched the edge of the valley floor, which ran north-east to south-west along the south-eastern edge of the area (perhaps coincidentally given the field system's much wider extent), this orientation was significantly emphasised by the two main features dating to the third phase of landscape organisation – a large possible enclosure on the valley floor, and a trackway running along the its north-western side, at the base of the slope (Fig. 3.17 Phase 3). The fact that the trackway curves around a distinct outward bulge in the enclosure ditch strongly suggests that, despite being broadly contemporary, the enclosure preceded the formal defining of the trackway by flanking ditches.

Valley-floor enclosure

As noted above, some of the roundhouses would have intersected with a substantial ditched boundary which ran along the base of the slope, and some of the field system ditches were cut at or near their south-eastern ends by the same feature. This boundary appears to comprise a

number of distinct elements suggesting that its final form was the result of at least two episodes of construction.

In its initial form this boundary appears to have been defined by a substantial but slightly sinuous ditch (18697), 70 m long, which at its south-western terminal was 4 m wide, but in its single excavated slot (18189, towards its north-east end) was 2.8 m wide and 1 m deep with moderately steep sides and a wide slightly concave base (Figs 3.14 and 3.20). At the north-east the ditch turned eastward before terminating, while at the south-west its curving line suggests that it may have been laid out to avoid some existing feature – although no feature was recorded at this location.

The lowest fill (18196) in the excavated slot was a 0.4 m thick deposit lying against the north-western side, suggesting that the ditch may have had a bank on its outer (north-western, up-slope) edge. This layer contained 17 sherds of Middle Iron Age pottery (and one dated only as Iron Age), and was overlain by a charcoal-rich fill (18198) deriving from the same side; the only other find was a piece of fired clay from the uppermost of the ditch's eight fills. The pottery is somewhat problematic because, as noted above, there were no features in the area which could be assigned a definite Middle Iron Age date. Although a further 19 Middle Iron Age sherds were recovered from the area, they were all (as noted above) from features also containing Middle/Late Iron Age pottery and interpreted as of probable Late Iron Age date. The sherds are therefore presumed to be residual, possibly deriving from a feature cut by the ditch.

The function of this boundary in its initial form is unclear. However, it seems that it was subsequently extended by the addition of further lengths of ditch at either end, although the stratigraphic relationships at these points were not examined. At the north-east, a length of ditch (18656), 1.1–2.3 m wide, extended the line of ditch 18697 for a further 14 m before turning at a right angle to the south-east and continuing for a further 11 m. It appeared to terminate 4 m from the edge of the excavation within a large spread of alluvium extending north and east over the valley floor, the ditch here being 0.4 m deep. It is possible that the terminal marks one side of an entrance gap. Ditch 18656, which cut field system ditch 18646, produced six Middle/Late Iron Age sherds.

At the other end of ditch 18697, the boundary was continued for 70 m to the south-west by ditch 18670, which was 1.6–1.8 m wide and 0.5–0.8 m deep. At the point where it connected with ditch 18697 more than one cut was observed – it appears that the initial cut

and a recut (both 0.8 m deep) terminated 1.4 m short of ditch 18697, but this gap was subsequently spanned by a second, slightly shallower (0.5 m) recut. At its south-west end ditch 18670 curved towards the south east, and terminated 3 m short of the edge of excavation, its terminal cutting the edge of Phase 1 enclosure ditch 18669 (Fig. 3.19). The south-westerly line of ditch 18670, however, was continued, after a 6 m wide gap, by a ditch of similar scale (18023) which ran for 6 m before also turning at a right angle to the south-east and continuing beyond the limit of excavation. Between them ditches 18670 and 18023 produced 14 Middle/Late Iron Age sherds, nine Late Iron Age/early Romano-British sherds and (from an upper fill) three Romano-British sherds.

Together, ditches 18697, 18656, 18670 and 18023 appear to have defined the north-western side of a large rectangular enclosure extending 160 m along the valley floor at the base of the slope, with a partly in-turned, north-west-facing entrance near its western corner, and a possible north-east-facing entrance near its northern corner. Only a 10–20 m wide strip of the enclosure lay inside the excavation area, but a number of discrete features lay within this area. These included two clusters of possible postholes, one on either side of the in-turned entrance and potentially associated with it, although forming no obvious pattern. One of these, described above, also lay within the southern of the Phase 1 clustered enclosures; in the other, only one posthole (18008) was excavated, producing single Iron Age and Romano-British sherds.

Also within the interior of the enclosure were the gullies of two roundhouses (and part of a third) and a four-post granary-type structure described above (Fig. 3.14). However, only one of these structures (18680) appears to have been associated with the enclosure, since it lay in the south-western half of a small rectangular sub-enclosure which appeared to abut the inside edge of main enclosure ditch 18670 (Fig. 3.21). The roundhouse, which cut a ditch (18673) of the rectilinear field system, comprised two lengths of gully with a projected internal diameter of 5.4 m. The terminals of the gully suggest a north-east-facing entrance (although north-west-facing is also possible). The rectangular plot, which was defined on three sides by ditches 18671 and 18672 (both of which also cut ditch 18673), measured 14 m by at least 9 m, and had a 2 m wide entrance in the middle of its south-eastern side. On its north-western side these ditches ended 1–2 m from ditch 18670, suggesting that they were closely associated. Apart from the roundhouse, the plot contained a number of postholes

forming no obvious structure. The roundhouse contained no finds, but the plot ditches produced 14 Late Iron Age sherds and two dated only as Iron Age.

Trackway

A number of lengths of ditch ran largely parallel to, and to the immediate north-west of, the valley-floor enclosure. 0.5–1.2 m wide and up to 0.35 m deep, these appear to mark the sides a 3.5–5 m wide trackway extending for 220 m across the area (Figs 3.14 and 3.17 Phase 3). Two main ditches were identified – ditch 18667 to the south-east and ditch 18700 to the north-west – neither of which extended the fully exposed extent of the trackway. Instead both sides of the trackway were represented by sections of ditch of variable length, and with some on slightly different lines, indicating either their recutting or replacement, resulting in variation in the width of the trackway. It is possibly that, at some point, the enclosure ditch marked one side of the trackway. Where the trackway appears to end at its north-east end, ditch 18700 turns at a right angle to the north-west.

In places, lengths of ditch appear to have been replaced or added to, with some lengths filling up former gaps. Some of the breaks in the ditches may be the result of truncation, while others may have been deliberate access points. On the north-west side, for example, there was a distinct kink in ditch 18700 (immediately north of roundhouse 18682), its line from the north-east turning first west then back towards the south-west, while other lengths of ditch to its west suggest a possible branch of the trackway forking off in a more northerly direction; this fork appears to have been subsequently closed off by another length of ditch. There were also a number of breaks in the trackway's south-eastern ditch: one close to the south-east end of enclosure ditch 18697, and two others close to the entrance into the enclosure, with one length of ditch curving towards the entrance, and another just beyond the western corner of the enclosure.

Despite the numerous intersections between the trackway ditches and those of both the Phase 1 clustered enclosures and the Phase 2 rectilinear field system, at only one location was a stratigraphic relationship established, with the edge of Phase 1 enclosure ditch 18669 cut by the edge of a short section of trackway ditch 18667. Moreover, together they produced only a small quantity of pottery ranging in date from Early/Middle Iron Age to Late Iron Age/early Romano-British, so giving no reliable indication as to their date.

Unphased features

Cremation burials

An immediately adjacent pair of urned cremations (18176 and 18214) was recorded in the westernmost part of the area (Fig. 3.22) and are probably closely contemporary. Both had been truncated. Grave 18176 (Fig. 3.23), which measured 0.5 m by 0.6 m and was 0.04 m deep, contained a pottery vessel within which there was cremated bone from an individual aged over 18 years. The cut of grave 18214, however, could not be clearly discerned, and was evident only from the position of a vessel within which there was cremated bone from a possible female aged 25–45 years. Both vessels, in grog-tempered fabrics, are of probable Late Iron Age date, although possibly extending into the post-Conquest period (see Jones in Chapter 6).

Area 2

Numerous possible archaeological features, many in dense clusters, were surveyed in this area, but only a very small proportion (excluding the ditches) were excavated, with many of them providing no dating evidence (Fig. 3.24). As described above, the roundhouse (51176) in the south-western corner of the area (Fig. 3.11) appears to be of Middle Iron Age date, although a Late Iron Age date cannot be ruled out and it is possible that some of the undated and unexcavated features also belong to the later period.

Of the ditches, all but two (51189 and 51207, both undated) were broadly consistent with the two main orientations of the wider late prehistoric field system (Fig. 3.10), although in this area these were not exactly perpendicular, with one set orientated west-north-west to east-south-east, and the other north-east to south-west. Nonetheless, those of each orientation appear to be associated, with some (eg, 51181 and 51182) forming a series of regular fields, and others lying closely parallel and appearing to forms trackways. Apart from these two – 51181 up to 2.1 m wide and 0.3 m deep with evidence for recutting at its northern end, and 51182 up to 2.6 m wide and 0.2 m deep – none the other ditches was over 1 m wide, and they were generally less than 0.2 m deep.

One possible trackway, 3–4 m wide and aligned north-east to south-west, was defined by ditches 51183 and 51184, while two, defined by ditches 51185 and 51186 (5 m wide) and ditches 51187 and 51188 (6 m wide) were aligned west-north-west to east-south-east.

However, these possible trackways cut across each other, suggesting that they represent two phases of the field system, and the relationship between the two mains sets of ditches is unclear. At those intersections where a stratigraphic relationship was recorded neither orientation was consistently earlier than the other.

The dating of these ditches is not aided by the small quantities, and mixed dates, of the pottery sherds recovered from them – two Middle Bronze Age, two Early/Middle Iron Age, one Late Iron Age/early Romano-British, two Romano-British, and eleven early medieval. Most of these periods were also represented in other features in the area, possibly accounting for the presence in the ditches of residual and/or intrusive material. Although 58% (by weight) of the pottery from the ditches was medieval, many of these sherds were eroded and possibly resulted from manuring. There is no evidence for medieval field systems of this rectangular form in the wider landscape, although a medieval rectangular enclosure (on a different orientation) lay to the immediate east, in Area 3W (see Medieval, Post-medieval and Modern, below), and the 2004 fieldwalking survey revealed concentrations of medieval pottery and tile in this area (Sparey-Green 2004, fig. 14). As in other areas of the site, therefore, the assigning of these ditches to a late prehistoric field system in very tentative, perhaps more so here than elsewhere.

Area 3W

Despite the relatively coherent arrangement of ditches in Area 2 to the west, few ditches in Area 3W fit easily with the wider suggested rectilinear field system, at least in terms of sharing its predominant axes (Figs 3.10 and 3.25). However, two short lengths of unexcavated ditch at its western end, and undated ditches 51192 and 50322 further to the east, have orientations (west-north-west to east-south-east) matching those in Area 2 and may well be associated; only one stratigraphic relationship was established for these ditches, ditch 51192 being cut by a medieval ditch (51193).

Although ditch 50322 intersected with a north–south ditch (51199), their relationship was not established. However, ditch 51199, which contained one late prehistoric sherd and three Late Iron Age/early Romano-British sherds may be associated with a set of ditches in the north-western part of Area 3E (see below, Fig. 3.26) which appear to represent some reworking of the field system later during the Late Iron Age.

Area 3E

This area had a very high density of ditches, representing multiple phases of activity of Late Iron Age, Romano-British and medieval date (Fig. 3.26). Those which appear to be of Late Iron Age date fall into two main groups – those possibly relating to the rectilinear field system, and those relating to a later localised reorganisation of the fields, including the laying out of a trackway that remained a significant boundary during the Romano-British and medieval periods.

Rectilinear field system

A number of ditches lie on or close to the principal axes of the rectilinear field system, but some of these are clearly stratigraphically late and in or after the Romano-British period; the most prominent of those aligned west-north-west to east-south-east (50866) is late Romano-British.

Nonetheless, three parallel and stratigraphically early ditches at the north-west, two of them undated (50579 and 50580) and one (50578) containing two Late Iron Age/early Romano-British sherds, are possible candidates (Fig. 3.26). So also may be stratigraphically early ditches 50657, 50864 and 50883 in the centre of the area; ditch 50657 (although on a slightly variant orientation) appears to curve towards ditch 50864, but their relationship was obscured by later ditches. Ditch 50657 contained one Iron Age and three Late Iron Age/early Romano-British sherds, while the single fill in ditch 50864 contained 12 Middle Iron Age sherds, along with a residual Middle/Late Bronze Age sherd, and two Romano-British sherds, probably intrusive; ditch 50883 contained no finds. At the south-east, ditches 50870 and 50877 could also belong to this phase; ditch 50870 contained two late prehistoric sherds, and one Romano-British sherd, while ditch 50877 contained one Late Iron Age/early Romano-British sherd.

Later field ditches

One set of apparently associated ditches in the western half of the area also appear to be of Late Iron Age date, but do not conform particularly closely with the overall pattern of the rectilinear field system, having different orientations to the ditches described above. These

appear, therefore, to represent some localised modification to the layout of fields. They include three ditches (50583, 50592 and 50596/51208) which converged at what appears to be a shared access point between adjacent fields (Fig. 3.26). Furthermore, three ditches (50596/51208, 50597 and 50598) contained substantial quantities of Late Iron Age/early Romano-British pottery, possibly representing dumps of pottery production debris.

Ditch 50592, which was up to 1 m wide and 0.3 m deep, and contained four sherds of Middle/Late Iron Age pottery, terminated 2.3 m from the western terminal of ditch 50596. The latter, which was up to 0.9 m wide and 0.4 m deep, contained 73 Late Iron Age/early Romano-British sherds (along with two Early/Middle Iron Age sherds, probably residual, and one dated only as Iron Age). It ran almost west–east for over 25 m, beyond which (as ditch 51208) it widened and deepened significantly (up to 2.5 m wide and 0.8 m deep), in places having one or more recuts. A 2 m wide slot (50529) excavated at the point where the ditch widened produced over 13.5 kg of Late Iron Age/early Romano-British (but probably pre-Conquest) pottery and one early Romano-British sherd (Figs 3.27 and 3.28). These were recovered from throughout the fill sequence, which included dumps of both pottery and of burnt material as well as episodes of silting. Other finds from this slot included an unidentified piece of copper ally (ON 895), a piece of an upper rotary quernstone (2118 g), a nail and small quantities of slag and fired clay. Another slot (50281) excavated further east, where the ditch turned slightly towards the east-north-east (and was cut by medieval ditch 50659) contained over 4 kg of Late Iron Age pottery, over 4.5 kg of slag, and small quantities of CBM and fired clay.

Ditch 50597 ran perpendicular from ditch 50596 towards the south, with just a 1.2 m gap between them. It was up to 0.5 m wide and 0.3 m deep, and in one short section of approximately 1.2 m (slot 50376) contained a dump of ceramics, comprising 0.5 kg of Late Iron Age pottery, and over 9.6 kg of Late Iron Age/early Romano-British pottery. It includes a number of near-complete vessels dating probably to *c.* AD 30–60 (Figure 3.29), but the lack of Romanised material suggests the material is entirely pre-Conquest in date. There was abundant charcoal among the pottery, as well as a piece of slag, a nail and other fragments of iron, but no other finds were recovered from elsewhere along the ditch.

Ditch 50598 (which cut ditch 50657 of the late prehistoric field system) terminated at the east just over 2 m from the southern terminal of possible trackway ditch 50658 (see below). It was 0.7 m wide and up to 0.4 m deep, and contained 2.5 kg of Late Iron Age/early

Romano-British pottery, most of it from a single slot (50481) (Figure 4.02). However, the ditch also contained 26 Romano-British sherds, all of them from the upper of two fills in another slot (50453); it is possible that these are either intrusive, or that the ditch remained open at the start of the Romano-British period. The ditch also contained two residual Late Bronze Age or Iron Age sherds.

The western terminal of ditch 50596 lay 3.6 m from the eastern terminal of ditch 50583 and the two ditches clearly seem to be part of the same boundary. The overall orientation of ditch 50583, which contained just one Late Iron Age sherd, was broadly consistent with the late prehistoric field system, but towards the west (where it continued beyond the excavation area) its slightly sinuous line was surveyed as being stratigraphically the latest of a sequence of ditches – cutting across not only the three parallel field system ditches (above), but also a possibly early Romano-British ditch (50587) curving from the north (but see Romano-British, below, Fig. 4.02). It is possible that this apparent inconsistency is due to the intersection at this point of three ditches (two with slightly irregular lines), leading to a misreading of their actual relationships.

Other ditches in this area potentially belonging to this phase of reorganised fields include ditch 50575 which contained one Late Iron Age sherd, and undated ditches 50576 (which cut field system ditch 50578) and 50577. As noted above, ditch 51199 in Area 3W may also be associated.

There were few discrete features in the area divided up by these ditches. Of note, however, was setting of four postholes (50344) in the small field at the east, probably representing a granary-type structure, its orientation matching that of possible trackway ditch 50658 (below). It was almost square (1.6–1.9 m wide), the postholes, one of which contained a fragment of Late Iron Age/early Romano-British pottery, measuring 0.5 m in diameter but having generally shallow (up to 0.2 m deep) U-shaped profiles.

Two other postholes (50525 and 50554), both of them close to ditch terminals at access points between fields (ditch 50592 and 50658, respectively) contained single Late Iron Age/early Romano-British sherds. A small pit (50317), cutting the southern edge of ditch 50598, contained a further nine sherds and one residual Late Bronze Age/Early Iron Age sherd.

Possible trackway

In the centre of the area there was a set of at least seven parallel ditches, aligned north-north-east to south-south-west, most of them crossing the 34 m wide excavation area (Fig. 3.26). Their layout, and their recorded stratigraphic relationships, indicate that they belong to a number of phases of activity. Moreover, their general line is clearly visible in aerial photographs as a cropmark continuing beyond the excavation. To the north this cropmark abuts another, which is clearly associated with a field boundary shown on the 1839 Kingsnorth tithe map (and later OS maps), with only faint traces beyond it (see Chapter 5, Fig. 5.5). This suggests that part of the boundary defined by the parallel ditches was one of long duration, potentially lasting from the Late Iron Age to at least the medieval (and possibly post-medieval) periods.

Three of the parallel ditches (50660, 50662 and 50663) are stratigraphically early, two of them cut by Romano-British ditch 50661 and all three by Romano-British ditch 50882. Moreover, two of them (50662 and 50663) cut ditches suggested to be part of the late prehistoric field system (50864 and 50883, above). The most westerly of the parallel ditches (50658), although having no stratigraphic relationships, may also be associated. Moreover, The position of these four ditches relative to Late Iron Age ditches 50598 and 51208 (the latter turning towards the north-east as it neared them) suggests that they may all be broadly contemporary, the parallel ditches possibly marking the line of a trackway bounding the eastern edge of the Late Iron Age fields. The order in which these ditches were cut could not be ascertained, and it is unclear whether the ditches represent the widening of the trackway (up to 7 m) or its narrowing (to 4 m).

Ditch 50658 contained 1.3 kg of Late Iron Age/early Romano-British pottery (as well as single Iron Age and Romano-British sherds), along with a small quantity of slag. The only find from ditch 50660 was one possibly intrusive Romano-British sherd. Ditch 50662 contained three Late Iron Age/early Romano-British sherds, and two almost certainly intrusive late Romano-British sherds, and a piece of slag. Ditch 50663 contained eight Late Iron Age/early Romano-British sherds and a piece of slag.

Areas 4S, 9E and evaluation trenches

These two adjacent areas, which together span the top and north-east side of the ridge south-west of the river (Area 4S) and the adjacent edge of the valley floor (Area 9E) contained a set of ditches the orientations of all of which are consistent with late prehistoric rectilinear field system (Figs 3.10 and 3.30). However, an estate map of 1683/4 indicates two post-medieval field boundaries crossing Area 4S on the same two axes, and it is considered most likely that these are represented by ditches 16244 and 16278 (with ditch 16276 also probably associated), while a field boundary shown on the 1839 Kingsnorth tithe map is probably represented by ditch 16277 (see Fig. 5.5). The remaining ditches, however, are considered to be probable components of the late prehistoric field system, as are many of the lengths of ditch recorded in the evaluation trenches to the immediate north-west and south-east.

In addition, there were scattered settlement features of Late Iron Age to Romano-British date; a number that were datable only as Late Iron Age/early Romano-British are considered in this section, although it is possible that they were post-Conquest.

Settlement features

A short length of curving gully (16206) in the southern half of Area 4S probably represents a roundhouse. The gully, which had a projected internal diameter of 6–6.5 m, was 0.3 m wide and 0.15 m deep, contained 64 sherds of Late Iron Age pottery and fragments of fired clay and animal bone. A single unexcavated possible posthole lay within the interior.

There were a number of pits in the same general area, some of which contained small quantities of Middle/Late Iron Age (16163 and 16178), Late Iron Age (16118 and 16226) and Late Iron Age/early Romano-British pottery (16084, 16129, 16131 and 16142). These were of variable shape and size, but generally shallow (no more than 0.25 m deep), and contained few other finds (two contained small quantities of animal bone).

Pit 16142 contained one piece (9 g) of cremated human bone, while another fragment was recovered from a nearby undated pit or posthole (16161). This material is unlikely to have been deliberately deposited and could be either residual or intrusive, there being a number of other cremation-related features in the area (below).

Three large features are of uncertain nature or function. A 5.3 m long linear feature (16280), aligned north–south, possibly a beam slot, comprised four short segments averaging 0.3 m wide and no more than 0.1 m deep. It contained 54 sherds of predominantly Late Iron Age pottery (but including also Middle/Late Iron Age and Late Iron Age/early Romano-

British), as well as a fired clay spindle whorl (ON 28) and a quantity of animal bone. An unexcavated 2 m long linear feature, lying perpendicular to its northern end, could potentially be associated with it. Also possibly associated was an irregular feature (16217) 8 m to its north-west, which appeared to comprise the junction of two short perpendicular linear gullies (2 m and 4.2 m long), with similar orientation to 16280 and the unexcavated feature. The intersection of the gullies, the depths of which were not ascertained, was obscured by a possible tree-throw hole. The feature contained three Late Iron Age sherds.

Another large irregular feature (16176) to their south-west, which also comprised a sort length of approximately north–south gully, contained 30 Late Iron Age sherds and fragments of fired clay and burnt animal bone.

Mortuary-related features

There was a range of cremation related features in Area 4S. These included the Middle Iron Age cremation burial of a subadult or adult over 15 years of age in grave 16164, and a small quantity (9 g) of redeposited cremated bone of probable Late Iron Age or early Romano-British date from a subadult or adult over 12 years of age in pit 16142. In addition, a small cut (16136) at the northern end of the area had a charcoal-rich fill containing 7 g of cremated bone from a subadult or adult over 12 years of age, and may also be a deliberate mortuary deposit, although it remains undated.

However, grave 16120 (0.6 m in diameter and 0.16 m deep) contained the unurned cremated remains of a possible woman aged 30–40 years, and a sample of the bone was radiocarbon dated to 100 cal. BC– cal. AD 110 (SUERC-64208, 2015 ± 29 BP), placing it within the Late Iron Age. The grave had three fills, with the bulk of burial deposit recovered from the undisturbed middle fill (16127), along with pyre debris in the form of charcoal and 763 g of burnt flint (Fig. 3.31). The lower two fills contained 22 sherds of Late Iron Age/early Romano-British pottery, all of them burnt. The upper fill contained 31 abraded body sherds or surfaceless flakes.

Rectilinear field system

A number of ditches in Area 4S have the same orientations as those of the suggested late prehistoric field system (Fig. 3.30). However, as noted above, two perpendicular ditches

(16244 and 16278) closely match field boundaries shown on historic mapping, and it likely that two others (16276 and 16277) are also associated (see Chapter 5).

The most likely candidate for a component of the late prehistoric field system, therefore, is ditch 16279 which ran towards the south-east before curving to the north-east and terminating. It was up to 2.3 m wide and 0.4 m deep, and contained four sherds of Iron Age pottery, as well as ten Late Bronze Age/Early Iron Age sherds. Two unexcavated ditches further to the north-east on the valley floor (in Area 9E) had similar orientations, the line of one of them apparently continued to the north-east in Areas 4N and 9A (see below).

Areas 4N, 9A and 9C

Two parallel sets of undated ditches, orientated north-east to south-west, were recorded approximately 32 m apart in Area 4N (and traced, unexcavated, further to the north-east in Area 9A, and to the south-west in Area 9E), and appear to form part of the rectilinear field system (Fig. 3.32). Ditch 16275, which was up to 2.2 m wide and 0.9 m deep, had a terminal to the south-west, 5 m from the opposing terminal of a similar ditch (16066), creating an entrance gap. To their north-west, and of comparable dimensions, were ditches 16270 and 16273; they appeared to continue the line of an unexcavated ditch in Area 9E. Ditches 16270 and 16273 had a 9 m wide gap between them, which was blocked, perhaps later, by a smaller ditch (16272), 1.5 m wide and 0.4 m deep. Together these ditches contained worked flint and burnt flint, with occasional pieces of animal bone and fired clay, but no pottery. The bulk of the worked flint (266 of the 346 pieces: 77 %) came from the terminals of ditches 16270 and 16273, and from ditch 16272 between them.

Apart from the Middle/Late Bronze Age pit (16005, above) containing fired clay loomweights and 34 pieces of worked flint, and a curving gully (16274, below) containing Romano-British pottery, there were few other features in the area.

An undated ditch (50136) in Area 9C, 150 m to the north-east, is potentially part of the same field system extending further across the valley floor.

Area 5

This area, comprising eastern and western parts, lay on the valley floor, with most of the features in the smaller eastern part (Fig. 3.33). These included a small subrectangular ditched feature of unknown function but considered likely to be some form of monument, potentially mortuary-related although no mortuary evidence was recovered. There were also a series of ditches, of at least three phases (in addition to post-medieval), a number of small gullies, two of which probably represent roundhouses, and a cluster of discrete features – including postholes, pits, ovens and a cremation graves. One set of ditches appears to be of Romano-British date, containing Romano-British sherds among the Late Iron Age/early Romano-British pottery (see Romano-British, below). The absence of any Romano-British sherds either from the earlier ditches or from the monument suggests that these are likely to be of Late Iron Age date.

Rectilinear field system and associated features

Two groups of ditches in this area, albeit apparently of different phases of activity, shared the same axes as the wider field rectilinear system. Three of them (15166, 15375 and 15376), all aligned south-west to north-east, were stratigraphically early.

Ditch 15166, which was 1 m wide and 0.2 m deep, contained no finds. The other two (15375 and 15378), both of which pre-dated a small subrectangular monument (15323), were 3.5–5 m apart and may have defined part of a trackway (Fig. 3.33). The north-western ditch (15376), which extended across the excavation area, was up to 1.5 m wide and 0.7 m deep with convex sides and a concave base (Fig. 3.34 section B, slot 15330), its southern edge cut by the monument ditch. The only find, a single abraded Late Iron Age sherd (8 g) was recovered from the uppermost of its three fills.

The south-eastern ditch (15375), which curved slightly towards the north, terminated within the excavation area. It was up to 1.1 m wide and 0.5 m deep, with a single fill from which was recovered three small abraded Late Iron Age/early Romano-British sherds. Five undated postholes (15241, 15243, 15245, 15247 and 15249), 0.3–0.6 m wide and 0.1–0.3 m deep, lay in an approximate horseshoe arrangement around its terminal, and could possibly be associated with it, perhaps forming some kind of structure marking this point (Figs 3.33 inset and 3.35). They also lay within the interior of the monument (as did the ditch terminal) and it is possible that they were associated with it instead (or as well). A small pit (15361) was recorded as being cut by ditch 15375 (where the latter was cut, in turn, by the inner edge of

the monument ditch (15323); this had a single fill containing three sherds of Late Iron Age/early Romano-British pottery.

The second group of ditches in the eastern part of the area appears to represent two long-term boundaries, both of them evidently recut and, as a result, significantly wider than the other ditches. Boundary 15373 ran south-west to north-east across the area, with ditch 15381 running perpendicular from it towards the south-east. Ditch 15381 was surveyed as cutting ditches 15166 and 15376, although these relationship were not established in section, while boundary 15373 consisted of multiple parallel ditch cuts, some of which could certainly have been contemporary with ditches 15166, 15375 and 15378.

As surveyed, boundary 15373 varied considerably in its width, with a marked widening from 5 m to 9.6 m toward the south west. An excavation slot, 0.7 m deep at this widest point, revealed the upper parts of at least six cuts of variable width, three of which appear to have been the terminals of ditch cuts extending only to the north-east, accounting the boundary's marked narrowing to the immediate south-west (Fig. 3.33 and section A). The sequence of cuts visible in section suggests that this boundary was one of relatively long duration, being remodelled as the ditches silted up, which may have happened quite rapidly given their valley floor location. The two ditch terminals on the south-east side are stratigraphically early within the sequence, possibly indicating an entrance break in the boundary at this point, subsequently blocked by extending the later cuts across it. The second slot, 0.9 m deep, was cut through boundary 15373 against the northern edge of the excavation area; three ditch cuts were recorded. No finds were recovered from any of the cuts in either slot.

The relationship between boundaries 15373 and 15381 was not examined, but because the latter joined the former at a right angle, and did not continue beyond it, they are assumed to be broadly contemporary. Two cuts were recorded in the single excavated slot across boundary 15381, the earlier cut (15234), at least 1.2 m wide and 0.4 m deep, curving towards the north-east, the later cut (15261), 2.2 m wide and 0.5 m deep, continuing to the south-east. Apart from one small Late Iron Age/early Romano-British sherd and a piece of burnt flint in cut 15234, all the finds came from the two fills of cut 15261. These comprised a further 19 sherds (146 g) of the same date, a fragment of copper alloy brooch (ON 79), two pieces of lead – one (ON 6) a possible rivet, the other a possible vessel foot – and single pieces of slag, fired clay and animal bone.

Subrectangular monument

At the eastern end of the area there was a slightly rounded, subrectangular ditched monument (15323), measuring 8.8 m by 7.7 m externally (and 6.5 m by 4.8 m internally), its long axis aligned NNW–SSE (Figs 3.33 and inset and 3.35). The ditch varied considerably in depth and profile around its circuit, being generally shallower along its northern side (0.15–0.4 m) and at its south-west corner (0.3 m), and deeper along its eastern (0.7–0.8 m), southern (0.65 m) and western (0.55–0.66 m) sides (Fig. 3.34 section B). Where deepest its sides steepened towards the base; the deep section of ditch of the western side had a noticeable rounded terminal at the monument's north-west corner.

Most excavated slots had two or three naturally accumulated fills. In two slots on the eastern side, a thin charcoal-rich layer (15206), possibly dumped, was recorded between the lower and upper fills (Fig. 3.34 section D). Finds, mainly pottery and animal bone, were recorded through the fills, but not evenly around the ditch circuit. All the animal bone (384 g), for example, was recovered from the two slots on the eastern side, as was as a small quantity (2 g) of highly burnt animal bone and a piece of burnt flint. The pottery (73 sherds, 851 g) was recovered from around the circuit, although 65% by weight was recovered from the two slots (15277 and 15326) on the shallow northern side. Apart from three Late Iron Age sherds (17 g) all the pottery was dated as Late Iron Age/early Romano-British. Small quantities of worked flint (two pieces) and fired clay (22 g) were also recovered.

As noted above, five undated postholes lay in an approximate horseshoe arrangement inside the monument. While they appear to be arranged around the terminal of pre-monument ditch 15375, this does not preclude their having had some relationship to the monument, as well or instead.

It is not possible to determine what the chronological relationship was between the monument and ditch 15381 which passed to its immediate north-east. It could be argued that because the monument's axis differed in its orientation from that of the ditch, it probably pre-dated the ditch, but this cannot be established.

Post-monument features

When the monument ditch had fully silted it was cut by four features on its eastern and southern sides. In the centre of the ditch, near the monument's northwest corner, was a small

undated possible posthole (15359), 0.2 m wide and 0.1 m deep. To its south, pit 15170 (0.9–1 m wide and 0.3 m deep) had a charcoal-rich layer (15169) containing burnt soil on its base, apparently dumped from the eastern side while still hot as it had burnt the underlying ditch fill (Fig. 3.34 section C); the overlying fill (15168) contained nine sherds (93 g) of Late Iron Age/early Romano-British pottery. To its immediate south-east, and cutting the inner edge of the ditch, pit 15196 (0.7 m wide and 0.2 m deep) had a similar burnt layer across the base, and contained two further sherds (32 g).

Pit 15224 (0.6–0.9 m wide and 0.4 m deep), which cut the inside edge of the monument ditch on its south side, was different in character, its single fill containing fragments of charcoal but no distinct burnt layer; it contained two sherds (13 g) of Late Iron Age/early Romano-British pottery.

Settlement and other features

The majority of discrete features in Area 5 also lay within the eastern part (Fig. 3.33). These included the Middle Iron Age cremation burial of an adult of 25-45 years of age (15049), and a number also contained Romano-British pottery. However, some contained only Late Iron Age/early Romano-British pottery, or were undated, and it is possible that some of these are of Late Iron Age date, particularly since two possible roundhouse ring gullies were recorded in this area, one of them (15122) cut by phase 2 ditch 15381, the other (15379) cut by a Romano-British ditch (15372, see Romano-British, below). However, because the Romano-British features cannot be distinguished from the rest on spatial grounds, all the discrete features in the eastern part of the area are considered as potentially Romano-British (see below).

Gully 15122 was less than 0.1 m deep and had a projected internal diameter of 4 m, but contained no finds. Gully 15379, 16 m to the west-north-west, with a projected internal diameter of 5.7 m, is possibly contemporary; it contained two small sherds (6 g) of Late Iron Age/early Romano-British pottery. A shallow undated pit (15161) lay just within its interior, while to its immediate east was an oval pit (15156), 1 m by 1.6 m and 0.3 m deep, containing one Late Iron Age/early Romano-British sherd, and nail, a piece of partly vitrified fired clay, possibly the product of an industrial process, a piece of burnt animal bone and charcoal.

In the western part of the area there was a small number of discrete features which, as to the east, included some of Romano-British date; all are therefore considered together (see

below), even though some could be Late Iron Age. Also possibly of Late Iron Age date was a short length of angled ditch (15356) of uncertain function which was cut by a Romano-British ditch (15348, below). It was 0.8 m wide and 0.5 m deep, and its northern terminal contained 74 sherds (600 g) of Late Iron Age/early Romano-British pottery, and well as fragments of fired clay (45 g) and animal bone (5 g).

Area 6

A number of phases of activity are represented by the array of ditches and other features in this area (Figs 3.36 and 4.6), but as elsewhere on the site their phasing is hampered by the lack of secure stratigraphic relationships and by the occurrence of residual pottery in some of the ditches. The following interpretation (and see also Chapter 5) is therefore tentative. It should be noted that the ditches in Area 11, to the immediate southwest show no obvious relationship to those recorded in this area, despite the two areas being separated by less than 30 m (below).

Rectilinear field system

There were several ditches in the south-eastern part of the area orientated north-east to south-west, and therefore potentially components of the rectilinear field system. However, all but two of them (30146 and 30148), both undated and possibly marking a 4 m wide trackway, contained predominantly Romano-British pottery (see Chapter 4, Fig. 4.6). It is possible that their orientation, when laid out in the early Romano-British period, was influenced by the axes of the existing field system, but it could also be coincidental.

Other features

Area 6 was centred on a small spur, extending to the north-east, near the base of the ridge on the south-east side of the valley slope. The resulting area of slightly flatter ground just above the valley floor was occupied by the curving gully of a possible Late Iron Age roundhouse, and it is possible that some of the other undated ditches were also of this date.

The roundhouse (30122) was represented by two lengths of gully with a projected internal diameter of 12 m. The longer gully, which had been recut, was separated from the shorter one by a 1.4 m wide gap (2.3 m wide when recut), and although the gully (including

the recut) was 0.3 m deep at its eastern terminal, the gully defined only the southern part of an arc. While it is possible that the northern part had been completely truncated, it is also possible that what survived was this feature's full original extent, and that it may have had some other function.

The gully produced 36 sherds of Middle/Late Iron Age pottery, and one Late Iron Age/early Romano-British sherd, suggesting a Late Iron Age date, along with animal bone and fired clay. However, a further 123 Middle/Late Iron Age sherds were recovered from a section of a later ditch (30198, slot 30106), at the point where it cut the western terminal of the gully recut. This material is considered likely to have derived from that terminal, although the dating of ditch 30198 is problematic; its south-eastern end, which was recorded as cutting Romano-British ditch 30206, produced two small Romano-British sherds, and its relationship with undated ditch 30197 (below) was not established.

There was a line of five small undated features across the centre of the arc's interior (Fig. 3.36), one cutting the eastern terminal, but apart from one piece of burnt flint they contained no finds and may not be associated with it; there was a loose cluster of other possible features in the general vicinity, as well as a small number of other undated features dispersed across the wider area. To the north-west, a short linear feature (30196), 0.9 m wide and 0.4 m deep, possibly a length of ditch (cut at its western end by the terminal of Romano-British ditch 30195) contained a single Middle/Late Iron Age sherd.

A small cluster of apparently associated features, 55 m east of gully 30122, together contained pottery of Middle/Late Iron Age (42 sherds), Late Iron Age (1 sherd) and Late Iron Age/early Romano-British (25 sherds) date, suggesting that they belong to this phase. These included two pits (30060 and 30092), both less than 0.5 m wide and 0.12 m deep, and an adjacent short irregular linear feature (30124) of unknown function. They also contained small quantities of fired clay, charcoal and burnt animal bone including, from feature 30124, two burnt bone beads (ON 50).

Also possibly associated with the roundhouse were two lengths of undated ditch (30197 and 30203), separated by a 25 m gap, at the north-west of the area, the curving lines of which suggest that they may be related to each other. Ditch 30197 curved south then south-east to a terminal 14 m south-west of the roundhouse gully, and their relative positions suggest they could be associated. Neither length of ditch contained any finds, but ditch 30203

was stratigraphically early, being cut by a Romano-British ditch (30204, below), and they are tentatively assigned to this phase.

Area 7

Rectilinear field system

Among the complex array of predominantly Romano-British ditches in Area 7 there is a stratigraphically early set with a consistent rectilinear arrangement that conforms to the orientation of the wider late prehistoric field system (Figs 3.10 and 3.37). It is particularly noticeable that their axes are not related to the local topography, but lie obliquely across the slope.

Some of the ditches appear to form large fields, such as that measuring at least 90 m wide at the north-east, bounded on three sides by ditches 41090 and 41092, while others appear to define smaller plots, such as that at the south-east bounded by ditches 41090, 41092 and 41093. Some close parallel ditches, such as 40847 and 40853 (3 m apart) at the north-west, and 41095 and 41096 (9 m apart) towards the south-west may indicate sections of track or droveway. The latter, although apparently related, were disconnected from other lengths of ditch, possibly reduced by truncation. Those ditches overlain by the Romano-British enclosure (below) appear to have suffered higher levels of truncation, possibly due to the concentration of later activity and heavier traffic. For example, the excavated slots of ditch 41090 which lay outside the enclosure averaged 0.5 m deep, while those inside averaged only 0.2 m. In slot 40273, for example, ditch 41090 was 1.1 m wide and 0.6 m deep with steep straight sides and a flat base (Fig. 3.37 section), and this may be indicative of the original dimensions of the wider field system. It had three fills, the lower and middle fills sloping down from the north-east side possibly indicating a bank on the downslope side.

The ditches produced few finds – six pieces of worked flint and one sherd (2 g) of flint-tempered late prehistoric pottery; three pieces of CBM recovered from ditch 41090 are almost certainly intrusive, deriving from a slot within the Romano-British building in the centre of the Romano-British enclosure (below).

Area 8

A number of linear features which were surveyed in this area (Fig. 3.10), which lies on the valley floor, had orientations consistent with the wider field system, but none was excavated, and so their character and date remains unknown.

Areas 10E, 10W and Bilham Farm

Apart from the Bronze Age ring ditch and oval segmented ditch, and a cluster of short irregular lengths of ditch near the centre of Area 10E, nearly all the ditches recorded in these areas appear likely to belong to the late prehistoric rectilinear field system (Fig. 3.38). This interpretation is based primarily on their layout and orientation since together they produced very little dating evidence, and that was of mixed date, comprising 11 sherds dated only as prehistoric or late prehistoric, three Late Iron Age/early Romano-British sherds, one Romano-British sherd and five medieval sherds, many of them abraded.

However, the ditches appear to define an arrangement of rectangular fields of varying size, and if so they represent the most extensive and best preserved areas of the field system on the site. The intersections of some ditches indicate that not all the ditches were of the same phase, although this probably indicates modification of the field system rather than the presence of two distinct systems of different periods. There are gaps of varying widths in many of the ditches; in some cases these represent entrances but others appear to be due to truncation.

The field system in these areas occupies the upper slope of the south-west-facing side of the ridge on the south side of the river valley. Their layout appears to have been partly affected by existing features in the landscape, in particular the small Bronze Age ring ditch (55068), perhaps a barrow, in Area 10W, around which a small sub-enclosure appears to have been constructed within a larger field, possibly at the same time as the field was laid out. The field, defined by ditches 55372, 55374, 55375 and 55010, measured 64–68 m long (NE–SW) by 46 m wide, and had significant gaps along the north-east side, where ditch 55010 was only 0.15 m deep, and at the northern corner, immediately north-east of the barrow; there were narrower gaps in the other three sides. Within the field were 11 undated postholes and small pits, the majority near its centre but forming no clear pattern.

The sub-enclosure, occupying the northern approximate quarter of the field, was defined to the south-east and south-west by ditch 55370. As well as the wide entrance at the

north, there were also three narrow gaps towards its western corner. One gap, 1 m wide in ditch 55372, was flanked by a pair of external postholes, one (55074) 0.3 m wide and 0.1 m deep, the other unexcavated. A second gap, 1.5 m wide, was in ditch 55370 on the south-west side; two adjacent postholes were recorded cutting into the infilled ditch terminal on the south-east side of the entrance. Just inside this entrance was the small feature (55069) containing a charcoal deposit within a large piece of Middle Bronze Age pottery (possibly the rim of an inverted urn (see Middle Bronze Age, above). Also close to this feature was a third gap, 1 m wide, at the western corner. There were a number of small features in the southern part of the sub-enclosure, including what may have been a curving line of seven possible postholes running from the gap at the south-west corner towards the barrow.

The enclosing and apparent respecting of the possible barrow by the field system was not matched at the Late Bronze Age oval structure (55277), which was surveyed as being bisected by ditch 101504 (although the stratigraphical relationships were not securely established). Similarly, the possible structure (55253) 60 m to its south was bisected by ditch 55188.

The field containing the round barrow sub-enclosure was flanked on its north-western side by a broad trackway, on the other side of which was another large field, measuring at least 55 m by 80 m, defined by ditches 55371 and 55373 (the latter recut for part of its length by ditch 100906). This field had a 10 m wide entrance gap at its eastern corner, and a 2.5 m gap just to the north-west. Within the field were 18 undated postholes and small pits, forming no clear pattern. The area north-east of this field may have been another large field, but any other ditches appear to have lain outside the excavation area.

The trackway, as defined by ditches 55372 and 55373, was 14–15 m wide, although three lengths of an internal ditch or gully (not excavated), extending for 27 m parallel to ditch 55372, narrowed it to 11 m. An apparently related ditch (55376), flanking the round barrow sub-enclosure, followed the same line before turning sharply into the trackway then back to its original line before terminating. This resulted in an abrupt narrowing of the trackway immediately opposite the corner entrance into the field to the west, possibly to aid in the movement of livestock between the trackway and the adjacent fields. These internal ditches within the trackway may also have been intended to keep livestock away from the entrances into the sub-enclosure containing the possible barrow. Parts of further fields in Area 10W were indicated by ditches to the south and east.

The field system continued to the south-east in Area 10E, where parts of at least five fields are indicated, with a probable sixth extending to the south-east. It is likely that there was at least one north-east to south-west boundary in the 32 m gap between the two areas, as ditch 55374 in Area 10W did not quite align with ditch 101504 in Area 10E. A number of parallel ditches, such as ditches 101504 and 55377 may define a trackway narrowing from 11 m wide at the north-west to 5 m wide at the south-east.

Although most of the ditches in Area 10E conformed to the same rectilinear pattern displayed, the fields appeared to have undergone a greater degree of modification over time, with some ditches being replaced or otherwise slightly re-aligned, although in the absence of clearly established stratigraphic relationship between those that intersected it is not possible to determine the sequence of these changes.

Ditch 55259, for example, which had a slightly sinuous line, appears to be associated with ditch 55232, both of them turning to the south-east before terminating on opposite sides of a 3.5 m wide entrance between two adjacent fields. Another ditch (55262), however, on the same general line, spanned this entrance, indicating that in one phase of the field system there was no entrance at this point. A third ditch (55188) with a similar orientation passed to the east of the entrance, but did not block it. The creation, or alternatively the blocking, of such an entrance may have been associated with the presence of the possible structures to its immediate south. These undated structures, one a possible post-built circular structure (55379) and another (or others) represented by short lengths of curving gully (55253), have been described above in relation to Late Bronze Age structure 55277 with which it has some similarities (see Fig. 3.7). However, they could equally be associated with this phase of activity.

As in Area 10W, a large number of small discrete features were surveyed, of which only a small sample was excavated, most of them remaining undated. Most formed no recognisable pattern, and while some could relate to activity contemporary with the use of the field system, others, as noted above, could be associated with the earlier (Late Bronze Age) activity in this area, or with the Romano-British or medieval periods, finds from both of which were also recovered in small quantities.

There was a rather disorganised cluster of short lengths of ditch, with variable orientations, near the centre of the area, spanning two of the fields. Some of these ditches could potentially represent components of the field system, or some form of contemporary

activity, but they form no obvious pattern, and the few finds from them (prehistoric and medieval pottery) provide no secure indication of their date.

Similarly, to the south of Area 10W, on the Bilham Farm evaluation, lengths of undated ditch on the alignment of the field system were encountered in trenches 1072, 1073 – 1076, 1078 and Pond C. No dating evidence was recovered, but the similarity of shape, scale and orientation suggests that these features are part of the same system of land division.

Area 11

A pit or possible ditch terminal (57119: Fig. 5.14) containing a single Late Iron Age sherd (49 g) was located to the west of Late Iron Age/early Romano-British enclosure 56901/56902. It cut an undated feature and was cut by a short late Romano-British ditch (57082).

4. Romano-British

The projected line of the Roman road from Lympne to Maidstone passes along the south-western edge of the site (Fig. 1.1), and its position and orientation is likely to have had an impact on the disposition of Romano-British activity in the surrounding landscape. The course of the road is preserved in the track from Bilham Farm south-east to Cheeseman's Green, and beyond that in the road to Adlington, but there are no surviving indications of its line north-west of Bilham Farm where it passes the site, and it is not known at what date this section of the road went out of use.

Area 1

In comparison to the Iron Age pottery assemblage a relatively small Romano-British assemblage (94 sherds, 706 g) was recovered from Area 1, of which all the chronologically diagnostic sherds (amounting to 70% by weight) were early Romano-British. The material was concentrated in the western part of the Area, and while twelve sherds were intrusive in earlier features, the rest were from a range of features which may indicate the edge of an area of Romano-British settlement (Fig. 4.1).

These include a rather irregular arrangement of ditches, apparently of more than one phase. The first phase comprises ditch 18696 which follows a slightly sinuous north-west to south-east line, curving east at its south-east end possibly to line up with the Late Iron Age Phase 3 trackway which may have remained in use in this period. At the north-west its line may have been continued, after a 4 m gap, by ditch 18661. Ditch 18662, which ran south-west from ditch 18696, then west, appears to form with it a small irregular enclosure. Together these ditches contained pottery of Late Iron Age (four sherds), Late Iron Age/early Romano-British (27 sherds), and early Romano-British (52 sherds) date. The second phase is represented by ditch 18663 (with cut ditch 18662) and possibly also ditches 18585 and 18660, which together may have defined a small rectangular enclosure. Ditch 18585 contained no finds, but together ditches 18660 and 18663 contained pottery of Late Iron Age/early Romano-British (16 sherds), early Romano-British (20 sherds), and Romano-British (two sherds) date.

There was a spread of small pits and postholes in the area of these Romano-British ditches, including numerous possible features that were not excavated. Many of those that were excavated were undated, but a small number were dated as either Late Iron Age or Romano-British (and others only as Late Iron Age/early Romano-British). They included a cluster of postholes in the possible small rectangular enclosure, within which at least two square four-post structures can be identified. Structure 18701, which was 1.8 m square, had postholes averaging 0.5 m wide and 0.3 m deep, which together produced nine sherds of Late Iron Age/early Romano-British pottery and one early Romano-British sherd. Structure 18702, which was slightly smaller (1.5–1.6 m square), but with postholes of comparable size, produced three Late Iron Age/early Romano-British sherds. Both structures had similar orientations (one axis aligned north-west to south-east), which together with their proximity and position with the small enclosure suggests that both are of Romano-British date.

The other postholes in this area did not form any clearly discernible structures. The few pits were generally small and shallow, containing only small quantities of domestic waste, mainly pottery but occasionally animal bone and fired clay, as well as burnt material. The location of the focus of Romano-British settlement is unclear. The four-post structures, which are likely to have been close to settlement structures, were positioned at the edge of the floodplain, 70 m from the present course of the river.

Area 2

As noted above (see Middle Iron Age) an irregular pit (51001), 0.8 m by 1.1 m and 0.4 m deep, near the south-west corner of the area, contained a single Romano-British sherd and 15 Late Iron Age/early Romano-British sherds (Fig. 3.24). The pit lay within the interior of an Iron Age roundhouse (51176) but is probably not associated with it.

Only two other Romano-British sherds (9 g) were recovered from this area, in a ditch (51179) 55 m to the south-east, possibly forming part of the late prehistoric field system, in which case they must have been intrusive.

Area 3W

A relatively small quantity of Romano-British pottery (66 sherds) was recovered from Area 3W (although significantly larger than in Area 2). Nearly all of it (96% by weight) came from a single slot cut through two adjacent near-parallel ditches in the south-east corner – ditch 51197 (slot 50889, 19 sherds), and ditch 51198 (slot 50886, 38 sherds) (Fig. 5.3). Due to its position and line, the later ditch (51198), which also contained one medieval sherd, is considered likely to be a component of a rectangular medieval enclosure (defined by ditch 51195, see Chapter 5), and it is possible that the Romano-British sherds in it derived from 51197, which it cut. Although relatively isolated, ditch 51197 was probably of Romano-British date. Ditch 51200 at the area's north-east corner may also have been of this date, containing five Romano-British sherds, although its position and orientation suggests that it too could have been associated with the medieval enclosure; its possible continuation to the east (as 50587 in Area 3E), however, contained a further 27 early Romano-British sherds. All the remaining Romano-British sherds from Area 3W were residual in medieval ditches 51194 (three sherds) and 51195 (one sherd).

Area 3E

Probably reflecting the small quantities of Romano-British pottery in Area 3W, only 65 Romano-British sherds were recovered from the western half of Area 3E – ie, west of the Late Iron Age trackway – in contrast to the 1386 sherds from the central and eastern parts (Fig. 4.2). The line of line of the trackway continued to form a significant boundary during the Romano-British period, as indicated by the lines of ditches 50556 and 50661, and it continued to do so into the medieval period (see Chapter 5).

Nearly all the Romano-British pottery from the western part of the area (96% by weight) came from single contexts in three ditches (50587, 50598 and 51210), the rest comprising single sherds from five other contexts. As noted above, ditch 50598, which contained a substantial deposit of Late Iron Age/early Romano-British pottery (smaller but comparable to the deposits in ditches 50596/51208 and 50597), is considered likely to be of Late Iron Age date, with the 26 Romano-British sherds also recovered (from a different slot, 50453) probably intrusive. Ditch 51210, which was 0.5 m wide and less than 0.2 m deep, lay 20 m north-west of, and parallel to, the earlier trackway; its northern end cut Late Iron Age ditch 50596, but its relationship with ditch 50597 was not established.

More problematic (as previously noted) is ditch 50587, one of a number of ditches intersecting in the north-west corner of Area 3E. The primary fill in slot 50232 contained 25 grog-tempered sherds from a single vessel of a predominantly but not exclusively post-Conquest form (see Jones, Chapter 6), and two Late Iron Age/early Romano-British sherds; a further ten Late Iron Age/early Romano-British sherds were recovered from other slots. As surveyed, ditch 50587 had a notable kink in its line where it intersected with ditch 50583 (and three parallel ditches of the late prehistoric field system), and although it was shown to cut field system ditch 50579 its relationship with ditch 50583 was not examined in section. The precise stratigraphic position of the context from which these sherds were recovered, therefore, remains uncertain.

In contrast, there was evidence for a far greater level of Romano-British activity in the central and eastern parts of Area 3E, ie, in the ditches running parallel to those of the Late Iron Age trackway, and in the ditches and many discrete features to its east (Fig. 4.2). A curving gully may indicate a roundhouse of this period in the south-east corner of the area, and in addition to domestic activity there was evidence for industrial activity in the form of pottery production and metalworking. More than one phase of Romano-British activity is indicated by the many intercutting features, and the associated pottery assemblage ranges in date from early to late Romano-British. Most (70.2% by weight) of the 1386 sherds (16,046 g) from this area could only be given a general Romano-British date, but the rest were early Romano-British (8.3%), middle Romano-British (0.7%) and late Romano-British (16.7%). While these assist in the dating of a small number of largely discrete features they do little to provide an overall phasing of Romano-British features in the area.

Roundhouse

In the south-east corner of the area there was a 10 m length of curving gully (50876), 0.3–0.5 m wide and up to 0.12 m deep but truncated at the west, with a projected internal diameter of 13.6 m, indicating a probable roundhouse lying largely outside the excavation area (Fig. 4.2 inset). It cut a short length of ditch (50877) possibly forming part of the late prehistoric field system, and contained six sherds of pottery – of Late Iron Age/early Romano-British, middle Romano-British and Romano-British date – strongly suggesting a Romano-British date.

A further six sherds, of the same date range, were recovered from two postholes (50442 and 50444) within the interior; there were six other postholes, all undated, within the interior, but they formed no obvious pattern and need not be associated with the roundhouse.

Ovens/kilns and associated features

Oven/kiln 50674

A circular oven or kiln (50674) was recorded among a group of pits near the centre of Area 3E, cut on its eastern side by Romano-British ditch 50865 (Figs 4.2 and 4.3). It had a circular chamber, 0.9 m in diameter and 0.35 m deep, with near-vertical sides and a flat base, and a 0.4 m wide flue/stoke-hole, with a slightly concave base, opening towards the north-east. The rear wall (opposite the flue) had a pronounced shelf up to 0.15 m wide in the centre but narrowing to each side, approximately 0.2 m above the floor. The sides (including the shelf) consisted of burnt clay; in places it appears that the clay might have been deliberately applied as a lining. The base of the oven also showed signs of burning and was very compact.

On the western side of the base, there was a charcoal-rich layer (50677), 0.5 m thick, containing three sherds of pottery, one of them possibly late Romano-British (Fig. 4.2 section A); a further 17 Romano-British sherds (including single abraded early and middle Romano-British sherds) were recovered from the overlying fills. The main fill (50676), 0.2 m thick, overlying the charcoal, contained large pieces of burnt clay, probably from the collapsed or demolished oven superstructure. One large piece of fired clay (ON 901) may represent part of the oven furniture. The upper fill (50675) was the result of natural silting.

The presence of charcoal-rich fills in a number of the adjacent pits (Fig. 4.2 section B) suggests that at least some of them were associated with the oven, and may give indications as to its operation and function. There was a sequence of four intercutting pits (50765, 50754, 51173 and 50680) to its immediate north-east and north, the largest and stratigraphically earliest of which (50765) was 2.5 m wide and 0.6 m deep with steep sides and a flat base; like the oven it was also cut by ditch 50865. Its primary fills (50769 and 50768) were sterile, but a number of its overlying fills (eg, 50767, 50766 and 50764) were rich in charcoal which appeared (in section) to have been dumped from the north-west. It contained 20 sherds of Romano-British pottery, four of which (from the lowest charcoal-rich fill) were middle Romano-British.

Charcoal was also noted in the middle of three fills in pit 50754, which cut the western edge of pit 50765. The upper fill of this oval pit, 0.6 m by 0.8 m and 0.7 m deep, contained 19 sherds of pottery, one of them late Romano-British and a possible nail. Two small shallow pits (51173 and 50680) to the north-west also had charcoal-rich single fills, pit 59680 containing 22 Romano-British sherds of which eight were late Romano-British.

The large pit (50779) south-east of the oven, which was 2.6 m in diameter and 0.6 m deep, had no charcoal recorded in its single fill, although it did contained 13 Romano-British sherds, fragments of fired clay and part of a glass bead (ON 903).

Oven 51212

A 2 m long linear feature with charcoal rich fills is interpreted as a heavily truncated possible keyhole-shaped oven (Fig. 4.4). The natural on base of the chamber at the north-west, which measured 0.4 m by 0.7 m and was 0.05 m deep, was heavily burnt. There was a slightly raised lip between the chamber and a large oval stoke-hole, 0.8 m by 1.4 m and 0.1 m deep at the south-east. Its charcoal-rich fills contained 11 Romano-British sherds, burnt clay and fragments of burnt flint.

Other discrete features

South-eastern group

There were at least eight pits (and possibly other undated pits) in the south-eastern end of the area, three of them (50644, 50787 and 50801) in a tight group, but the rest more widely dispersed. Together they contained 583 sherds of pottery, all but 37 of them datable only as of general Romano-British date. The pits varied considerably in size, form and likely function, with some (eg, 50644, 50726, 50736 and 50744) being irregular in shape and with single fills containing pottery but no other finds (apart from residual worked flint). Pit 50492, which cut Romano-British ditches 50661 and 50879, was over 1 m wide and 0.7 m deep, with an irregular profile, and three fills which together produced 14 sherds of pottery, dating from the 4th, possibly into the 5th century.

Four of the pits, however, were probable storage pits. Pit 50696, which measured 1.2 m by 1.5 m, was 0.8 m deep with near vertical sides and a flat base (Fig. 4.2 section C). It contained a sequence of nine fills, with 20 early Romano-British sherds recovered from a fill

(50699) on the base of the pit, and a further 65 sherds from the same and a higher fill (50702), but no other finds.

Pit 50646 was 1.1 m in diameter and 0.6 m deep, with near-vertical sides and a slightly concave base. Its single fill contained 93 sherds of which two were middle Romano-British.

Pit 50787 was 1.2 m in diameter and 0.9 m deep, with vertical sides in places undercut or eroded towards the slightly sloping flat base (Fig. 4.2 section D). Above the thin and sterile primary fills was a largely homogenous deposit, 0.5 m thick, and two thinner upper fills, these three fills containing between them 65 sherds of pottery of 2nd to 4th century date, a piece of slag, burnt flint and fragments of animal bone.

Pit 50801, immediately north of pit 50787, had a similar although apparently more heavily truncated profile. It was 1.5–1.8 m wide and 0.6 m deep, with very steep to vertical sides, again undercut or eroded at the flat base (Fig. 4.2 section E). Above the sterile basal fill, there were two thin charcoal-rich deposits (separated by small deposits of material eroded from the sides), then two more substantial deposits, these fills together producing 90 sherds of pottery, of which six (from 50795) were middle Romano-British, as well as small quantities of fired clay, slag, CBM and animal bone, and a piece of iron sheet.

An elongated pit (50648), 1 m wide by 1.9 m long and 0.8 m deep, with very steep sides and a flat base, is of uncertain function. It had two largely homogenous fills containing charcoal and burnt clay, which together produced 77 sherds of pottery and (from the main, lower fill) a nail.

A shallow (0.2 m) subrectangular possible pit (50427), or the northern terminal of a ditch, at the south-east corner of the area, contained a large quantity (over 1.6 kg) of Romano-British pottery as well as an iron blade, possible a scythe (ON 893).

There were a few other more dispersed pits in the area, including one large oval pit (50456) in the line of the earlier trackway, and cut by ditch 50882 (below) so that mostly only its base survived. It measured 1.5 m by 2.8 m and was 1.1 m deep, with a shallow slope at its western end but very steep elsewhere. The upper of its two surviving fills contained a single Romano-British sherd.

Ditches

The array of Romano-British ditches in the central and eastern parts of Area 3E clearly represents more than one phase of activity (Fig. 4.2). It included one major ditch (50866) running north-west to south-east, and a number of smaller ditches, some of them (50556, 50661, 50865, 50867, 50879 and 50882) either parallel or perpendicular to it, but others at the south-east (50871, 50872, 50873 and 50878) with different orientations. Towards the eastern end of the area, ditch 50866 was cut by a post-medieval ditch which continued its line to the south-east (recorded under the same group number); the Romano-British ditch is assumed to have also continued to the edge of the excavation.

Some of the stratigraphically early ditches appear to form a ladder-arrangement of small rectangular plots, although it is far from certain that these ditches are all contemporary. These include ditch 50556 on the line of the Late Iron Age trackway and, to its east, ditches 50865 and 50867, all orientated north-north-east to south-south-west

Ditch 50556, which was at least 0.8 m wide and 0.25 m deep, had a single fill containing 55 early Romano-British sherds. It was only visible in plan in one excavated slot where it was shown in section to be cut on its eastern side by medieval ditch 50659. Although its extent beyond the slot was not determined it may have continued northwards to the point where the surveyed ditch 50659 narrowed from 3 m to 2 m.

Ditch 50865, which averaged 0.8 m wide and 0.3 m deep and contained five Romano-British sherds, cut oven 50674 (of possible middle Romano-British date, see above) and some of its adjacent pits. It continued north beyond the limit of excavation but at the south terminated 1.5 m from ditch 50882, possibly indicating a relationship with it. Parallel ditch 50867, 12 m to the south-east and also continuing to the north, was significantly larger, up to 1.5 m wide and 0.4–0.7 m deep for most of its length, but with a 0.9 m deep terminal at its southern end (where it cut an undated pit and was in turn cut by Romano-British ditch 50661). It contained 12 Romano-British sherds, as well as ten Late Iron Age/early Romano-British sherds (probably residual); a substantial quantity of medieval pottery (25 sherds), all from uppermost fill, are likely to be intrusive.

Further to the south-east were four other lengths of ditch orientated closer to north-east to south-west, one of which (50878) was stratigraphically early. It was up to 1.3 m wide and 0.4 m deep, with a single fill containing 15 sherds of pottery, including single sherds of middle and late Romano-British date. Although having a slightly curving line, cut at its north-

east end by a later ditch, it is possible that it was associated with ditch 50871, separated from it by a gap of between 5 m and 13 m. Ditch 50871, which was of similar dimensions, contained 28 sherds of pottery, 17 of them early Romano-British.

The two other lengths of ditch in this area (50872 and 50873) appear to be associated with each other, lying on the same line and having opposing terminals 2.4 m apart. Together they contained six Romano-British sherds, one of them middle Romano-British. Ditch 50873 intersected with ditch 50866 at a right angle and was not recorded beyond it, but their stratigraphic relationship was not securely established.

Three of these stratigraphically early ditches (50865, 50867 and 50878) were cut by ditch 50661. At the north-west this followed the line of the earlier trackway, suggesting, along with ditch 50556 (above), the trackway's continued use. It then turned towards the east-south-east, and appears to have terminated at the point where it was cut by a post-medieval/modern ditch as it was not recorded beyond it. It was of variable width (0.7–1.4 m) and depth (0.2–0.45 m), and had a single fill from which 42 sherds of Romano-British pottery were recovered. Most of the pottery (82% by weight) came from where it cut ditch 50878, and all but one of the sherds from this slot were early Romano-British, therefore possibly deriving from the earlier ditch.

Two lengths of ditch lay approximately parallel to ditch 50661, to its south-west. Ditch 50879, which averaged 0.9 m wide and 0.4 m deep, was also (like ditch 50661) not recorded south-east of the post-medieval/modern ditch. Towards the north-west, where it was cut by the terminal of Romano-British ditch 50882, it appeared to either end or turn south-west out of the excavation area. Its single fill produced 15 Romano-British sherds, including some of middle and late Romano-British date. Also recovered, however, were 43 medieval sherds, and while these could indicate that it was associated with medieval ditch 50875 (which terminated less than 6 m to its north, see Fig. 5.4), it is also possible that this material was intrusive given the apparent concentration of medieval activity in this area (see below). As well as being cut by Romano-British ditch 50882, ditch 50879 was surveyed as being cut by Romano-British pit 50492.

Ditch 50882 continued the approximate line of ditch 50879 towards the north-west where it was cut by medieval ditch 50659. It averaged 1.4 m wide and 0.5 m deep and had generally two fills, from which were recovered five Romano-British sherds (and six late Iron Age/early Romano-British sherds all from intersections with the earlier trackway ditches).

The most substantial of the Romano-British ditches was ditch 50866, which was recorded in section cutting Late Iron Age ditches 50660, 50662 and 50663 and Romano-British ditches 50661, 50865 and 50867, and being cut at the north-west by medieval ditch 50659. For most of its length it comprised a single cut up to 3 m wide and 1.2 m deep, with a U-shaped profile. However, towards the south-east it was surveyed as significantly wider (over 5 m). Here it was cut by a post-medieval ditch (50206) which, as depicted on the 1683/4 estate map (Sparey-Green 2004, fig. 16), ran north-east from the edge of excavation before turning to the south-east, apparently following the line of ditch 50866 (as well as a possible medieval ditch, 50875 below); on later maps the course of the ditch is changed.

A slot cut through ditch 50866 close to the south-east end of the area (below Fig. 5.4) shows multiple cuts (not distinguishable in plan), the stratigraphically earliest of which (50831) was at least 2 m wide and 0.9 m deep, and may represent the original, Romano-British cut, while a smaller cut (50841), 0.9 m wide and 0.4 m deep, cutting its north-east edge may also Romano-British. The fills of cut 50831, which contained no finds, were largely removed by later cuts on approximately the same line, the earliest of which (50839) contained 114 Romano-British sherds (of early–late date). However, despite the pottery, much of which was heavily abraded and could be residual, cut 50839 is considered to be of possible medieval date (see Chapter 5), with the later cuts being of post-medieval to modern date.

In its other excavated slots ditch 50866 produced 238 sherds of Romano-British pottery, of which 61% (by weight) was late Romano-British. However, all the late sherds came from the upper fill in a single slot (50563), and do not provide a reliable date for the ditch's construction. Other finds from the ditch included fragments of a Greensand rotary quern (ON 857), a piece of vessel glass (ON 898), a large lump of slag and small quantities of CBM, fired clay and, animal bone.

Area 4N

The only Romano-British feature in this area was a shallow gully (16274), its curving south-eastern part describing an arc with a projected internal diameter of approximately 6 m, possibly representing part of a roundhouse gully (Fig. 3.32). It contained six sherds of Romano-British pottery, as well as 44 of Late Iron Age/early Romano-British date, along with animal bone and worked and burnt flint.

Area 5

The stratigraphically latest ditches in the eastern part of the area were of Romano-British date, as was an arrangement of four apparently associated ditches in the western part (see Fig. 3.33). In addition (as noted above) there was a cluster of discrete features in the eastern area, some of which were of Romano-British date; others in this area may have been earlier but as they cannot be distinguished from the Romano-British features on spatial ground these are all considered as a group; the same applies to the more dispersed discrete features in the western part of the area.

Ditches

Ditch 15372 ran in a slightly curving line from north-west to south-east (cutting across Late Iron Age boundary 15373) before turning sharply to the south-west, 3 m to the west of the Late Iron Age monument. It was up to 2.2 m wide and 1 m deep with steep sides and a concave base, and with up to four fills recorded. It contained eight Romano-British sherds (33 g) from secondary and tertiary fills as well as 61 Late Iron Age/early Romano-British sherds (1393 g), but no other finds.

Its line towards the south-east was continued by a much smaller ditch (15377), 0.7 m wide and up to 0.15 m deep with a wide flat base, which contained five sherds of pottery, two of them (31 g) Romano-British. This ditch's terminal lay just beyond the turn in ditch 15372 and it passed within 1.1 m of the monument suggesting that this was still a significant feature in the landscape.

The turn of another ditch (15378) lay just inside the excavation area, 9 m north-east of ditch 15372, running south-east to north-west before curving sharply to the north-east (and cutting across Late Iron Age ditch 15234). It was up to 1.8 m wide and 0.7 m deep with similar profile and fills to ditch 15372, and contained 23 Late Iron Age/early Romano-British sherds (319 g), as well as small quantities of burnt flint, fired clay and animal bone. When fully silted the point where the ditch turned was recut by two small ditches running along its edges, which produced a further 12 Late Iron Age/early Romano-British sherds (80 g) and one Romano-British sherd (19 g), as well as further fired clay.

Four lengths of ditch (15370, 15371, 15353 and 15348) at the western end of the western part of the area appear to be arranged as some form of funnel, narrowing towards the east. It is possible that they represent the convergence of two trackways. Ditches 15370 and 15371, on the northern side of the funnel, were of comparable size and profile, measuring, respectively, 1.7 m wide and 0.8 m deep, and 1.8 m wide and 0.6 m deep. In both, the lower fills appear to have derived from the north or eastern side, possibly indicating banks on the outside of the funnel. Only the shallow terminals of the ditches to the south (15348 and 15353) were excavated, but they appeared to be of similar width; the terminal of ditch 15348 was cut by two postholes. Together these ditches contained 727 sherds (4247 g) of Late Iron Age/early Romano-British pottery and 32 Romano-British sherds (83 g). Other finds include animal bone (61 g), fired clay (98 g) including part of a globular spindle whorl (ON 7), a piece of folded lead sheet (ON 4), possibly a curse tablet, and a nail (plus two intrusive medieval sherds).

Other features

The discrete features cutting the ditch of the Late Iron Age monument have already been discussed, and as noted above the other features from Area 5 include some containing Romano-British sherds among the larger Late Iron Age/early Romano-British pottery assemblages. For this reason all these features are considered together, although it is recognised that some of them are likely to be of Late Iron Age (or earlier) date given the presence of two probable roundhouses pre-dating the Romano-British ditches.

Postholes

The majority of features were in the area bounded to the south-east and north-east by Romano-British ditch 15372, although a few lay outside this area (Fig. 3.33). Most of these appear to have been postholes, many of them forming identifiable groups. For example, there was a broadly linear arrangement, over 20 m long, of up to 20 postholes (plus another ten or more possible postholes surveyed but not further investigated) orientated south-west to north-east. This lay parallel to the line of the earlier, Late Iron Age boundary (15373), and perpendicular to ditch 15372, but despite their linear distribution these feature formed no clear structures. Also within this group was Middle Iron Age cremation grave 15049 (see above).

Some of the other postholes appear to be arranged in short lines, or pairs, which could have had a variety of functions.

The best candidate for an identifiable structure was a near-square setting of four postholes (15380) close to the sharp turn in ditch 15372, two of which contained Romano-British pottery. The postholes, which were 0.4–0.5 m wide and 0.2–0.3 m deep, were set 1.3 m apart (centre to centre). However, this is relatively small for four-post structures often interpreted as granaries; the two Romano-British examples in Area 1 (see above) were 1.5–1.6 m and 1.8 m square, respectively.

Pits

Several small pits were recorded, most of them undated, varying in their size and fills. Notable among those in the eastern part of the area was pit 15056, 0.9 m wide and 0.1 m deep, which had a layer of Romano-British pottery lining its base (66 sherds weighing 2119 g, equal to 14% by weight of all the Late Iron Age/early Romano-British and Romano-British pottery from the area); there was no evidence of burning.

At the south-west end of the linear group of postholes, pit 15083, 0.6 m in diameter and 0.15 m deep, contained two placed Late Iron Age/early Romano-British vessels, and fragments of burnt animal bone (Fig. 4.5).

Pit 15020, 1.1 m wide and 0.2 m deep, had a thick charcoal-rich fill on its base but no evidence of *in situ* burning, and an upper fill that contained four Romano-British sherds (19 g).

In the western part of the area, pit 15137 was 1.1 m wide and 0.6 m deep with a shallow lip at its north-east end giving the feature an overall length of 1.7 m. It had a sequence of five fills, two of which appeared to be dumps of hearth debris, rich in charcoal and fired clay; there was no evidence of *in situ* burning. Six Late Iron Age/early Romano-British sherds (92 g) and burnt animal bone were also recovered.

Further west there a large oval feature (15258), measuring 6.1 m by 2.6 m, within the 'funnel' arrangement of ditches. It was 0.55 m deep with steep–vertical sides and a flat base, and contained four fills from which 64 sherds (622 g) of Late Iron Age/early Romano-British pottery were recovered. An adjacent small pit (15209) contained a further 52 sherds (400 g). The relatively large quantities of pottery from these features matches those from the funnel ditches (above), and two shallow pits (15203 and 15237) to their west. The latter contained

burnt deposits from which were recovered a further 52 sherds (695 g) and 68 sherds (804 g), respectively, including one Romano-British sherd. Together these most westerly features in Area 5 produced 53% by weight of all the Late Iron Age/early Romano-British and Romano-British pottery from the area.

Mortuary evidence

A small grave (15139) towards the north-east corner of the western part of the area, 0.6 m in diameter and 0.16 m deep, contained 397 g of cremated bone from an individual aged 21–30 years; although the grave also contained fragments (37 g) of very eroded Romano-British pottery, the burial is considered to have been made unurned (see McKinley, below, Table 14). A sample of the bone was radiocarbon dated to 100 cal. BC– cal. AD 110 (SUERC-64207, 2013 ± 29 BP).

Area 6

Ditches

More than one phase of Romano-British ditch was identified in this area, with a number of the ditches inter-cutting (Fig. 4.6). However, stratigraphic relationship were securely established at very few of their intersections, and their phasing relies largely on their spatial relationship. Moreover, the dating evidence provided by the pottery does not seem entirely consistent with the limited stratigraphic evidence, with the result that the suggested phasing is necessarily tentative.

Two ditches do not fit obviously into any of the suggested phases – ditch 30093 (3 m wide and 1 m deep) at the north which contained 11 Romano-British sherds (81 g), and ditch 30202, which intersected with ditch 30204 (below) and contained a further three sherds (23 g). Few other features were dated to the Romano-British period.

Phase 1

One stratigraphically early ditch (30206) ran south-west to north-east across the excavation. Towards the south-west it was shown to be cut by ditch 30198 (below), but its relationships with two other ditches with which it intersected (30200 and 30204) were not securely established, nor was that with a more substantial unexcavated ditch at the north-east (possibly

post-medieval or modern, see Chapter 5), beyond which its course was not traced. It was 0.6–1.3 m wide and up to 0.5 m deep, with evidence for localised recutting, and it contained 63 sherds (287 g) of Romano-British pottery, as well as seven Late Iron Age/early Romano-British sherds (36 g) and two Middle/Late Iron Age sherds (presumably residual). Despite the fact that this ditch was shown to be stratigraphically early, four of the Romano-British sherds were middle Romano-British; it is possible that these were intrusive – all came from the same excavated slot (30175), with three of them from its recut.

A short length of ditch (30207), containing further Late Iron Age/early Romano-British and Romano-British sherds, ran perpendicular from ditch 30206 towards the north-west, appearing to link it to an undated L-shaped gully (30205), up to 0.5 m wide and 0.2 m deep, one arm of which lies parallel to ditch 30206.

Approximately 5 m south-east of ditch 30206 was a short length of near-parallel ditch (30208) of similar dimension; it had a terminal at the south-west and like ditch 30206 intersected with both ditch 30204 and the large unexcavated ditch at the north-east, beyond which it also was not recorded. It contained six sherds (163 g) of Romano-British pottery, half of them early Romano-British.

Further to the south were three other ditches also broadly parallel to ditch 30206. The most southerly two (30148 and 30146), which were 3.5–4 m apart, contained no finds and are undated. Ditch 30209, in contrast, contained a substantial quantity of Romano-British pottery (465 sherds, 3370 g). It appeared to peter out at the south-west, with no clear terminal, and may have been completely truncated, while at the north-east it curved slightly eastward. Other finds from it comprised two pieces of Romano-British glass (12 g), two pieces of lead (16 g), four nails, a small and almost complete fired clay crucible containing metalworking debris (114 g), and a piece of possibly worked stone (360 g). The range and relatively quantity of finds from this feature (in comparison to the other Romano-British ditches) suggested that there may have been a focus of activity (of uncertain character) just beyond the excavation area, possibly to the east.

Phase 2

A second phase of ditches is suggested by the spatial relationship between ditches 30198 (the south-eastern terminal of which cut phase 1 ditch 30206) and ditch 30204. Together they appear to define an approximately D-shaped enclosure with a possible entrance at the north-

west, and apparently open to the south-east – although it is possible that the recutting of ditch 30206 reflects its continued use during this second phase.

Ditch 30198 ran straight from south-east to north-west, just cutting the edge of Late Iron Age gully 31022, but with an unclear relationship with possible Late Iron Age ditch 30197. Beyond that it was either extended or recut by ditch 30195, which turned towards the north-east before reaching a rounded terminal. Ditch 30198 was 1 m wide and 0.5 m deep, but ditch 30195 to the north was up to 2 m wide and 0.6 m deep, potentially removing any trace of an original cut. Although ditch 30198 produced 123 sherds (846 g) of Middle/Late Iron Age pottery, these all came from the ditch slot which cut the western terminal of the Late Iron Age gully recut (see Fig. 3.36), and they are considered to be residual. The remaining pottery comprised four Late Iron Age/early Romano-British sherds (14 g) and two Romano-British sherds (2 g); an irregular feature (30078) cutting the ditch 30195 contained a further five Late Iron Age/early Romano-British sherds (59 g).

To the north-east of ditch 30195, and appearing to match its curving line, was ditch 30204; this continued west beyond the area of excavation, but if these two ditches were related there would have been a gap of between 11 m and 28 m in the north-west side of the resulting enclosure. The ditch, which was up to 2.5 m wide and 0.7 m deep, cut the undated but suggested Late Iron Age ditch 30203, then curved towards the south-east, continuing beyond ditches 30206 and 30208 (with which its relationships were not clearly established) before terminating. It contained no datable finds.

It is possible that the undated L-shaped gully (30205, above) which cut the northern end of ditch 30207 (running perpendicular from ditch 30206) also belongs to this phase, possibly forming a small subdivision within the enclosure.

Phase 3

A possible third phase is represented by ditch 30200, the curving northern part of which appears to have bisected the Phase 2 enclosure, passing through the possible entrance at the north-west, before terminating just short of the edge of excavation; a large amphora sherd (1037 g) was recovered from this terminal. It was up to 1.5 m wide and 0.6 m deep, but its rather irregular curving line towards the south-east suggests that it might have undergone some modification; it also intersected with a large irregular feature (surveyed but not further investigated) of unknown character. At the south-east it turned towards the south-west

(parallel to Phase 1 ditch 30206), a slot at this point producing seven Late Iron Age/early Romano-British sherds (49 g).

Phase 2 ditches 30195 and 30198 may have continued in use during this phase, now defining (with ditch 30200) a smaller elongated enclosure measuring approximately 150 m north-west to south-east and up to 40 m wide, with a 2.6 m wide entrance gap at the north, and another, 4.2 m wide, at the south. This enclosure may more accurately be viewed as a subdivision within a larger area enclosed by ditch 30200, since the ditch continued to the south-west beyond the southern entrance gap. It is possible that ditch 30204 now defined the north-eastern side of a possible trackway running along the north-east side of the Phase 3 enclosure.

Other features

A truncated cremation grave (30003), 0.5 m in diameter and 0.1 m deep, contained the urned burial of an individual (possibly female) aged 27–35 years. Only the base of the burial urn (32 sherds) survived, but a second, smaller vessel had been placed to its west (Fig. 4.7). The pottery is of Late Iron Age/early Romano-British date, but the grave's position close at the intersection of Romano-British ditches 30198 and 30206 provides a possible indication as to its more precise date. A further sherd, and human bone (a jawbone and tooth) were recovered from 4 m west of the grave.

Among the small number of discrete features in this area were three widely dispersed shallow pits (30048, 30177 and 30188) containing small amounts Romano-British pottery (late Romano-British in pit 30048).

Area 7

The most prominent Romano-British feature recorded on the site was a large rectangular ditched enclosure in this area, lying on the southern flank of the valley, just above the floodplain, between 38 m and 40 m OD (Fig. 4.8).

Rectangular enclosure

The enclosure, defined by a substantial ditch (41106), measured internally 102 m by 70 m, its long axis, orientated WNW–ESE, appearing to have been determined by the local topography. For ease of description this axis is treated as lying east–west (Fig. 4.8).

Enclosure ditch

The ditch was complete around the circuit apart from a 27 m wide gap at the western end of its southern side, possibly representing access from the south – the direction of the Roman road – and a short gap at an externally curving feature just south of the midpoint on the eastern side. The ditch was 2–3.5 m wide, and up to 1 m deep, with a moderately steep but variable profile and between one and seven fills recorded (average three) in its excavated slots (Figs 4.9 and 4.10). There was no clear evidence in the fills for a bank, either internally or externally.

At the north-east, the ditch appeared to have a shallower extension continuing 5 m east beyond the corner, although it is possible that this was a product of erosion (Rob De'Athe pers. comm.). A pair of adjacent postholes – 40288 (0.4 m wide and 0.4 m deep) and 40290 (05–0.6 m wide and 0.5 m deep) were recorded cutting the base of the ditch immediately south of this corner, but were not noted cutting the ditch fills. A similar pair (40321 and 40323) were noted in the excavated slot (40317) 13 m to the south (Fig. 4.9 section 1), but no comparable features were recorded in any other of the excavated slots.

The entrance gap at the south-east was defined by clear ditch terminals at the western end of the southern side and the southern end of the western side, the latter terminating just short of the line of the southern side. An undated pit (40823), 1.0–1.2 m wide and 0.5 m deep, with vertical sides and a flat base, lay just south of the terminal on the western side, close to the projected position of the enclosure's south-western corner. It could, therefore, be associated with the enclosure entrance; it had a thin, very dark organic fill on the base, the overlying fills the result of natural silting.

Both this pit and the ditch terminal on the western side cut the northern end of a natural channel, up to 4.5 m wide and 0.3 m deep, running down the slope, and it is possible that the ditch followed the line of this feature further down the slope to the north. Another less regular possibly natural feature (unexcavated) lay parallel to the east, its southern end passing through the enclosure entrance. It is possible that this was caused in part by traffic through the entrance.

Apsidal feature

There was a 5 m wide break in the ditch on the eastern side of the enclosure, the northern flanking terminal cutting a pit (40442) 2 m wide and 0.4 m deep. The gap between the two terminals was spanned by a much smaller ditch (40209), 0.9 m wide and 0.4 m deep, which may have been dug to allow the drainage of water pooling in the upslope terminal. The terminals were also linked by a shallow crescent-shaped feature (40200), protruding 4 m out to the east, which although 2 m wide was only 0.1 m deep; it was not clear whether this was an actual cut feature or an area of heavy trample. The outer edge of feature 40200, was cut by a shallow burnt pit containing ash and charcoal (40095); this may be later in date, and unrelated to the enclosure, with the two sherds of Romano-British pottery recovered being residual.

The nature of these associated features on the eastern side of the enclosure is unclear, and the relationship between them not clearly established. It they represent an entrance, it was not a simple entrance; access to the enclosure was much more easily gained at its south-west corner. However its function is central to the interpretation of the enclosure as a whole. In plan this part of the enclosure boundary has the appearance of a small apse, a feature which in pre-Christian Roman temple architecture often functioned to frame a statue of a deity. The London Mithraeum, for example had a semicircular apse at its western end in which was the plinth for a cult statue (Hall and Shepherd 2008, 32–6). If the feature in enclosure 41106 is comparable, this would strongly suggest a religious aspect to the enclosure's use.

The possibility that this feature may have held some object of ritual or religious significance is given support by the distribution of artefacts around it. For example, of all the Romano-British pottery recovered from the enclosure circuit – ie, from ditch 41106, ditch 40209 and feature 40200 – over 95% by weight was recovered from a 20 m length of ditch on the enclosure's eastern side, spanning and including this apsidal feature. In addition, the only silver coin (ON 60) from the whole site, a denarius of Domitian (AD 85/86), and the only piece of CBM from the enclosure circuit, both came from the same area, as did one of the two pieces of glass from the enclosure ditch, and three pieces (2683 g) of a possible gritstone quernstone. Even though only a small quantity of animal bone (15 pieces, 76 g) was recovered from Area 7, of the material from Romano-British contexts all but one piece was recovered from the immediate area of the apse (from feature 40200, ditch 40209 and the adjacent terminal of the enclosure ditch).

There are suggestions of a similarly shallow crescent-shaped feature (41089), on the enclosure's northern side (extending outside the excavation area) but there was no break in the ditch at this point and no comparable concentration of finds in its vicinity.

Post settings

Three sides of the northern half of the enclosure circuit were also defined by a line of evenly spaced postholes (41107) set back some 3–4 m from the inner edge of the ditch, on average 2.2 m apart (centre to centre). Approximately 40 postholes can be assigned to this structure, which is likely to have formed a fence or screen-wall. It appears to have been heavily truncated in places, there being some significant gaps, particularly along the north side. It is most complete running north from the midpoint on the eastern side, and then west from the north-east corner, while a short length at the north-west showed that it curved around the enclosure's corner (in contrast to the right-angle formed by the ditch).

Although there were a small number of postholes similarly positioned in relation to the ditch in the south half of the enclosure it is not certain that the structure continued around the entire circuit. The fact that the enclosure ditch averaged 0.87 m deep along the southern side, compared to 0.74 m along its northern side, suggests that the southern side of the enclosure had not been more heavily truncated, and it is possible, therefore that the post setting may have only been intended for the northern, downslope part of the enclosure, flanking the valley floor.

On the eastern side, the post setting appears to have stopped just short of the apsidal feature – at feature 40395 (a possibly truncated posthole), to the immediate south of which was a very shallow oval feature (40393) containing ten sherds (59 g) of Romano-British pottery. Instead of continuing in front of the apsidal feature, the line of the screen was broken by a rectangular arrangement of four postholes (41121), 4.3 m long (east–west) by 2.5 m wide. This comprised a pair of larger postholes to the west, one containing a nail, the other an unidentified piece of iron, and a smaller pair to the east; together the four postholes contained 16 sherds of Romano-British pottery, including one of middle Romano-British samian.

In addition to the main post setting around the northern part of the enclosure, there was a related setting of at least 11 similarly spaced postholes (41109) within the north-east corner arranged at a right angle to enclosure, defining a small, almost square area measuring 18 m by 21 m. There were no postholes along the northern half of its western side, possibly

indicating an entrance into this area. Parallel to the postholes along the south side, and just outside them, there was a narrow gully (41117), further defining this area. There were a number of postholes inside this area, but none clearly associated with it or forming any recognisable pattern, and there was nothing to indicate the function of this small enclosed area.

There were numerous other postholes within the larger enclosure, but most of these also formed no clearly identifiable structures. One possible candidate for a structure is a slightly irregular line, 26 m long, of up to nine postholes (41108), lying parallel to, and 4 m south of, the fence-line along the northern side. Their less regular line and more variable spacing (2.4–4.4 m) than the fence-line suggest that they were not an original feature of the enclosure, and are possible associated with the first phase of enclosure reorganisation (see below).

Central building and associated features

There was a concentration of postholes, pits and other discrete features near the centre of the enclosure (Figs 4.8 and 4.11). This corresponds closely to an area of darker soil (40182) measuring 15 m by 9 m (87 m²) which appeared to fill an irregular hollow with shallow to moderately steep sides (Fig. 4.12). On its eastern side the shallow slope at the edge of the hollow had a very irregular surface, suggesting that it has been heavily trampled in this area (Fig. 4.13). In the base of the hollow was a truncated ditch (41120) probably associated with the late prehistoric field system (see Fig. 3.37).

A number of features were recorded cutting layer 40182, including postholes, pits and ovens, some of the postholes cutting through it into the underlying natural. Six of the postholes (40156, 40120, 40116, 40130, 40995 and 40975), and one other possible posthole (unexcavated) at the north-west, were quite regularly spaced and appear to form a rectangular building (41122), with two others (40086 and 40091) forming its east-facing porch; one posthole appears to be missing on the western side. The building was at least 14 m long (north–south, ie, perpendicular to the enclosure's long axis) by 7 m wide. The postholes were up to 0.9 m wide and 0.6 m deep, most of them having clearly visible post-pipes (Fig. 4.11 sections A–H). It is notable that the area of trampled ground (Fig. 4.13) lay within the entrance area.

Together the postholes contained 51 sherds (1126 g) of Romano-British pottery, and 20 pieces (2351 g) of CBM, the latter amounting to 77% by weight of all the CBM from Area 7; this rises to 96% (2926 g) if material from features within 2 m of the building are included, strongly suggesting that CBM played some role either in the construction of the building or in its internal fittings. Two of the postholes (40120 and 40156) contained large pieces of gritstone quernstone (2479 g and 2622 g, respectively), possibly used as packing.

The most prominent feature inside the building was a row of five ovens (west to east 40965, 40973, 40983, 40935, 40124) positioned centrally towards its southern end, their long axes splaying out slightly towards the north (Fig. 4.14). They varied in shape, but had comparable profiles, all of them being deeper at their southern ends, and they all contained charcoal-rich fills (in two cases, 40983 and 40935, also containing fired clay). They contained few finds – a few sherds of pottery and (from 40973) a piece of Romano-British vessel glass.

A small posthole (40993) lying on the long axis of the building immediately north of the ovens may be associated with them, as may a shallow (0.02 m) and very localised spread of charcoal (40107) north of oven 40124, which contained two small sherds of Middle/Late Iron Age pottery (presumably residual), a small piece of briquetage and a fragment of bronze pin (ON 61). Other postholes inside the building formed no apparent pattern, and their stratigraphic relationship with layer 40182 was in many cases unclear; these also contained few if any finds.

The nature of the hollow is unclear. Finds recovered from layer 40182 included thirteen sherds of Romano-British pottery (including five sherds of samian), a barbed and tanged flint arrowhead (ON 65), a nail and fragments of fired clay; there were also further pieces of flint and one prehistoric sherd, probably residual. Apart from a thin, charcoal-rich layer (41023) containing one further Romano-British sherd, recorded near its base at the south-east corner, layer 40812 was largely homogenous in colour and texture. It is possible that some of the apparent depth of the layer is due to the heavy traffic within the building and the activities associated with the oven, combined with natural soil processes, leading to a staining of the subsoil to some depth below ground surface. This would suggest that the hollow was not as deep as appeared following the removal of the darker soil, and not necessarily earlier than the building and the activities undertaken inside it. As is evident from Fig. 4.14, the ovens were cut into the layer 40182.

A number of features surrounding the building may also be associated with those activities. These include loose groupings of postholes mainly to the north and south. To the north, but not obviously part of the building, there was an east–west line of three evenly spaced postholes (40937, 40940 and 40169), north of which was another (40175). The postholes south of the building were more variable in size and did not form such a clear pattern. Posthole 41004, for example, measured 0.9 m by 1.2 m, was 0.5 m deep, and had a clear post-pipe and a large packing stone, while posthole 40987 measured 0.7 m by 0.9 m and was 0.6 m deep. Posthole 40098, 0.5 m wide and 0.3 m deep, contained a large piece (3500 g) of slag, possibly a complete (or near complete) furnace bottom, possibly used as packing. Other postholes, such as 40991 and 40126 were only 0.2 m diameter, but still 0.4–0.5 m deep. Posthole 40133, which lay on the line of the building's eastern side, was subsequently cut by a subrectangular pit (40135).

At the south-west corner of the building, within the area of soil layer 40182, there was a sub-oval pit (41000, cut on its northern edge by a posthole) with steep to near-vertical sides and a flat base. Across the base was a layer (41003), up to 0.06 m thick, consisting almost entirely of charcoal, above which were a series of silty clay fills (Fig. 4.15). A shallow circular pit (40951) immediately west of the building also had a layer of charcoal on its base, the underlying clay natural reddened by heat. A spread of charcoal-rich material, in a shallow depression (41019) 8 m south-east of the building may also be associated. It contained pottery, a piece of Romano-British vessel glass, a possible whetstone fragment and fired clay.

The building was clearly a focal feature within the enclosure, and probably an inherent part of its design and function from its start. Along with a number of immediately surrounding features – pits and other postholes – it appeared to lie within a small rectangular plot, defined to the east, south and west by ditch 41113. However, this plot is one of a series relating to a phase of later re-use of the enclosure (see below), by which time the significance of the building, if still standing, may have changed. The arrangement of ovens at the southern end of the building appear to have been central to its function – at least at some point during its period of use. In themselves, however, they do not explain its size and substantial construction, nor its near-central eastward-facing position within the enclosure. Some clues, however, may be provided by the finds and environmental remains recovered from this concentration of features.

All the slag from Area 7 was recovered from features within or close to the building, although most of this comprised the single large piece used a probable packing in posthole 40098; the rest comprised one piece (249 g) from one of the building's postholes (40975), and 5 g of fuel ash slag from adjacent ditch 41113. The origins of this material is unclear; there is no evidence that the ovens in the building would have been suitable for metalworking, nor is there evidence for any such activity nearby; apart from small quantities of slag from Areas 1, 5 and 6, the bulk of the material from the site came from features some 500 m to the north-west in Areas 3E and 3W.

Perhaps more informative is the distribution of amphora sherds from the site. Apart from one large sherd (1027 g) in Area 6 and two sherds from Area 5, all the remaining pieces of amphora (67 sherds, weighing 2296 g) were recovered from Area 7. Of these 42% by weight was recovered from just two of the postholes in the central building (40116 and 40975), and a further 36% was recovered from features less than 10 m to its north – pits 40128, 40154 and 40175, and a slot (40796) excavated in ditch 41099 directly north of the building (Fig. 4.8). The remaining ten sherds (22%) were recovered either from the enclosure ditch terminal on the south side of the apsidal feature or from ditches (41104 and 41105) between it and the building. The sherds were probably all from vessels used for carrying olive oil from southern Spain, and although what they held subsequently is not known, they clearly had some role in the activities taking place both in and around the central building, and possibly also around the apsidal feature.

The environmental remains are also informative. Charcoal from the row of five ovens within the building comprised mostly oak and cherry/blackthorn roundwood, indicating that the ovens were fuelled by bundles of firewood drawn from woodland and scrub or hedgerow habitats, producing a high but relatively short-lived fire (see Challinor, Chapter 7). Evidence for the use of some larger firewood logs, which would have provided more sustained heat, was indicated by the presence of oak heartwood. Oven 40983 also contained a large quantity of burnt cereal remains, perhaps indicating a crop drying or processing activity.

Most of the rich assemblages of charred plant remains in samples from Area 7 were concentrated in the area of the enclosure's central building and included potential evidence for malting activities. In particular, the recovery of germinated wheat grains from oven 40124 and postholes 40995 and 41009 (as well as from the corner of adjacent ditch 41113 to the immediate west) suggests that brewing was undertaken within this building; these are the only

instances of germinated grain from the whole site. If, as suggested by the apsidal feature in the enclosure's eastern side, the enclosure had a religious function, the brewing of alcohol would not necessarily have been out of place, possibly to be used as a libation in religious rituals and worship.

Enclosure reorganisation

In addition to the ditches of the late prehistoric field system over which the enclosure was built, there are a number of ditches in Area 7 which appear to post-date the enclosure (Fig. 4.8), some of which (eg, 41098, 41099, 41100, 41101 and 41113) defined an arrangement of small subrectangular plots inside the enclosure. The few stratigraphic relationships between these ditches suggests that this reorganisation was originally confined to the interior of the enclosure, but was then extended eastward towards (by ditches 41103, 41104, 41114 and 41115) and then beyond the enclosure (by ditches 40077, 41110, 41111 and 40694). Other short lengths of ditches also appear part of this reorganisation, but cannot be so easily phased.

First phase

The northern ends of some of the ditches (40487, 41099, 41100, 41101 and 41116) were surveyed as ending at the inside edge of the enclosure ditch and not continuing beyond it, but none of these intersections was examined, and it was therefore not established whether they cut the enclosure ditch, or were cut by it; there were also no recorded relationships between these ditches and the postholes of the internal fence-lines. Near the north-west corner of the enclosure, the north side of its ditch was cut by the terminal of a ditch (41102) which was on the same approximate line as northern ends of ditches 41100 and 41101, but which then turned back towards the enclosure, and the date and function of this feature is unclear; the only finds from it were three presumably residual Middle/Late Iron Age sherds.

Given the uncertain relationships between these ditches and the enclosure ditch it is at least possible that they pre-date the enclosure. However, although ditch 41100 and the enclosure ditch lay parallel, and just 1–2 m apart, it is considered more likely that ditch 41100 was laid out in relation the existing enclosure than that the substantial enclosure was laid was laid out in relation to a relatively short length of narrower ditch. Being so close to the enclosure ditch, ditch 41100 might seem to have been largely superfluous, but given that the north-west corner of the enclosure extended off the base of the valley side onto the edge of the

floodplain, ditch 41100 may have been dug simply to aid drainage, its western end deepening (from 0.2 m to 0.8 m) and curving north into the enclosure ditch.

Apart from ditches 41100 and 41101 which lay parallel to the north and west sides of the enclosure, respectively, the other ditches of this phase were laid out in a slightly irregular arrangement in relation to the enclosure, defining plots (at least in this first phase) only along the north side and in the centre. As noted above, the area of the central timber building was enclosed on three sides by ditch 41113; the resulting plot, measuring up to 20 m (north–south) by 17 m, was open to the north but ultimately bounded by ditch 41099.

To its north, positioned centrally against the enclosure's northern side was a larger plot, 51 m long and 16–20 m wide, defined by ditches 41097, 41098 and 41099, with ditch 41100 running part of the way along its north side. In an excavated slot near its south-west corner, three postholes (40510, 40525 and 40527) were recorded in the base of ditch 41099, but no similar features were recorded elsewhere around this plot's circuit. Two lengths of undated ditch (41116) in the eastern end of this plot may represent a further subdivision. It is also possible that the slightly irregular east–west line of up to nine postholes (41108) which lies wholly within this plot is associated with it. The plot had an entrance, 8–10 m wide (its eastern side obscured by a later pit), near the centre of its southern side, immediately north of the north-western corner of the plot enclosing the central building, facilitating access between these two plots and the western part of the enclosure.

Ditch 41101 at the north-west may also be of this early phase, marking the western side of a rectangular plot open to the south. The south-western quarter of the enclosure and a broad strip along its southern side remained open during this phase and contained few features, suggesting that access to the reorganised enclosure was still gained through the wide entrance at the south-west; this remained largely unchanged during the second phase of reorganisation (below).

The ditches were generally up to 1 m wide and averaged 0.3 m deep. They contained relatively few finds, the greatest number and range (pottery, fired clay, glass and slag) coming from ditch 41113 (and a slot excavated in ditch 41099 to its immediate north), perhaps not surprising given their proximity to building 41122, one of the enclosure's two main foci of activity.

Second phase

Two ditches were shown to be stratigraphically later than the first-phase ditches described above. The western end of ditch 41114 cut first-phase ditch 41113 at the south-east corner of the central plot, continuing its eastward line. This line was further continued, after a short gap, by ditch 41115 which terminated just short of north–south ditch 41111; unlike the first-phase ditches, ditch 41111 crossed over the enclosure ditch at the north and south. Similarly, the northern end of ditch 41103 cut first-phase ditch 41099 at the south-east corner of its plot, continuing its line south. This line, likewise, was further continued, after a short gap, by ditch 41104 which terminated just short of ditches 41114 and 41115.

While some of these ditches appear to represent the modification of the plots defined by the first phase ditches, their effect, taken together, would have been to cut off access to the very eastern end of the enclosure, including the previously important apsidal feature (and the four-post timber setting in front of it), both from the first-phase plots and from the still open southern part of the enclosure. Another short length of ditch (41105) lay parallel to ditch 41104 between it and the apsidal feature, possibly intended to further signify the 'closure' of this feature.

This changed significance for the enclosure is represented not only by the fact that its previously important eastern end was now cut off from the rest of the enclosed area by ditch 41111, but also by the fact that this ditch appears to be primarily part of a rectilinear field system extending to the east of Area 7, with two ditches (41110 and 40077) running eastwards from it. This field system may also have extended to the west, since parallel to ditch 41111, 52–54 m to the west, was another stratigraphically late ditch (40694). A single excavated slot, in which it was 2.3 m wide and 0.3 m deep with one fill, produced no finds, but it does not correspond to any field boundary shown on historic mapping, and its line, which like ditch 41111 curved slightly westwards towards the south suggests it also belongs to this phase.

By this second phase of reorganisation, therefore, the suggested religious function of the enclosure, appears to have been completely superseded, and it is possible that was taken over for some more mundane use.

Other internal features

There was a range of pits, postholes, ovens and other discrete features within the enclosure, in addition to those already described inside and immediately around the central building. The

small number of stratigraphic relationships and the chronologically undiagnostic nature of much of the Romano-British pottery from them means that few of them can be securely associated with the different phases of the enclosure's use and reorganisation. Many of the smaller features contained no pottery, nor indeed any finds.

Cremation grave

Apart from the features described above, the only other evidence for ritual activity within the enclosure was a largely isolated and very truncated grave (40185), recorded in its southern part, containing the urned cremation burial of a possible female aged 25–35 years. The early Romano-British date of the fragmentary urn (ON 66/67) suggests that it belongs to the early phase of the enclosure's use.

Pits

There was a group of three large pits to the north of the central building; two of them (40128 and 40152) cut the terminals of ditches of the first-phase enclosure reorganisation, while two of them (40128 and 40148) were rectangular and lined with clay.

Most notable among them was pit 40128, which cut the terminal of ditch 41099 at the entrance into the northern-central plot. It measured 1.7 m by 2.3 m, and was 1.1 m deep, with near-vertical sides and a flat base (Fig. 4.16). It had four fills – above an initial layer of trampled soil there was a clay lining up to 0.1 m thick extending across the base and over half way up the sides. Above this was a thick dumped layer containing over 15 kg of fired clay, some with wattle impressions, possibly the remains of an oven (or ovens), plus six Romano-British sherds. The uppermost fill contained numerous fragments from a possibly complete rotary quernstone in imported Mayen lava (weighing over 16.5 kg), plus an iron object (ON 62) and a further 81 sherds (817 g) of pottery, including samian. It is possible that the demolition of an oven and the breaking of a quernstone marks the end of activities undertaken within the central building, perhaps contemporary with the second-phase reorganisation of the enclosure which also saw the effective isolation of the apsidal feature to the east.

The other rectangular pit (40148) measured 1.3 m by 1.9 m, and was 0.5 m deep with vertical sides and a flat base (Fig. 4.17). It had a lining of yellow clay (40149) 0.05 m thick on the base and 0.25 m thick on its sides, inside which was a thinner (0.02 m) lining of dark clay

(40150); these were slumped at the east end. The largely homogeneous fill contained 22 sherds of Romano-British pottery, two pieces of CBM and an iron nail.

In contrast, pit 40154, which cut the north-west terminal of ditch 41113, was irregular in shape and profile, measuring 2.4 m by 3.9 m and up to 0.4 m deep. Its single fill contained 19 sherds (510 g) of pottery, two pieces of quern (410 g), fragments of fired clay and an iron nail.

Notable among the other features in the enclosure was a large oval pit (40960) near its north-west corner – the lowest part of the enclosure. It lay in the corner of one of the plots of the first-phase reorganisation, and may be associated with it, particularly as it straddled the line of the enclosure's internal post setting (41107). It was 1.2 m deep with steep sides and a concave base, and had three fills resulting from natural silting. It contained a small quantity of Romano-British pottery and a residual piece of flint. The analysis of insect remains from the pit suggests it did not contain standing water, and so was probably not a well, while the low proportion of dung beetles suggests it was not a waterhole for livestock (see Hill and Smith, Chapter 7).

There was an adjacent pair of sub-oval pits towards the eastern end of the northern-central first-phase plot. Pit 40561 was 1.1 m by 1.4 m wide and 0.9 m deep with very steep side and an almost flat base. The only finds, from the middle of its three naturally accumulated fills, were 21 sherds (502 g) of Late Iron Age/early Romano-British pottery. Pit 40576 was 1.4 m by 1.6 m wide and 0.8 m deep with steep to vertical sides and a concave base. Near the base a thin charcoal-rich layer, probably dumped, overlay the waterlogged primary fill; the main upper fill contained two Romano-British sherds.

One of the few identifiable Romano-British features in the open, southern part of the enclosure was another clay-lined pit (40647), 2.2 m by 1.4 m and 0.6 m deep, with an irregular profile; the clay lining was streaked with charcoal. Its uppermost fill contained 15 sherds of pottery.

Ovens and hearths

In addition to the five ovens in the central building, there were two pairs of ovens, and a group of three possible hearths in the south-east of the enclosure. The two pairs of ovens (40103 and 40105 to the north and 40109 and 40113 to the south) lay 6 m apart to the south of the apsidal feature in the enclosure ditch, 5–6 m from the ditch and just west of the projected

line of the enclosure's internal line of posts (of which there was no trace in this area). Within each pair the ovens were less than 0.5 m apart. The southern pair cut late prehistoric field system ditch 41093. Each oven had a deeper bowl at the east and a narrower flue at the west, and all had charcoal-rich fills. Oven 40103 contained fragments of fired clay (293 g), while oven 40105 contained two sherds (5 g) of Late Iron Age/early Romano-British pottery (probably residual). Oven 40109 contained two undated sherds.

Three similar features (40307, 40339, 40352) close to the enclosure's south-east corner may also by related; they were all similar in form, and all showed evidence of *in situ* burning in the form of heat-reddened clay at their sides or base. Feature 40307 contained two charcoal-rich fills, on the lower of which was a setting of four stones, one of them (527 g) from a quern; other finds included fragments of fired clay (237 g) and two small sherds of pottery. To its east, feature 40339 had a charcoal rich-fill at the base, as well as a central column of stones, including a piece of quern (2093 g), running up through the overlying fills; it also contained one sherd of pottery, a nail and fragments of fired clay. To the immediate north, feature 40352 had a black, charcoal-rich layer covering the base, and an upper fill containing pieces of stone similar to those in features 40307 and 40341, but no other finds.

The context for all these features is unclear. Like the ovens within the central building, they could be directly related to the suggested religious function of the enclosure in its original phase. It is possible, however, that they post-date the reorganisation, and perhaps 'secularisation', of the enclosure. They all lie to the east of ditch 41111 (the second phase of reorganisation) which cut across the enclosure and clearly marks its abandonment, and they may have been positioned in relation to it rather than to the enclosure.

External features

Only three discrete Romano-British features were recorded outside the enclosure. Immediately north of the enclosure ditch at the north-west was a large pit (40878) measuring 2.6 m by 3.4 m and 0.6 m deep with moderately steep sides and an irregular base. It had four fills, and produced 20 sherds of Romano-British pottery (eight of them early Romano-British) and a nail. The other two features, both containing single Romano-British sherds (possibly residual), lay to the south-east of the enclosure – a small pit (40054) cut by a small posthole, and a shallow feature (40044) with a charcoal-rich lower fill which also contained fragments of fired clay; they may be comparable to other undated features with evidence of burning.

Areas 9A–9D

A number of ditches in these areas (Fig. 3.32) are considered to be potentially of Romano-British date, although many of them contained no finds and consequently their dating is very tentative, based largely on their alignments and orientations, and their possible relationships with dated features in adjacent areas.

They include a pair of parallel ditches (50026 and 50043), 6–8 m apart, forming a slightly sinuous trackway running west-north-west to east-south-east across Areas 9A and 9D (Fig. 3.32). Both were of similar size, 1.1–2.6 m wide, and (in their single excavated slots) 0.6 m and 0.35 m deep, respectively. The western end of ditch 50043 was surveyed as being cut by north-eastern end of a third, comparable ditch (51202) up to 0.7 m deep at its terminal, and it is possible that these three ditches are associated. The recut terminal of ditch 51202 contained 14 sherds of Romano-British pottery, all but one late Romano-British.

Also possibly associated was ditch 51205 (in Area 9B) which ran perpendicular from the trackway towards the south. This slightly curving ditch, with a terminal at the north, was up to 1.6 m wide and 0.6 m deep, and contained one Romano-British sherd and 34 Late Iron Age/early Romano-British sherds. Its orientation, although not its line, matches that of an undated ditch (50039), 1–1.8 m wide and 0.5 m deep, in Area 9A to the north. Another undated ditch (50134), in Area 9C, may also be associated – it is perpendicular to ditch 50039 (although apparently unrelated to ditch 50141).

The north–south line of ditch 50141 (in Area 9C) suggests it may be associated with Romano-British ditch 15370, 120 m to the south in Area 5; like it, it contained Late Iron Age/early Romano-British pottery (three sherds).

Many of these ditches contained no finds and their dating is far from clear. Ditch 50026 was surveyed as cutting a ditch possibly forming part of the late prehistoric field system, and being cut in turn by an unexcavated ditch of probable medieval to modern date (see above), while ditch 51202 was surveyed as cutting another possible component of the late prehistoric field system.

There were few discrete features of this possible date within these areas. However, west of ditch 21205 (in Area 9B) there were two clusters of small features (and other more dispersed features), some of which also contained Late Iron Age/early Romano-British

pottery. These included, at the north, a group four shallow pits, or possibly hearths (50114, 50116, 50124 and 50132), 0.5–0.8 m wide and up to 0.16 m deep, containing pottery, animal bone and charcoal, and one other (50119) containing no artefacts. To the south was an arc of four possible postholes, three of them undated but the largest (50064), 0.8 m wide and 0.5 m deep, containing 41 sherds of Late Iron Age/early Romano-British pottery.

While these discrete features may be associated with ditch 51205, they could also be associated with two later ditches, with irregular lines, which cut across it; the ends of the two ditches were parallel for 6 m, and approximately 2 m apart. Ditch 51204 contained no finds, but ditch 51206 contained six Late Iron Age/early Romano-British sherds.

Areas 10W, 10E and Bilham Farm

There was little evidence for Romano-British activity in Areas 10W and 10E, despite their relative proximity to the Roman road, with only small assemblages of Late Iron Age/early Romano-British (18 sherds) and Romano-British (14 sherds) pottery being recovered. The only feature of possible Romano-British date was a small subcircular cut (55258, in Area 10E), 0.4 m wide and 1.0 m deep, containing six small Romano-British sherds, a nail and a small quantity of animal bone (Fig. 3.38).

In the Bilham Farm evaluation area, to the south of Area 10E, trenches 1077, 1079 and Pond B were positioned to target the possible extents of the Roman road (Fig. 4.23). Trench 1079 contained an area of compacted flint approximately 20 m wide, aligned north-west to south-east, probably the road surface. On its northern edge, ditch 107905 followed the same alignment, and continued into trench 1077 and Pond B (as 107704/57510) where it contained three sherds of Romano-British pottery. Ditch 107709 (which it cut) contained two Romano-British sherds and two crumbs of ceramic building material. 107709 was also cut by 107707, which was undated. All three ditches shared the road's alignment, and are likely to be successive phases of the flanking ditch.

Area 11

Archaeological remains in Area 11 consist of several types: a largely rectilinear arrangement of ditches of more than one phase appearing to form a number of adjacent fields or enclosures; some shorter and less regular lengths of ditch possibly representing smaller

enclosures, subdivisions of the larger enclosures, and possible structures; two adjacent small sub-circular enclosures; and numerous discrete features, mainly postholes and pits.

94% by weight of the pottery assemblage from Area 11 fell within the Late Iron Age/Romano-British date range. 310 sherds (2050 g) were identifiable as Late Iron Age/early Romano-British, and 345 sherds (4439 g) as late Romano-British. Most of the assemblage, however, (1286 sherds, 8042 g) was datable only as Romano-British. This relative dearth of closely chronologically-diagnostic material, and the likely occurrence in features of both residual and intrusive sherds, makes the reliable phasing of many of the features impossible.

Stratigraphic relationships suggest a degree of relative phasing between features (Fig. 4.18), and some can be assigned a relatively early date range (Late Iron Age/early Romano-British), while others are of late Romano-British date. Otherwise, many of the ditches in particular can only be given a generally Romano-British date.

The majority of features lay to the north-east of post-medieval field boundary 56275 (Fig. 4.18). The low level of recorded features to its south-west may reflect heavier truncation by historic cultivation in the south-western field, rather than a lower level of activity.

Field system

Although none were precisely aligned, the orientations and layout of the ditches in Area 11 were broadly consistent with those in Area 6 less than 30 m to the north-east, suggesting a ladder arrangement of enclosed fields.

Two ditches (56276 and 56307) lay entirely to the south-west of post-medieval ditch 56275. Ditch 56276 was 44 m long, aligned north-west to south-east, with terminals at both ends; it contained single Late Iron Age/early Romano-British and Romano-British sherds. Ditch 56307, which was cut by ditch 56275 but was not recorded to its north, ran south-west for 42 m before petering out, probably due to truncation from ploughing. It contained four sherds (24 g) of Romano-British pottery and a piece of medieval/post-medieval CBM.

These two ditches were near perpendicular to each other, and may be associated, although they had different orientations to the other Romano-British ditches to the north-east and contained only small quantities of Romano-British pottery, possibly intrusive. While it is possible that they belong to this phase (and are shown as such on Fig. 4.18), their orientations are closer to those of the suggested late prehistoric field system recorded more widely across the Cheeseman's Green excavations.

To the north-east of the post-medieval ditch 56275, a set of five broadly parallel Romano-British ditches ran north-east to south-west across the excavation area, only two of them (56272 and 56273) extending into the area south of 56275.

Three (56272, 56273 and 56274/56375) lay within a narrow band between 13 and 19 m wide. The north-westernmost (56272) ran from the northern limit of excavation to the point where it was cut at a right angle by the post-medieval ditch. Any northward continuation would have lain just to the west of Area 6, and there was no trace of it further to the south (although parallel ditches 56273 and 56274/56375 were seen to continue). This could indicate that the ditch terminated at this point, that it turned at a right angle to the north-west or south-east on the same line as the post-medieval ditch, or that it had been completely removed to its south. Ditch 56272 produced pottery of Late Iron Age/early Romano-British to late Romano-British date. There was possible evidence towards the north-east end for an earlier cut (56919) on the same line; the early cut produced no finds.

The central ditch (56273), 3.5–5.5 m to the south-east of ditch 56272, had a 16 m wide gap towards its northern end. There were three small pits (56120, 56126 and 56131) at the southern terminal of the northern portion. Towards the south, unlike ditch 56262, it continued for 11 m beyond the line of the post-medieval ditch (as 56878 recut by 56881), although the alignment is not precise. Ditch 56273 produced only a small quantity of Romano-British pottery (seven sherds, 12 g), as well as seven medieval sherds (presumed to be intrusive) from a single slot (56231).

The easternmost of the three ditches (comprising ditches 56274 and 56375) had a similar gap, 17 m wide, towards the north (Fig. 4.19), although offset to the south-west by approximately 8 m from the gap in ditch 56273. There were a pair of adjacent postholes (56485 and 56490), probably associated, within the gap, and another (56498) next to the northern terminal of the northern portion, while the northern terminal cut either a pit or an earlier terminal (56909); only posthole 56485 contained pottery – four Romano-British sherds (21 g).

Although ditches 56274 and 56375 were parallel to each other, and only 3–4 m apart at their south-western ends, towards the north ditch 56274 diverged eastwards to almost 10 m from ditch 56273. Like ditch 56273, ditch 56274 appeared to continue for 56 m beyond the post-medieval ditch, its line gradually petering out, probably as a result of ploughing. No

trace of the ditch was recorded in Area 6, 28 m to the north. The ditch produced 13 sherds (107 g) of Romano-British pottery, and a piece of a quern.

A fourth ditch (56271) lay 15–25 m to the west of ditch 56272, diverging slightly from it towards the north. Like ditch 56272 it was not recorded south of the post-medieval boundary. There was a 1.7 m wide break in its line. Towards the north it terminated 25 m from the excavation's limit, its terminal in a position which matched the southern sides of the slightly staggered gaps in ditches 56273 and 56274/56375, suggesting a possible relationship. Although no continuation of the boundary was recorded towards the north, it is possible that the terminal of ditch 56271 represents the southern side of a similar, if wider, gap. If these four ditches were parts of the same system of land division it is possible the unbroken ditch 56272 was the latest, effectively blocking an access point through the other three boundaries.

Some or all of these ditches may have formed parts of a trackway running along the western edge of a large square or sub-square field or enclosure. A ditch on the same orientation (56264), 93 m to the south-east of 56274 and close to the eastern limit of excavation, formed the opposite side. It continued beyond the north-eastern and south-western limits of excavation, but no ditch on the same line was recorded in Area 6. The ditch contained 19 sherds (162 g) of Romano-British pottery, one of them late Romano-British. The north-eastern terminal of ditch 56060 cut the south-western end of 56264 on a slightly different orientation. It contained 93 sherds (601 g) of Romano-British pottery, the majority of them (73% by weight) of late Romano-British date.

The southern side of this field was formed by a pair of parallel ditches (56305 and 56309). The earlier of the two (56305) intersected with ditch 56274 at its north-west end, although stratigraphic priority could not be determined. It contained 98 sherds (600 g) of Romano-British pottery (including two sherds of Late Iron Age/early Romano-British date) and a fired clay spindlewhorl (ON 938), as well as one piece of intrusive medieval/post-medieval CBM and a redeposited flint scraper. To its immediate south there was a disturbed area (57185) containing medium to large fragments of ragstone. This layer was cut by ditch 56309, which lay no more than 3 m to the south-west of ditch 56305 at the south-eastern end, gradually converging on it and before cutting over its line and terminating 1.5 m from ditch 56274. Ditch 56309 contained 57 Romano-British sherds, a piece of intrusive medieval/post-medieval CBM, and another redeposited flint scraper.

Within the enclosure or field, immediately to the south of the breaks in the western boundary ditches, ditch 56277 divided the area into two plots. It followed a slightly curving line from within 3 m of ditch 56274 at the north-west to within 8 m of ditch 56264 at the south-east. Within the southern portion were two circular ditched enclosures and a number of other features (below). Ditch 56277 contained 10 sherds (69 g) of pottery of Late Iron Age/early Romano-British to late Romano-British date.

Group 56280/56376

A small sub-rectangular arrangement of ditches in the southern corner of the field is of probable Late Iron Age/early Romano-British date (Figs 4.18 and 4.20). It comprises two short lengths of ditch (56280 and 56376) forming a structure up to 13 m long (north-east to south-west) and 9 m wide, open at its north-east end and western corner. L-shaped ditch 56280, on the south-eastern side contained 28 sherds (104 g) of pottery of predominantly Late Iron Age/early Romano-British date (87% by weight). Ditch 56376 on the north-western side contained 64 sherds (147 g), all of Late Iron Age/early Romano-British date, and all but eight of them from the northern terminal which splayed outwards and extended beyond the terminal of the opposing ditch. Both ditches contained small quantities of fired clay.

The area between the two ditches was occupied by a cluster of 22 pits of varying size and shape, most containing no finds; one undated example (56812) cut the western ditch. Pottery was recovered from 56797 (four Late Iron Age/early Romano-British sherds, 10 g), 56743 (eight Romano-British sherds, 31 g) and 56835 (three sherds (8 g) of Romano-British and late Romano-British date). Their purpose, and that of the surrounding structure, is unknown.

Circular enclosure 56901/56902 and associated features

This enclosure (Figs 4.18 and 4.21) was situated towards the centre of the southern part of the field, 11 m to the north-east of penannular ditched enclosure 56517 (below). It had at least two phases of construction and use.

Its first phase is represented by a shallow segmented penannular ditch (56901), 10 m in internal diameter, with an 8 m wide opening at the south. Six ditch segments were identified, although their replacement and partial removal by the second-phase ditch (56902) may have obscured other breaks. It is also possible that the segments, which were only 0.1–

0.15 m deep, represent the remains of undulations in the base of an originally more continuous ditch with a wide south-facing entrance. The segment on the eastern side of the entrance continues southward rather than curving towards the west, and its line may be continued by two undated features (56969 and 56971). Two postholes within the entrance on the western side contained a single sherd of Late Iron Age/early Romano-British pottery. The ditch segments contained 51 sherds (290 g) of Romano-British pottery, including three of Late Iron Age/early Romano-British date, as well as fragments of animal bone (8 g) and cremated human bone (3 g).

The ditch was subsequently recut, largely around its outer edge, to a depth of up to 0.25 m by two lengths of ditch between 0.5 m and 1.1 m wide (56902). The eastern segment almost completely closed off the entrance, leaving only a 1.5 m wide gap on the south-western side and a corresponding 0.3 m wide gap on the north-eastern side. The ditch had a pronounced kink in its line where it turned westwards across the former entrance. Together the second-phase ditches contained 135 sherds (942 g) of pottery, which included 12 of Middle/Late Iron Age date, but the majority of which were Romano-British; these included 10 late Romano-British sherds (80 g), along with small quantities of animal bone (2 g) and intrusive medieval/post-medieval CBM.

A number of small features either lay within the enclosure's interior, or had a stratigraphic relationship to its ditches. Most cannot be closely associated with one or other phase. These included a cremation grave (57153), 0.3 m in diameter and 0.04 m deep in the north-eastern part of the interior. Its charcoal-rich fill contained 31 g of cremated human bone and two abraded (and possibly residual) sherds (9 g) of Romano-British pottery. 7 small fragments of cremated bone (weighting 1.8 g.) returned a date of cal. AD 10–200 (SUERC-104079: 1942 ± 26 BP).

Other features in the interior comprised three pits (56925, 56987 and 57048) and nine possible postholes (56892, 56895, 56898, 56929, 57038, 57075, 57163, 57167 and 57171), three of which contained Romano-British pottery, but which together formed no clear pattern.

The second-phase ditch cut a pit (57053) containing six sherds (55 g) of Late Iron Age/early Romano-British pottery.

Penannular enclosure 56517 and associated features

This enclosure (Figs 4.18, 4.20 and 4.22) was roughly oval, 12 m east–west by 10.4 m north–south, with a 2.6 m wide entrance at its narrower eastern end; its internal space was 7.6 m wide. The penannular ditch was 1.1–1.8 m and 0.3–0.64 m deep, being shallowest along the northern side and deepest to the south and south-west. The ditch contained 146 sherds of Romano-British pottery (including one late Romano-British sherd), and 50 sherds dated as Late Iron Age/early Romano-British, possibly indicating an early Romano-British date for the enclosure. Small quantities of fired clay, animal bone and intrusive medieval/post-medieval CBM were also recovered.

The fills suggested natural silting with periods of waterlogging. While there were no indications in the fill profiles of an internal mound or external bank, there was a spread of brown silty clay (56526) recorded within the interior and overlying the upper ditch fills in several slots. There were also indications of possible backfill events, in the form of deposits containing quantities of burnt material, recorded at more than one level at locations around the ditch circuit.

There were a number of pits and postholes within the enclosure's interior, while others had a stratigraphic relationship to the ditch. Four pre-dated the ditch (56602, 56575, 56564 and 56544), while others (pit 56692 and postholes 56582, 56634, 56606, 56527, 56562 and 56590) cut its fills. One of these (56590) contained 25 sherds (375 g), most from a single Late Iron Age/early Romano-British vessel, possibly representing a placed deposit; as this is recorded as cutting the ditch fills this would appear to confirm the suggested early Romano-British date for the enclosure. Another posthole (56527) and the pit (56692) contained late Romano-British sherds. One undated pit (56702) lay slightly off-centre within the entrance, adjacent to the southern ditch terminal.

The distribution of the internal features suggests some possible organisation of space, with seven oval pits (56523, 56552, 56558, 56560, 56582, 56692 and 56990) in the southern half, separated from a cluster of mostly smaller pits and postholes in the northern half by a clear 'corridor' leading from the entrance. The southern group of pits contained generally small quantities of Romano-British pottery, including one late Romano-British sherd from 56692 which cut the ditch at the western end (56560 and 56582 contained no finds); pit 56692 also contained two small pieces of medieval/post-medieval CBM.

Apart from undated pit 56661 (which had a stakehole on its western edge), and pit 56612 which contained four Late Iron Age/early Romano-British sherds (39 g), the features in the northern part of the interior were all noticeably smaller. While some are described as postholes, they could have had a range of functions; feature 56637, for example contained 31 sherds (279 g) of late Iron Age/early Romano-British pottery, mostly from a pedestal base, and two other features in this area (56617 and 56700) also contained pottery of this date. They form no obvious pattern, although ten of the smallest features, were clustered in the north-eastern quarter of the interior, some of them cutting the edge of the ditch.

Group 56279

South-east of the two circular enclosures a rectangular arrangement of two ditches (56279) defined a small structure 16 m long (north-east to south-west) and 12–13 m wide, open to the south-west (Figs 4.18 and 4.20). Its two ditches averaged 1.1 m wide and 0.2 m deep and turned inwards at the north-eastern end, that on the north-western side taking a second turn to the south-west and continuing for over 3 m down the central axis. The ditch on the south-eastern side terminated short of that on the north-west side, although the width of the slightly funnel-shaped gap between them was obscured by a later (undated) pit. The ditches contained 16 sherds (48 g) of Romano-British pottery, and a small quantity of medieval/post-medieval CBM (30 g). The south-eastern ditch cut a pit (56143) containing 28 sherds (106 g) of Late Iron Age/early Romano-British pottery.

There appeared to be a rather symmetrical arrangement of features within the interior of the structure, concentrated towards its north-eastern end. A pair of pits (56864 and 56193) flanked the north-western ditch at the point where it lay on the structure's central axis; both contained small quantities of Romano-British pottery. A group of features within and immediately beyond the north-eastern end were mostly undated. One (56145) contained Romano-British pottery (14 g).

A short line of five postholes to the immediate north-east may be associated with the structure. Two the postholes (56201 and 56203) intercut, both containing Romano-British pottery, and 56201 contained a possible ballista ball (ON 921).

Groups 56372/56373

An arrangement of two short parallel ditches lay in the northern part of the field (Fig. 4.19). Ditch 56372 (4.3 m long) and ditch 56373 (6.5 m long) were approximately 5 m apart, aligned north-east to south-west. Together they contained 71 sherds (617 g) of Romano-British pottery, two nails (ONs 948, 959), and small quantities of fired clay and animal bone. Three small features (pits or postholes) lay between the ditches, one of which (56493) contained a single Romano-British sherd (21 g). A fourth undated feature lay just to the north, possibly associated with this group, or with curving ditch 56304 (below).

Feature 57241

A small irregular ditched feature (57241) consisting of a pair of sub-parallel ditches at least 8.7 m long east–west and 4 m wide was cut at its western end by field ditch 56305 (Fig. 4.18). It contained 11 sherds of Romano-British pottery. There was a single possible internal feature.

Other ditches

The majority of the other lengths of ditch are of less certain function, being generally short in length and irregular in line (Fig. 4.18). Some of them pre-date the field system ditches, while others post-date them, and they range in date from Late Iron Age/early Romano-British to late Romano-British. A number appear to represent different forms of structure; these are described separately, below.

Most of these short ditches were of general Romano-British date. They included ditch 56904, 27 m long and aligned south-west to north-east, immediately west of the two circular enclosures (below); this ditch produced no pottery, but a single fragment of blue/green melted glass waste was recovered.

A 20 m long ditch (56903) ran partly parallel to the south-western side of the field, before turning north; it contained eight Romano-British sherds (47 g) and two of Late Iron Age/early Romano-British date. Parallel to the north-west side of the field, and 3–4 m from ditch 56274, ditch 57184 contained two sherds identifiable only as later prehistoric.

Ditch 56278, which ran north-west to south-east roughly parallel to adjacent ditch 56277, contained a single Romano-British sherd (4 g). Towards the south-east it intersected with ditch 56264; their stratigraphic relationship was not established by excavation. The lower fill at its north-western end, however, was cut by the north-eastern terminal of late

Romano-British ditch 56302 which ran south-west for 20 m before turning to the north-west for a further 3 m. It contained six Romano-British sherds (47 g), two of which were late Romano-British. Also of possible later date was a short ditch (57082) running east–west from the north-western terminal of 56904; it contained three Romano-British sherds (20 g), two of them late Romano-British.

An irregular enclosure (56310) (Fig. 4.19) overlay the inner (56274) of the three parallel trackway ditches forming the north-western side of the large field. It enclosed an area 25 m long (north-east to south-west) and up to 12 m wide, and had a 2.6 m wide entrance on its eastern side, set within which there were two postholes (57100 and 57103) 1.7 m apart centre to centre. There was also a gap in the south-western corner, apparently closed by ditch 56273. Ditch 56310 produced 19 sherds (243 g) of Romano-British pottery, of which two were late Romano-British, along with small quantities of fired clay and burnt flint. However, possible entrance posthole 57100 contained two Late Iron Age/early Romano-British sherds, although these could be redeposited. There were three intercutting pits (and two other possible pits) within the enclosure, only the latest of which (57111, measuring 1.4 m by 2.3 m, and 0.37 m deep) contained finds comprising part of a late Romano-British mortarium (1426 g) from the upper of its three fills (57114). Possibly associated was a small arrangement of five undated postholes (56161) immediately outside the enclosure's northern corner (between ditches 56273 and 56274). Also possibly associated was a 10 m length of curving ditch (57182) just east of the enclosure, south of its eastern entrance. Its function is uncertain, but it contained 12 Romano-British sherds (115 g), two of which were late Romano-British.

A number of short, slightly curving ditches or gullies (57180, 57181, 56226, 56304 and 57255) were recorded towards the northern end of the excavation area (Fig. 4.19). They are of uncertain function, although it is possible that some could represent the parts of roundhouse ring gullies. Gully 56226 (which cut field ditch 56277) contained 17 Romano-British sherds (129 g), two of them late Romano-British. Gully 56304 also contained a number of late Romano-British sherds, along with a double spiked iron loop (ON 924) and a small quantity of slag. Two small undated postholes lay within the curve of gully 56304, and third larger example close to its southern terminal. A possibly L-shaped ditch (56110) was partly exposed on the northern limit of excavation (Fig. 4.18).

An 8 m long, slightly curved gully (57250), which lay to the south of the post-medieval ditch (56275), contained 128 sherds (663 g) of Romano-British pottery (including 19 of late Romano-British date).

A number of short lengths of ditch lay to the south-east of ditch 56264, which formed the south-east side of the large field, and consequently in the next block of land to the east. A shallow linear feature (56069) and ditch 56303 lay parallel to and 2–3 m beyond the field boundary, both of them cutting earlier, approximately perpendicular ditches (56051, 56067 and 56031) that terminated just short of ditch 56264. Apart from ditch 56051, which contained no finds, all these features contained small quantities of Romano-British pottery.

Discrete features

Numerous discrete features, mostly pits and postholes, were recorded during the excavation, a sample of which were excavated (Fig. 4.18). These were densest in the southern part of the field, especially in the area surrounding the two circular enclosures and groups 56279 and 56280/56376, suggesting that these features were the main focus of activity. Due to their density, a number intersected forming generally loose clusters, but it is unclear whether or not this was intentional. The pits generally ranged between 0.8 m and 1.5 m wide and up to 0.3 m deep. Although some had fills probably formed through deliberate backfilling, the majority had infilled through natural silting process.

Most of these features contained no dating evidence, and while the presence on the site of a small number of prehistoric features makes it likely that some of the undated features were of prehistoric date, it is considered probable that most were contemporary with the phases of Late Iron Age/Romano-British activity. The small number of stratigraphic relationships, however, and the likely occurrence in features of both residual and intrusive material in an area of such intense activity makes it hard to reliably phase the majority of these features.

Three pits, not directly associated with larger structures or groups, are assigned a Late Iron Age/early Romano-British date. Two lay to the immediate west of group 56280/56376 (Fig. 4.20) with which they may have been contemporary – pit 56730 contained 22 sherds of Late Iron Age/early Romano-British pottery, as well as single pieces of slag and CBM, while pit 56709 contained a single sherd. Pit 57025, which lay to the north, close to ditch 56277 (Fig. 4.19), also contained a single sherd.

Nineteen discrete pits are dated simply as Romano-British. Four (56706, 56718, 56751 and 56768) lay to the south of penannular enclosure 56517 (Fig. 4.20). Three (56019, 56070 and 56174) lay to the north-east of structure 56279 (Fig. 4.18). Six pits (56102, 56133, 56135, 56137 and two earlier but undated) intercut close to the southern corner of the field (Fig. 4.20), while two (56076 and 56078) intercut on the north-eastern edge of ditch 56277 (Fig. 4.18). Others were more widely dispersed across the Area: 56012 (cut by ditch 56264), 56014 (east of ditch 56264), 56042 (a pit or large posthole at the south-east terminal of ditch 56277, cutting an earlier undated posthole), 56256 (immediately north-east of ditch 56277 (Fig. 4.19), 56821 (near the western corner of the large field/enclosure), 56959 (Fig. 4.19) north of circular enclosure 56901/56902, and 56267 and 56330 (to the south-west of post-medieval ditch 56275).

Nine discrete pits are of probable (or possible) late Romano-British date. One (56521) lay immediately south of the southern terminal of penannular enclosure ditch 56517 (Fig. 4.22), and another two (56774, 56845) to the south-west of the monument (Fig. 4.20). Three were more widely spaced within the main field: 56235 (to the north-east of structure 56279), 56824 (cutting Romano-British pit 56821), and 56080 (on the north-eastern edge of ditch 56277 cutting Romano-British pit 56078). One (56445) was adjacent to post-medieval ditch 56275, and a further two (56333, 56378) lay to its south-west.

Amorphous feature 56017

An amorphous feature (56017) in the north-east corner of the excavation (Fig. 5.12), which contained a small quantity of Romano-British pottery, is of uncertain nature function.

5. Saxon and Medieval to Modern, and Undated

Anglo-Saxon

During the excavation of test pits through the alluvial deposit containing Mesolithic flints in Area 4N (above) a large hollow piece of worked waterlogged tree trunk (17813), from a

mature pollarded oak (*Quercus*), was found placed upside-down at depth within a pit or posthole (17814) cut into the deposit (Figs 3.32, 5.1 and 5.2) (see Taylor and Barnett, Chapter 6). A sample of the wood was radiocarbon dated to the early Anglo-Saxon period – cal. AD 480–610 (UB-20906, 1512 ± 32 BP and UBA-32568, 1538 ± 35 BP) at 95% confidence (Table 29). No other Anglo-Saxon features, deposits or finds were recorded on the site, and this feature, located on the valley floor, is of unknown function. Residual Mesolithic flints were the only other artefacts found within the feature, including a flint core deep inside the hollowed timber.

No Anglo-Saxon material was collected during field-walking of the site (Sparey-Green 2004, 23), and there is little evidence for early Anglo-Saxon occupation in the wider area. However, two adjacent large waterholes/wells, with timber structures at their bases, were found at Foster Road and radiocarbon dated to cal. AD 580–660 (NZA-28894, 1444 ± 25 BP) and cal. AD 590–660 (NZA-28893, 1427 ± 25 BP); they lay close to a sunken featured building from which a single sherd of organic-tempered Saxon pottery was recovered (Powell and Birbeck 2010). A number of hearths radiocarbon dated to the 5th–7th century have been found near South Willesborough, 1.2 km to the north-west (Deeves 2007, 242), as well as possible grave-goods from an early Anglo-Saxon burial (*ibid.*, 9). A radiocarbon of cal. AD 1020–1210 (Beta-171102, 950 ± 40 BP) was obtained from one of a number of similar hearths at Brisley Farm (Stevenson 2013, 213). Late Anglo-Saxon charters suggest an established settlement pattern by the mid-9th century period with identifiable manorial estates and parishes (Sweetinburgh 2004a, 28).

Medieval, Post-medieval and Modern

A small assemblage of medieval pottery (156 sherds), most of it of 12th–13th century date, was recovered from the site. However, all but 14 sherds came from features in Areas 2, 3W and 3E indicating a clear a focus of settlement activity at the west of the site. Six post-medieval or modern sherds were also recovered.

A significant part of the understanding of the medieval and later features involves analysis of cropmarks visible in aerial photographs and field boundaries shown on estate maps of 1683/4 and 1723 (as plotted in Sparey-Green 2004, fig. 16), the 1797 Ordnance Surveyor's drawing, the tithe maps for Sevington (1838), Kingsnorth (1939) and Mersham

(1840), and early edition Ordnance Survey (OS) maps. Because some of these features display long-term continuity of use, the medieval, post-medieval and modern periods are considered together.

Areas 2, 3W and 3E

The distribution of medieval pottery from the excavation corresponds broadly to that recorded during the 2004 fieldwalking survey, as well as that survey's recovery of sandstone rubble and peg tile fragments which probably relate to the remains of one or more buildings to the immediate south of Areas 2, 3W and 3E (Sparey-Green 2004, fig. 14).

It also corresponds to a series of apparently associated cropmarks visible in aerial photographs (*ibid*., figs 11 and 12). These include a prominent ditched boundary on the edge of the floodplain which curves for over 700 m round the north-eastern and north-western sides of the low ridge south of the river, and a number of other ditches running perpendicular from it onto the ridge. Some of the cropmarks correspond to field boundaries shown on the early maps, while others do not, suggesting that at least some of these features had been abandoned during the post-medieval period, possibly indicating a medieval origin.

Area 2

A number of features in this area contained only medieval pottery (although in total only 13 sherds were recovered), such as ditches 51181, 51182 and 51185. These formed components of a rectilinear field system, other possible elements of which in this area are largely undated (Fig. 3.24). However, as discussed above (see Chapter 3), the layout and appearance of these ditches are broadly consistent with the late prehistoric field system recorded more widely across the site. Moreover, the orientations of the majority of Area 2 ditches do not match either the mapped field boundaries or the cropmark evidence. The low numbers of medieval sherds suggest that they may be intrusive, perhaps reflecting medieval manuring in this area.

Area 3W

In contrast to Area 2, Areas 3W and 3E contained a number of ditches almost certainly of medieval date, the positions and orientations of some of which are clearly related both to the cropmarks and to mapped field boundaries (Figs 5.3 and 5.4).

These include, in Area 3W, two right-angled ditches (51193/51195 and 51194) whose spatial relationship suggests strongly that they may be associated, as may two other ditches with similar orientations (51198 and 51120). Although, together, they produced only 12 sherds of medieval pottery, in two of the four slots in which these were found they were recovered from the basal fills. The ditches also produced one late prehistoric and 12 Late Iron Age or Romano-British sherds, the majority of them abraded and in poor condition, suggesting that they were residual; the only other finds were pieces of residual struck flint.

Ditch 51193/51195 appeared to form parts of the northern (51195) and western (51193) sides of a possible rectangular enclosure, over 60 m east–west by over 20 m north–south; no ditches clearly forming its eastward continuation was recorded in Area 3E, suggesting that its eastern side lay in the 20 m wide unexcavated gap between the areas. Ditch 51193/51195 had been recut in the vicinity of the north-western corner, the original cut (51194) turning at a sharp right angle, subsequently recut on a more curving line. On the western side the ditch was up to 2.8 m wide and 0.4 m deep, with moderately steep sides and a wide flat base; on the northern side it was up to 2.2 m wide and 0.5 m deep.

Ditch 51194 may have formed a rectangular subdivision within the western part of the enclosure, possibly accessed from the east by a 2–3.5 m wide passage, 14 m long, lying between its east–west arm and ditch 51195. This ditch was of comparable, although more variable dimensions, measuring 1.7–3.3 m wide and 0.4–0.7 m deep; at its terminal it was 0.9 m deep with near-vertical sides and a flat base.

Another potential subdivision within the enclosure may be represented by right-angled ditch 51198 in the south-east corner of the area. Two small medieval sherds were covered from the lower of its two fills, and although the larger pottery assemblage was predominantly Late Iron Age/early Romano-British (29 sherds) and Romano-British (38 sherds), the Romano-British pottery at least may have derived (as discussed above) from a Romano-British ditch (51197) which it cut. Also recovered from ditch 51198 was a quantity of fired clay (530 g), although this could also have been associated with the earlier material.

Another ditch (51200) lying parallel to and 6 m north of ditch 51195 also appears to be spatially associated with it, although the only pottery it contained was five Romano-British sherds; further Romano-British pottery recovered from its possible eastwards continuation, as 50587, in Area 3E (Fig. 5.4).

There were few features within the area defined by these ditches, including a cluster of Iron Age pits and two undated cremation graves with unurned burials, but nothing that was clearly associated with them.

All of these ditches were stratigraphically late. Ditch 51193/51195 was stratigraphically later than two undated ditches with which it intersected, at least one of which (51192) may have formed part of the late prehistoric rectilinear field system, but its relationships with the three other ditches (50322, 50959 and 51199) were not clearly established. Ditches 51189 and 51200 were also stratigraphically late, both cutting Late Iron Age 51199; ditch 51194 cut only a small undated feature.

Map and cropmark evidence

An historic date for the suggested enclosure is strongly indicated by the fact that the southern end of a field boundary shown on the 1839 Kingsnorth tithe map between fields *551* and *555* (Fig. 5.5) corresponds to the line of the enclosure's western side, north-west corner and approximately 10 m of its northern side. The pronounced kink in the field boundary suggests that it was following an earlier feature, and the arrangement of field boundaries to the immediate south and east suggests that ditch 51193/51195 may have defined a subrectangular enclosure approximately 48–58 m north–south by 75 m east-west. The eastern and southern sides of the enclosure are faintly visible as cropmarks, while its south-east corner is indicated by a prominent kink in the field boundary forming its eastern side which is evident in the Bilham estate map of 1683/4 (Fig. 5.5), and is still evident on recent OS maps.

The field on the tithe map which contained the enclosure (*555*) is not listed in the tithe award schedule (as transcribed on the Kent Archaeological Society website). However, the adjacent field to the west and south (*551*), with which it had been amalgamated by the time of the 1st edition OS map of 1871/2, was named *Pound Field* in the tithe apportionment, possibly referring to the former presence of an enclosure (although the 1683/4 estate map shows other fields called *Great Pound Fielde* and *Little Pound Fielde* further to the east).

Area 3E

Medieval

Area 3E produced 115 sherds of medieval pottery, which represents 84% (by weight) of the medieval pottery from entire site, although the nature of the medieval activity was less clear here than in Area 3W.

The line of the closely set parallel ditches in the centre of this area (some appearing to define a north–south trackway of Late Iron Age to Romano-British date) is visible as a cropmark in aerial photographs associated with other apparently medieval/post-medieval features (see below). The stratigraphically latest of these ditches was ditch 50659, which cut the fill of late Romano-British ditch 50866. It was 2.2 m wide and 0.8 m deep, and its two fills contained two medieval sherds (from the upper fill), as well as four late Iron Age/early Romano-British sherds and 39 Romano-British sherds all of which were very abraded and likely to be residual.

Most of the medieval pottery in this area, however, came from four other ditches to the south-east of ditch 50659 – ditches 50661 (22 sherds), 50867 (25 sherds), 50875 (15 sherds) and 50879 (41 sherds). As discussed above, three of these ditches (50661, 50867 and 50879) appear to be of Romano-British date, with the medieval pottery being intrusive; in each case it was recovered from either their single and/or their uppermost fills.

Ditch 50875, however, appears to have been of medieval date, containing early medieval pottery in both its lower and upper fills. It was 2.7 m wide and up to 0.7 m deep with moderately steep straight sides and a flat base. It ran north-east from a terminal, before curving round towards the south-east, where it intersected with, and then appeared to follow the line of, Romano-British ditch 50866. The position of its terminal suggests that the ditch flanked an entrance, at least 8 m wide, possibly of an enclosure extending to the south and east.

The separate line of ditch 50875 was not discernible in plan south-east of where it joined ditch 50866, where both ditches were then crossed by a substantial ditch (50874) of probable post-medieval date (see below). However, the continued line of ditch 50875 towards the south-east may be represented by one of the multiple cuts on the line of ditch 50866 visible in section near the south-east edge of the excavation (Fig. 5.4 section). Stratigraphically, the most likely candidate for the medieval ditch is cut 50839 which was of a similar size and profile to the rest of ditch 50875. In this section it largely removeded the fills of ditch cut 50831, which is probably the continuation of Romano-British ditch 50866; as

noted above (see Chapter 4) cut 50839 contained 114 sherds of Romano-British pottery, presumably residual, deriving from the earlier ditch cut.

Post-medieval and modern

The evidence for post-medieval and modern activity is based largely on the interpretation of historically mapped field boundaries and features visible as cropmarks in aerial photographs. In one photograph a square arrangement of cropmarks to the south of the area has been suggested as possibly representing a moated site (Sparey-Green 2004, 12, figs 11 and 12) of likely later medieval or post-medieval date; this feature, however, is less apparent of other photographs.

As noted above, Romano-British ditch 50866 and medieval ditch 50875 were cut at a right angle by a later ditch (50874) just south-east of where their lines met (Fig. 5.4). In the single fully excavated slot of ditch 50874 (50206), south-west of that intersection, it was 3 m wide and 1.3 m deep, with six fills recorded. Overall the ditch contained seven Late Iron Age/early Romano-British sherds and 14 Romano-British sherds, and one sherd of 18th/19th-century stoneware.

A cropmark corresponding to the line of this ditch is clearly visible in aerial photographs, curving slightly westwards at the south-west. To the north (on the edge of the excavation) it turns sharply north-west where it appears to form part of a long curving boundary enclosing the north-west end of the low ridge between the East Stour River and Bilham Dyke (Sparey-Green 2004, figs 11 and 12). The 35 m long section of ditch 50874 exposed within the excavation corresponds to one of a number of apparently radial ditches running outward towards this boundary, another of which corresponds medieval ditch 50659 (and the line of the late Iron Age/Romano-British trackway).

Although ditch 50874 is visible as a cropmark continuing south-east beyond the point of its intersection with ditches 50866 and 50875, this south-eastern part had been removed as a field boundary by the time of the 1839 tithe map; it is possible that part of its line is reflected in a dogleg in the south-eastern boundary of a field called *Great Meaddow* shown on the 1683/4 Bilham Estate map (Fig. 5.5), although this map gives no other indication of these boundaries. To the north of the intersection, however, ditch 50874 followed the line of the north-eastern side of a field (*557*) first shown on the tithe map, turning sharply to the north-west on the edge of the excavation area (Fig. 5.4). This boundary passed just north of a

Sheepfold shown on the 1871 OS maps, part of which would have lain within the excavation area although no trace of it was recorded, and then followed a slightly curving line which appears to line up on ditch 51200 in Area 3W (Fig. 5.3).

At the southern end of the dogleg, the boundary of field 557 turned south-east along the line of ditches 50866 and 50875, and in section (Fig. 5.4 section) could be represented by any or all of the later ditch cuts (50828, 50834 and 50836). The largest of these was no more than 1.7 m wide and 0.7 m deep, none of them containing any finds. This very distinctive kink in the field boundary was preserved until the late 20th century. As with ditch 50659 to the west, which appears to have preserved the line of late prehistoric boundaries into the medieval period, part of the line of a Romano-British ditch (50866) appears have been maintained through the medieval, post-medieval and modern periods.

Other Areas

Area 1

A substantial curving feature lying close to the southern edge of the area, which was surveyed but not excavated (Fig. 3.14), corresponds to a probable drainage ditch shown on the 1871 OS map.

Area A1

Individual ditches in evaluation trenches 1 and 2 (Fig. 5.7) appeared to relate to post-medieval and modern agricultural activities.

Area 4S

The orientations of the post-medieval/modern field boundaries in this part of the site are almost identical to those of the late prehistoric rectilinear field system, causing potential confusion in the phasing of the recorded field ditches (Fig. 3.30).

Two boundaries defining three adjacent fields shown on the 1683/4 estate map (*Hors Spott*, *Great Pound Fielde* and *Little Pound Fielde*) lie within this area, one running north-west to south-east, the other running at a right angle south-west from it (Fig. 5.5). The former matches the line of undated ditch 16244, which was 2.5 m wide and 0.7 m deep with two fills, while the latter corresponds with ditch 16278, which was up to 2 m wide and 0.4 m deep, and

had two fills, the upper containing four residual sherds of Late Iron Age/early Romano-British pottery. Ditch 16244 ran along the base of the slope at the edge of the valley floor (and may also be represented by an unexcavated ditch recorded in evaluation trench 205), while a ditch approximately perpendicular to it in trench 203 probably marks the south-east side of *Great Meaddow*.

Both these boundaries had been lost by the time of the 1839 tithe map. The former (which had been replaced by one to the south-west, between fields *558* and *559*) could be represented by any one of three parallel ditches (16276, 16277 and 16279), although its position, if not its exact orientation is most closely matched by ditch 16277, the only one of the three to join ditch 16278. As this junction lay on the edge of the excavation, the continued line of this boundary to the south-east could not be determined, although it may be represented by a ditch in evaluation trench 195. Ditch 16277 was up to 1 m wide and 0.4 m deep. Another undated ditch (16276), 0.7–1.1 m wide and up to 0.4 m deep, may also be associated with these post-medieval and modern ditches, since it abutted, but did not cross, ditch 16244, running south-west from it before turning to the north-west. Although not depicted on either map, it could have been a drainage feature associated with these fields but not forming a boundary.

Areas 5, 9A and 9D

Two unexcavated ditches in Area 5 are likely to be of post-medieval (or earlier) date (Fig. 3.33). One, which runs north-north-east to south-south-west, corresponds to a field boundary shown on the 1838 Sevington tithe map, and on OS maps until 1975. The course of the other ditch, which runs east–west at the north of the Area, matches a feature visible in aerial photographs (Sparey-Green 2004, fig. 11) running to the north-west; the same feature was surveyed (but again not excavated) in Areas 9A and 9D where it was up to 3.7 m wide (Fig. 3.32). The line of this feature also matches a line of 'tree' symbols shown on the 1871 OS map, suggesting that it may represent a former watercourse which, given the sinuous course of the river, was almost certainly a ditch related to water management on the valley floor. This ditch may have been replaced by a later drainage ditch to its south, which branches from the river further upstream to the east, then rejoins the earlier ditch before draining back into the river.

Area 6

A 3–5 m wide ditch (not excavated), aligned north-west to south-east in the north-east corner of the Area, was surveyed as being later than two Romano-British ditches (Fig. 4.6). Although it does not correspond to any mapped field boundary, it does line up with a boundary 85 m to the south-east, as shown on the 1838 Sevington tithe map (and on OS maps until 1975), perhaps indicating that it marks a medieval or post-medieval field boundary abandoned when fields were enlarged. One the 1871 OS map this boundary is shown as tree-lined, perhaps an indication of its age.

Area 7

A 2 m wide ditch (not excavated) running north-east to south-west across this area (Fig. 4.8), corresponds to a field boundary shown on the 1838 Sevington tithe map (and on OS maps until 1975).

Area 10W

In the north-east corner of this area a shallow linear depression (100604) aligned north-west to south-east, 4.7 m wide and 0.1 m deep with a probably rutted base, may mark a trackway running immediately adjacent to a post-medieval field-boundary (Fig. 3.38). It contained three sherds of medieval pottery and a piece of post-medieval/modern flowerpot.

Area 11

No features of medieval date were identified, the eight sherds (36 g) of medieval pottery recovered coming from Romano-British ditch 56273 and post-medieval ditch 56275 (Fig. 4.18). This latter feature corresponds to a field boundary shown on the 1838 Sevington tithe map; no other post-medieval features were identified.

Areas B6-B8 Spine Road

Two shallow ditches were encountered in the approximate centre of evaluation trench 6 (Fig. 5.8). The ditches lay on different alignments which would have converged to the north-west beyond the limit of excavation (assuming straight courses for both). Ditch 603 was aligned WNW to ESE, with moderate concave sides and a concave base. The ditch measured 0.70 m wide and 0.18 m deep. Three meters to the southwest ditch 605 was 0.72 m wide and 0.17 m

deep on a north-west to south-east alignment, with moderate concave sides and a concave base.

Medieval pottery (a sandy ware with rare shell (fabric M40B; 1175-1400) 28 sherds, 111 g) was recovered from both ditches. The material includes a jar rim with developed profile and a jug rim.

In trench 9 a single north-east to south-west aligned ditch (904) was encountered. The ditch measured 2.65m wide and 0.64m deep. A modern land drain lay along its south-eastern edge.

Undated

A large number of excavated features provided no artefactual dating evidence, and many more possible features were surveyed but not further investigated. However, a significant proportion, particularly of the ditches, have been assigned to period on the basis of their spatial relationships to other features – albeit with varying degrees of confidence. Other features, which do not fit easily within any of these phases but which still appear significant on the basis of the form or location, are described briefly here.

Fence-line

A slightly sinuous E–W line of truncated postholes (51214), averaging 1 m apart, in the central part of Area 2 probably represents a fence-line (Fig. 3.24). It crossed the line of field system ditch 51182, but no postholes were observed cutting the ditch fills. Only two of the postholes were excavated, both of which were only 0.05 m deep. One (51090) produced two sherds of early medieval pottery, insufficient to date the whole alignment. Another short line of unexcavated, but similarly spaced possible postholes running NE–SW was recorded adjacent to the NW limit of excavation; it may represent a second fence-line, or possibly a continuation of the curving line of the first.

Ditches

Many of the ditches contained either no dating evidence, or evidence that was considered likely to be either residual or intrusive. However, a substantial number of them have been tentatively phased on the basis of the spatial and real or apparent stratigraphic relationships with other features. A small number, however, remain unphased. Many of these comprised only short lengths of ditch, and are not considered to be of particular significance. A few, however, that have not previously been mentioned may represent significant features in the landscape.

Area A1

A pair of sub-parallel ditches (Fig. 5.7) was identified in evaluation trench 8. Ditch 803 was aligned north-west to south-east, measuring 1.18m wide and 0.42m deep. To the west, ditch 805 was aligned NNW to SSE and measured 1.6m wide and 0.57m deep. The ditches exhibited similar profiles but differing fills and need not be contemporary. Neither ditch was identified in any other trench nor does the projected trajectory align with the known Roman road which runs approximately 30-40m to the south.

Area 2, 3W and 3E

Two shallow ditches in Area 2 appear spatially unrelated to the other ditches in this area (Fig. 3.24). Ditch 51207, which was up to 0.5 m wide and 0.2 m deep, cut ditch 51186, possibly part of the late prehistoric field system. However, ditch 51189, up to 1 m wide and 0.3 m deep, was recorded as being cut by another possible ditch of the field system (51188). Their dates, therefore, remain unclear; the east–west line of ditch 51189 approximately matches that of the cropmark to the north which form part of the large oval possible enclosure, but this may be entirely coincidental.

Area 3W

A number of ditches in this area (eg, 50959, 51190 and 51191) formed no obvious pattern and appear spatially unrelated to the other ditches (Fig. 3.25). All pre-dated the medieval enclosure, but the relationship between undated ditch 51191 and ditch 51192, the orientation of which suggests it was part of the late prehistoric field system, was not established.

Area 8

Only one feature in this area was investigated, with a single slot (50006) excavated through a linear feature running approximately north–south (Fig 5.6). In the slot it was 3.8 m wide and 0.6 m deep, with five sterile fills, but it is unclear whether it was a ditch or a naturally formed water channel.

Other features surveyed in this area suggest that there were ditches of more than one phase, some of which (as noted above, see Chapter 3) have orientations consistent with the late prehistoric field system, but others are of unknown date and character. These include an arrangement of ditches possible forming a small subrectangular enclosure, up to 30 m long (east–west) by 18 m wide (north–south) near the northern end of the area.

Area 11

An L-shaped arrangement of short ditch segments (56308) contained no finds and was of uncertain function (Fig. 5.9). The only dating evidence was provided by the fact that the eastern-most segment (56841) was cut by Romano-British ditch 56273, and one segment was cut by a Romano-British posthole (56974). Although the profile and fills of this segment did not match those seen in the other segments, its orientation and position suggest that it was part of the larger feature. The feature comprised a line, at least 24 m long aligned southeast to north-west, of four segments, and another line, 32 m long, of four segments at a right angle to it. The three complete segments in the north-eastern line were 3.6–4.7 m long and approximately 1 m wide, and spaced 1.6–2 m apart. The four segments in the other line, which extended for 32 m, were noticeably smaller (2.9–3.5 m long and 0.3–0.7 m wide), and had much more variable spacing, there being a 13 m gap at the south-west. The segment fills were fairly consistent, resulting from gradual silting. A cluster of five undated postholes (56433) and an undated pit (56439) showing evidence of *in situ* burning formed no obvious structure near the northern end of the feature.

B1-B3

Undated ditches were encountered in trenches 1064, 1065 and 1066 in Plot B3 (Fig. 5.10). In trench 1064, a pair of broadly parallel ditches 6 m apart were aligned north-west to south-east. The north-eastern ditch (106405) was 1.2 m wide and 0.2 m deep with shallow concave sides. The south-western ditch (106407) was 1.1 m wide and 0.3 m deep with a similar profile.

In trench 1066, ditch 106604 was recorded for 7.6 m on a north-east to south-west alignment. It was 0.5 m wide and 0.16 m deep with steep concave sides. It may have continued as ditch 106505 in trench 1065, which formed a possible terminal, very disturbed by modern land drains. Some 8 m to the east, a second ditch (106503) was aligned north-west to south-east. It was 0.7 m wide and 0.2 m deep with a moderately steep V-shaped profile.

B4-B8 Flood Compensation Area

Seven evaluation trenches (35-39, 48 and 52) contained a 19th century field boundary visible on historic mapping and 1940s aerial photography (Fig. 5.11). Ditches in evaluation trenches 3, 6, 34, 49 and 50 formed no coherent pattern.

Burnt Features

Notable among the many undated discrete features across the site was a series of shallow pits containing evidence of burning in the form of charcoal, burnt flint, and occasionally fire-reddened soil, but no pottery or other finds to indicate that this material derived from domestic activity.

The largest number of these were recorded in Areas 1 and 7, with a significant number also in Areas 2, 3E, 3W, 4S, 4N and 5 and individual examples in evaluation trenches 3 and 5 in Area A1, evaluation trench 5 in B6-B8 Spine Road, evaluation trench 42 in B4-B8 Flood Compensation Area, evaluation trench 1081 in the Bilham Farm area and evaluation trench 1068 in Area B3. While some of dated pits also contained burnt material, the relatively high proportion of undated pits that contained such burnt material probably reflects that such features were preferentially selected for investigation on account of the visible evidence of burning in their fills.

Many are not closely associated with any settlement evidence, and have a broad similarity in appearance. Where there were stratigraphic relationships, such features were almost invariably late. Two (18029 and 18206) in Area 1, for example, cut the fills of the silted up Late Iron Age valley-floor enclosure, while pit 15078 in Area 5 cut the fills of Romano-British ditch 15372, and pits 41047 and 40906 in Area 7 cut the fills of the Romano-British enclosure ditch 41106.

As noted above, a number of shallow circular cuts filled with charcoal have been found near South Willesborough, 1.2 km to the north-west and radiocarbon dated to the 5th–7th century (Deeves 2007, 242), while similar features at Brisley Farm were radiocarbon dated to the 11th–12th century (Stevenson 2013, 213). These features have been identified as 'hearths' but in the absence of other material from them it in uncertain what function and context they actually had.

6. Finds

Pottery

by Grace Jones and Rachael Seager Smith

Introduction

The assemblage ranges in date from the Early Bronze Age to the 13th or 14th century AD, with only three sherds of post-medieval and modern material. The main focus of activity lies within the Late Iron Age and Romano-British periods (*c.* 100 BC–AD 410), particularly the 1st century AD. A total of 14,434 sherds of pottery, weighing 138,936 g, was recovered. The material came from nearly all areas of the site, with the exception of Area 8 (Table 1). Most of the pottery was recovered as bulk finds during the hand-excavation of archaeological features and deposits, although pieces from the >5.6 mm fraction of sieved environmental and artefact samples, and a number of individually three-dimensionally recorded vessels (including more or less complete pots found in burials) and sherds, are also included.

Methodology

The entire assemblage was assessed to broadly characterise the material and provide chronological information. Quantification resulting from this preliminary level of analysis is presented in Table 1, by Area and broad period. All sherds were examined on a context by context basis and divided into broad fabric or ware groups, with reference made to regional or national fabric series as appropriate. The pottery was quantified by number and weight within each context group, and recognisable forms were recorded using regional type series such as Thompson (1982), Monaghan (1987) and Young (1977). The Dragendorff series was used to describe the samian forms. Comment was also made on decoration, surface treatment, evidence of use and re-use, pre- or post- firing perforations and condition.

More detailed analysis was carried out on all pottery of Bronze Age date, with full fabric and form analysis conducted in accordance with the guidelines of the Prehistoric Ceramics Research Group (PCRG 2010). This level of analysis was also applied to pottery of Early to Middle Iron Age date, with the exception of residual or unstratified pottery. Quantification of

pottery recorded at this more detailed level is presented in Tables 3 and 6, and referred to in the sections below. This resulted in the original number of sherds assigned to a broad 'prehistoric phase' being reduced to 56 sherds (Table 4). The Late Iron Age, Romano-British and post-Roman pottery has been recorded to the minimum guidelines of the Study Group for Roman Pottery (Darling 1994). The largest, key groups of Late Iron Age and Romano-British pottery were more fully recorded, including measurement of rim diameters. A selection of vessels was selected for illustration to portray a visual representation of the range of the material recovered.

Condition

The overall condition of the assemblage is poor, with a mean sherd weight of 9.6 g. The vast majority of pieces exhibited extremely severe surface abrasion and edge damage. Rates of fragmentation were high and featured sherds (rims and other pieces diagnostic of particular forms but excluding most bases) accounted for only 7% of the sherds. Many of the rims, most representing less than 5% of the original diameter, were also broken at or above the neck/shoulder junction, hampering the precise identification of form, and thus the dating of the piece. The poor condition of the assemblage is, however, commensurate with those from other sites in the area (eg, Lyne 2008; Jones 2012; Thompson and Doherty 2013, 275; Jones forthcoming) and is largely a result of post-depositional erosion, combined with a variety of other taphonomic factors. The majority of the archaeological deposits were relatively shallow, for example, having been heavily truncated and damaged by ploughing, and stratification was limited to layers within isolated features (eg, pits, ditches) cut into the natural substrata.

Context of recovery

The pottery derived from 416 features and a number of layers (including alluvial and colluvial deposits and the subsoil). Of these, 253 contained ten sherds or fewer, 106 produced 11–30 sherds, 41 features/layers had 50–100 sherds, while between 101 and 500 sherds came from 12 features, and more than 500 sherds from two ditches and two pits. Approximately half of the assemblage came from the ditches, gullies and other linear features which, by their nature, might be expected to contain mixed, frequently reworked material, predominantly accumulating only after the feature had gone out of use (Table 2). Pits produced just over one quarter of the pottery while a further 7% of the sherds derived from eight cremation burials,

one of Early Bronze Age and seven of Late Iron Age or Romano-British date. The remainder of the assemblage came from structural components (eg, beam slots, postholes, stakeholes: 6% by sherd count), ovens, hearths and other heating structures (1%) and a range of miscellaneous feature types, including tree-throw holes and other natural features, palaeochannels, layers and spreads.

Early Bronze Age

Pottery of Early Bronze Age date (365 sherds, 3138 g) was recovered from a single feature (20204), a grave found in an evaluation trench to the north-west of Area 4S. The cremated remains of a female, under 30 years of age, had been placed in a Collared Urn, accompanied by a second vessel. Both vessels appear to have been made from the same grog-tempered fabric (G4, Appendix 1), a soft ware, soapy in texture. Sherds from the two different vessels were differentiated on the basis of surface finish. The Collared Urn is highly fragmentary, and came mostly from context 20205 (187 sherds, 2226 g), with one rim sherd (13 g) from context 20207 (Fig. 6.1). The rim conforms to a Longworth (1984, fig. 3) type 21: expanded and flat-bevelled. The vessel is biconical in form (Longworth 1984, 7, form BII), and displays a number of the traits classified as late features by Burgess (1986) in his review of Collared Urns. These include a 'deep hat-like collar', 'peaked collar base' and bipartite form. The collar has a gentle convex curve (Longworth 1984, fig. 5, collar type A), the base is flat (Longworth 1984, fig. 8, base type A). A number of rim sherds were rejoined, indicating a rim diameter of 240 mm, 40% of which is present. The rim top, although highly abraded, appears to have been decorated with two lines of twisted cord impressions, running parallel to the edges. The level of abrasion of the vessel's surface is such that it is impossible to ascertain if the collar or exterior had also once been decorated. The exterior of the vessel is oxidised, the core and much of the interior is unoxidised. All sherds are abraded but this appears to be particularly acute on the interior of the vessel. Part of the central area of the base (16 mm thick) was reconstructed, but very little of the wall could be rejoined to it. Many of the sherds have clear diagonal joins resulting from ring/strap manufacture.

The second vessel was recovered from all three fills of this feature, with 72 sherds (346 g) found in the collapsed layer within the Collared Urn and a further 49 sherds (343 g) also from context 20205, 17 sherds (70 g) from context 20206 and 39 sherds (140 g) from

context 20207. The sherds from within the Collared Urn include body and plain base sherds. No rim sherds were recovered from the second vessel, however the walls survived to a height of 12-16 mm. Hints as to its manufacture are provided by the presence of rounded ring/strap joins that, unlike most of the core, are oxidised, suggesting that they may have been left to dry for too long during manufacture, creating a weak point and subsequent breakage during firing, the exposed join oxidising as a result of exposure. The lower part of the vessel may have survived intact and been used in its shorter version. The exterior of the vessel is oxidised, most of the core is unoxidised, the interior surface is irregularly fired.

Middle to Late Bronze Age

Positive identification of Middle and Late Bronze Age pottery is hampered by the poor condition of the sherds, the small size of the groups, a lack of diagnostic sherds and the use of flint-tempered fabrics from the Neolithic through to the Romano-British period in this region. Sixty-two contexts produced 855 sherds (4775 g) broadly assigned to this phase. The pottery came from 53 features and the subsoil, but only six produced over 20 sherds. Most came from Area 10, with fewer than 20 sherds in areas 1, 2, 3E and 7. With the exception of a Middle Bronze Age Bucket Urn rim from Area 7, and the rim from a neutral-profile vessel of probable Middle to Late Bronze Age date from Area 3E, all Middle to Late Bronze Age pottery from areas other than Area 10 comprises featureless, abraded body and base sherds.

Fabrics

The Middle and Late Bronze Age fabrics are dominated by a range of fine to coarse flint-tempered wares, made with calcined flint in silty clay matrices (Table 3 and Appendix 1). Flint and grog mixtures were also utilised, with much smaller quantities of sandy wares, grog-tempered pottery and three sherds in a vesicular fabric. Calcined flint was commonly used as an opener for pottery fabrics in Kent from the Middle Bronze Age onwards.

Middle Bronze Age

Four slots excavated through ring ditch 55068 (Area 10) produced pottery. Fourteen body sherds (57 g) in a flint-tempered (F1), unoxidised fabric came from the fills of slot 55056, with a single abraded sherd (4 g), possibly from the same vessel, from slot 55050. The sherds

are featureless and had lost their surfaces but would originally have been at least 10 mm thick and of possible Middle Bronze Age date. A tiny, abraded fragment of sand-gritted ceramic material of probable Romano-British date was recovered from slot 55058 and presumed intrusive.

A flat-topped, squared rim from a Middle Bronze Age Deverel-Rimbury style bucket urn/jar (R16) was recovered ditch 51105, part of field system 41105 (Area 7), where it was probably residual. It had been made from a coarse, flint-tempered fabric (F1), with walls 12 mm thick and traces of a row of fingertip decoration around the upper exterior.

Parts of the lower area of a thick-walled (10–15 mm) vessel was recovered from pit 50273 in Area 3E (ON 853, 50 sherds, 1201 g). It had been made from a fabric tempered with coarse, calcined flint fragments up to 10 mm in size. Most of the external surfaces are oxidised, while the core and interior are unoxidised. The external surface had been smoothed, with finger-width channels still visible. Four joining sherds from the lowest part of the wall indicate a plain base, but no rim fragments were recovered. The vessel was probably in the Deverel-Rimbury style and of Middle Bronze Age date. Other probable sherds of Middle Bronze Age pottery include two thick-walled flint-tempered sherds (F5) from ditch 51184 of trackway 51184 (Area 2) and two thick-walled body sherds from the subsoil in Area 7 (ON 77, F10 and ON 78, F7).

Pit 55112 contained 45 sherds (85 g) of flint-tempered pottery, and two sherds (7 g) of flint and grog-tempered pottery. All were undiagnostic, abraded body sherds but the fabrics were similar to those used for more diagnostic Middle Bronze Age vessels.

Middle to Late Bronze Age

A neutral-profiled or tub-shaped vessel in a flint-tempered fabric came from ditch 50864 (Area 3E, R17, F5). Although broadly of similar form to the Middle Bronze Age Bucket Urn from Area 7, it is thinner-walled (10 mm) with a more gentle curve at the rim tip/wall junction. It is similar to vessels recovered from Saltwood Tunnel (Jones 2006) and Tutt Hill (Morris 2006), suggesting a Middle/Late Bronze Age transitional date, but residual in this feature.

Late Bronze Age (Area 10)

The largest group of Late Bronze Age pottery came from pit 55307, associated with oval structure 55277. The 356 sherds (2015 g) are highly abraded and many are grey in colour and vesicular, they appear to have been burnt. The material is dominated by flint-tempered wares with smaller quantities of flint and grog-tempered fabrics, a few sherds of sandy ware and a vesicular, probably organic-tempered, fabric. The group includes 11 rim fragments that may have derived from shouldered jars, but are all broken at the neck. Seven are slightly flared and concave, rounded on top (R10), including an example with a hole pierced through it, presumably an attempt to repair a broken vessel. Another rim has an internal bevel (R11), one is quite flat on top (R12) and two are externally expanded (R13). It may be that some of the rounded rim fragments come from the same vessel, but none could be rejoined. Although much of the surfaces of the sherds are now missing, the vessels would have originally been relatively thin-walled (5–7 mm). The rim diameter of only three can be measured, with an R10 vessel of 210 mm in diameter and the two R13 forms at 180 mm and 310 mm. Among the body sherds are 16 from a highly abraded, thin-walled cup with omphalos base. The body is rounded and the rim may have been slightly turned out. An oval-sectioned handle from a thick-walled vessel was also recovered.

Eleven other features associated with structure 55277 produced pottery, including pits 55265, 55269, 55283, 55286, 55292, 55298, 55301, 55304, fire pit 55272, and postholes 55325 and 55358, and gully 55267. Only two rim forms were recorded, both from pit 55301, a shouldered jar fragment (R12) and a slack or neutral-profiled vessel with flat-topped rim (R14), 160 mm in diameter, and rusticated around the external shoulder area. Rustication of a vessel's exterior, usually around the shoulder area (Jones 2006, 11), was previously thought to have originated towards the end of the Late Bronze Age or start of the Early Iron Age in Kent, but recent analysis of the Late Bronze Age site at Cliffs End Farm, Ramsgate, indicates the technique was in use from the 10th century BC (Leivers 2014). Pottery from the gully of oval structure 55277 comprises 18 sherds (37 g) of flint-tempered or flint and grog-tempered fabrics, but all are abraded body sherds with a mean sherd weight of just 2.1 g.

Three postholes (55207, 55210 and 55217) that appear to be part of another structure, roundhouse 55227, contained a total of 79 sherds of pottery (131 g). All are body sherds, with a mean sherd weight of 1.7 g and are therefore undiagnostic, although an increase in the proportion of sandy wares (21% of the weight from these postholes) may indicate a date towards the Early Iron Age.

Undiagnostic later Bronze Age and later prehistoric material

Seven sherds of Middle or Late Bronze Age flint-tempered pottery from a single vessel were recovered from possible cremation grave 55381 **(**Area 10). It is decorated with small fingertip impressions along the rim top. The sherds have little curvature and it is difficult to ascertain which of the surfaces are interior or exterior, but it seems that the interior had been given an additional coating of fine, crushed flint, and the exterior had soot deposits. A single medieval sandy sherd was also recovered from this context. Flint-gritting of vessel bases is a relatively common potting trait in Bronze Age Kent, but it is much rarer on the surfaces. Leivers (2014, 150) notes that a small number of vessels from the Northern Enclosure group at Cliffs End Farm, Ramsgate, have a slip with finer temper applied to the exterior of the vessel.

Fragmentary pottery that cannot be closely dated was recovered from across the site. While most was recovered from Area 10 and probably relates to Middle to Late Bronze Age activity in this area, the material from other areas is summarised in Table 4. All are undiagnostic, abraded body sherds.

Early to Middle Iron Age

A total of 440 sherds of Early to Middle Iron Age pottery, weighing 4310 g, was recovered from Areas 1, 2, 3E, 3W and 7, although three of these (Areas 2, 3E and 7) produced 12 sherds or fewer (Table 5). Contexts assessed as Middle to Late Iron Age, or more broadly as Iron Age in date, were not selected for further analysis due to a lack of diagnostic forms and features, or small group size.

Fabrics

During the Early to Middle Iron Age, there was a shift from the use of flint-tempered fabrics to more sandy fabrics (Table 6). The flint-tempered wares accounted for 77% of the Middle to Late Bronze Age assemblage, but just 8.4% of the Early to Middle Iron Age pottery. The reverse was noted with the sandy wares, accounting for just 3.3% of the Middle to Late Bronze Age pottery, but 60% of the Early to Middle Iron Age pottery. These Iron Age sandy wares include a range of fabrics, some with very few visible inclusions (such as Q7), others

contained sparse quantities of flint (Q11) or iron (Q12) in sandy matrices. At least one fabric contained abundant glauconite (Q5). By the Late Iron Age, a preference for grog-tempered vessels is evident, with the fabric type accounting for 50% of the Middle to Late Iron Age assemblage, with sandy wares falling to 17%, and other fabrics including flint-tempered and flint and grog-tempered wares taking the rest of the market share.

Forms

A range of Iron Age forms was recorded, although most are represented by a single example and few profiles can be reconstructed. Many of the rims had broken at the neck, thereby hampering identification of the form. These include three examples of a slightly flared rim, flattened on top and slightly expanded on the exterior, from thin-walled jars or bowls, probably shouldered (R3, Fig. 6.2.05), 160–180 mm in rim diameter. Rounded rim fragments that were too small to identify to form were recorded against codes R6 (plain) and R7 (pinched/grooved exterior). Four rim types are likely to have come from shouldered jars. They included an example with a flared, rounded rim in a sandy fabric (R2, Fig. 6.2.04); a large vessel, with a flat-topped, everted rim of more than 400 mm diameter (R18); a T-shaped, expanded, flat-topped rim with piecrust decoration (R19) and a vessel with fairly upright rim (R29). Form R10 is effectively a smaller version of a shouldered jar (Fig. 6.2.01). A flat-topped, slightly expanded rim (R3) may have come from a shouldered jar or bowl. A bipartite vessel with long, concave neck and flat-topped rim may also have been a jar (R24). Shouldered jars are a fairly long-lived form from the Late Bronze Age into the Early Iron Age across much of southern England. Examples from Kent include Late Bronze Age vessels from Cliffs End (Leivers 2014), Cobham Golf Course (McNee 2006, no. 12), Saltwood Tunnel (Jones 2006, no. 10, 32 and 57) and Coldharbour Road, Gravesend (Barclay 2004); Late Bronze Age/Early Iron Age forms from Monkton Court Farm (Macpherson-Grant 1994), Highstead (Couldrey *et al.* 2007, forms 60 and 61), Little Stock Farm, Mersham (Bryan 2006, R7) and Iwade (Hamilton and Seager Thomas 2005); the Early Iron Age sites along the route of the A2 Downs (Macpherson-Grant 1980), and Early to Middle Iron Age vessels from the East Kent Access Phase II (EKA2) (Leivers 2015). The finger-impressed ‘cabled’ decoration visible on one vessel is paralleled in the assemblage from Tollgate (Jones 2006, nos 1–3, 11, 20, 21).

Other jars forms included an ovoid jar with plain, rounded rim (R26). This form also had a long currency in the region, from the Late Bronze Age to the Middle Iron Age, with a Late Bronze Age example from south-east of Park Farm, Ashford (Jones 2012, fig. 15.2); a Late Bronze Age/Early Iron Age example from Highstead (Couldrey *et al.* 2007, form 1) and Early to Middle Iron Age parallels from White Horse Stone (Morris 2006, figs 73, 74, 117 and 128) and Beechbrook Wood (Jones 2006, nos 35–6). Jar form R28 had a more slack profile, and out-turned, pulled bead rim, flattened on top. A thickened, rounded rim (R20) may have come from a round-bodied jar. Both are of Early to Middle Iron Age date.

Neutral-profiled vessels included three with rounded rims (R22) and one with a slightly beaded rim (R21). The latter had well-finished, smoothed surfaces. The forms are typical of the 'saucepan pot continuum' of southern Britain, and in Kent are paralleled from a number of sites along the route of the Channel Tunnel Rail Link (CTRL) including Beechbrook Wood, White Horse Stone, Cuxton, West of Northumberland Bottom and Little Stock Farm. They span the Early to Middle Iron Age and Middle Iron Age periods at these sites. Examples have also been published from Highstead, including form 45 (Couldrey *et al.* 2007, form 45, fig. 72, no. 202, period 2 and form 44, fig. 93 no. 402, period 3B).

The bowl forms were carinated with upright or slightly in-turned rims (R5, Fig. 6.2.07, R8, R9, R25, R27). They were made in a range of fabrics, including sandy wares, grog-tempered fabrics, flint-tempered wares and an organic and flint-gritted fabric. The forms again find parallels among the Early to Middle Iron Age assemblages from the region, including Saltwood Tunnel (Jones 2006, no. 61, from an Early Iron Age grave), Little Stock Farm (Bryan 2006) and White Horse Stone (Morris 2006). A probable shouldered bowl with a faint cordon above the shoulder area was also recovered (R4, Fig. 6.2.06). The latter is encompassed by McNee's 2012 typology, Early Iron Age bowl form BO10, with similar examples from Shelford Quarry and Ramsgate Harbour (McNee 2012, 346).

Key groups

Two features produced the largest quantities of Early Iron Age pottery from the site: pits 50899 and 50949. Pit 50899 contained three vessels that may have formed part of a deliberately placed deposit, with vessels ON 906 and ON 907 located at the western side of the pit, and ON 909 on the opposite, eastern, side. They include the profile of a small, shouldered vessel with upright rim, decorated with incised diagonal stab marks on shoulder

and the exterior of the rim (ON 907, Fig. 6.2.01) It measures 85 mm in height and diameter. The vessel is irregularly fired and made from a silty, iron-gritted fabric. Patches of soot are visible on the exterior and traces of burnt residue on the interior, suggesting that it was used for cooking, despite its small size. A further 49 sherds (371 g) came from a globular-bodied vessel, with a plain shoulder cordon and an omphalos base (ON 909, Fig. 6.2.02). The vessel had been made from a medium-grained sandy fabric with occasional inclusions of chalk (Q1), the walls 7–9 mm are thick. The sherds are highly abraded but the exterior had been oxidised and red-finished, the core and interior were unoxidised. Although relatively rare in Kent, this form of base is seen on bowls and cups from other Early Iron Age sites in southern Britain, such as Potterne (Gingell and Morris 2000, 153) and is listed among the bases types from Barbara McNee's survey of later prehistoric pottery from Kent (McNee 2012, base form BA6). The lower part of a coarseware jar (19 sherds, 603 g) with plain, flat base, was also recovered from this pit (ON 906, Fig. 6.2.03). It had been inverted in the pit and its fill, a yellowish brown sandy clay, was distinct from the surrounding yellowish grey sandy clay. This vessel had been formed with a sand and flint-gritted fabric (Q3) with walls 8 mm thick. The exterior surface was oxidised, the core and interior were unoxidised. A small amount of burnt residue is present on the lower wall of the vessel. The sherds are abraded, particularly under the base where much of the surface is missing, but there is a hint of some fine basal flint-gritting. Part of another base, in the same fabric, was among the bulk recorded finds from this feature. This is unoxidised throughout and also has a fine flint-gritted base.

Other sherds in the Q3 fabric include two carinated body sherds, the flaring rim from a coarseware shouldered jar (R2, PRN 12, Fig. 6.2.04) and two slightly flared rims, flattened on top, from finer (walls of 5 mm) jar or bowl forms (R3, PRN 13 and 18, Fig. 6.2.05). The rim from a third fineware shouldered jar/bowl is also flared and rounded on top, although little survives of the tip or below the shoulder area. The surfaces are oxidised, the exterior red-finished and the interior smooth and given a slurry finish. There is a faint cordon just above the shoulder area (R4, PRN 19, Fig. 6.2.06).

The second Early Iron Age assemblage came from pit 50949 (87 sherds, 834 g), located 4 m to the north of pit 50899. The group is highly abraded but includes much of a coarseware weakly shouldered jar in an organic and flint-tempered fabric (PRN 25, Fig. 6.2.07). The walls below the shoulder are rounded, the rim is upright, flat-topped and slightly expanded on the exterior in places. A basal sherd in the same fabric suggests this vessel had a

plain, flat base. The surfaces of the vessel are oxidised on the exterior and unoxidised on the interior, but are now mostly grey in colour and lightweight; it therefore appears to have been burnt. This style of vessel was common on Early Iron Age sites across southern England, typified by form JB2/3 at Danebury (Cunliffe 1984), jar type 51 at Potterne (Gingell and Morris 2000) and in Kent at West of Northumberland Bottom (Bryan and Morris 2006, jar type R3), Tollgate (Jones 2006) and White Horse Stone (Morris 2006). It is encompassed by McNee's (2012) Late Bronze Age/Early Iron Age jar form J11. A body sherd from a thicker-walled (12 mm) shouldered jar was also recovered.

At least two fineware bowls were recorded from pit 50949. One is represented by a body sherd from a carinated bowl, decorated at the shoulder level with an incised horizontal line and with diagonal incised lines above, creating chevrons (PRN 36, Fig. 6.2.08). The sherd is abraded but its surfaces are still smooth and were presumably once burnished. The motif is one typical of Early Iron Age sites, recorded on carinated bowls at Potterne (Gingell and Morris 2000, fig. 47, no. 12, fig. 48 nos. 24–5, 8th to 6th centuries BC), and in the Kent region is paralleled at Saltwood Tunnel (Jones 2006, nos. 79 and 81), Tutt Hill (Morris 2006, no. 21), Cliffs End Farm (Leivers 2014, fig. 5.3, 14) and Highstead (Couldrey *et al.* 2007, fig. 59, 33). The rim and partial profile of a carinated bowl with slight groove just under the rim exterior was also recovered (PRN 38, Fig. 6.2.09). Carinated bowls (McNee 2012, bowl type 11) have also been recorded from a number of sites in Kent including the Late Bronze Age/Early Iron Age assemblage at Monkton Court Farm (Macpherson-Grant 1994) and Barham Downs (Macpherson-Grant 1980). Four rim fragments from thin-walled vessels are too small to ascertain if they derived from jars or bowls but appear to represent at least three other vessels (PRN 28, 33, 34: R6; PRN 32: R7; PRN 37: R8).

Late Iron Age to Romano-British

The pottery assemblage is dominated by material of 1st century BC to 1st century AD date, with 11329 sherds (114,460 g) coming from 407 features and a number of layers, although only 56 contained more than 30 sherds. Some of the largest groups of pottery were recovered from the western half of Area 3E. The assemblage is dominated by grog-tempered material, accounting for 79% of the pottery from this period by number of sherds (Table 7). Romanised greyware and oxidised fabrics account for just 11%. Imported tablewares are scarce,

representing fewer than 1% of the Late Iron Age/Roman sherds, and are confined to samian and three colour-coated ware beaker sherds, one probably from the Argonne region of northern France and two from a Cologne vessel. The samian forms include vessels from Southern Gaul (form 18 dishes, form 27 and 46 cups and a form 29 bowl), Central Gaul (dishes and bowls of forms 18/31, 18/31R, 31, 37, 38 and cup forms 27, 33 and 35 or 36), along with a single form 45 mortaria sherd, perhaps from Eastern Gaul. No stamps were identified and none of the decorated sherds is sufficiently large or well preserved to merit description of the decorative scheme; most pieces have completely lost their surfaces.

Amphora, too, are poorly represented. With the exception of two pieces of uncertain type from Area 5, all the amphora sherds are in the Baetican fabric (Peacock and Williams 1986, 140), generally used for the globular bodied Dressel 20 form, which carried olive oil from southern Spain during the later 1st to mid 3rd century AD. Imported coarsewares include the North Gaulish whiteware sherds and a single body sherd from a Mayen ware jar. The North Gaulish wares were imported from the Oise/Somme area of northern France from *c*. AD 65/70–150 (Hartley 1998, 203) and, with the exception of two strap handle fragments from a flagon, all probably belonged to mortaria. Mayen ware, on the other hand, was imported from the Eifel region of Germany from *c*. 300 AD.

The British finewares, consisting of a variety of relatively high quality, thin-walled vessels, used in the serving and presentation of foodstuffs and beverages, are poorly represented. Fine greywares from the north Kent coast (Monaghan 1987, 249, 252-3) are numerically dominant within this group, with smaller quantities from more local sources (the East Kent fine grog-tempered wares; Monaghan 1985, 66). Beakers predominate, initially butt and biconical forms (Monaghan 1987, classes 2B and 2G) with a few globular-bodied types (*ibid.* class 2I0), while poppy-head beakers (*ibid.* class 2A) became increasingly common after *c*. AD 120, followed by funnel-necked forms (*ibid.* class 2C) of 2nd and 3rd century AD date. The fine oxidised ware predominantly consist of small, fine body sherds from bowl and beaker forms too abraded to be assigned to particular sources although these could include the north Kent coast and Canterbury, while the single rim, from an imitation form 33 cup or small bowl (ditch 50886, Area 3E) might be an atypical product of the late Romano-British Oxfordshire industry. More definite products of this industry, all found in Area 3E, include Oxfordshire red colour-coated ware bowl sherds. Associated sherds suggest a similar, late Romano-British date for the six unassigned British colour-coated ware sherds, derived from a

single, dark brown surfaced beaker, found in pit 50680, while a New Forest colour-coated ware beaker base came from pit 30048 in Area 6.

The oxidised wares represent 5% of the Romano-British sherds. Many of the whiteware sherds derive from Claudio-Neronian butt beaker forms (Cam 113); sherds from a Hofheim-type flagon rim (*c*. AD 40–70) were also recorded. Rims are scarce among the oxidised wares but sources probably include Canterbury (Pollard 1995; CAT fabrics R6, R8 and R9) and the north Kent coast (Monaghan 1987, 253, fabric N4/1s; Davies et al 1994, 38, 40). Most sherds probably derive from flagons, although bowl and jar rims were also noted. From the early 2nd century AD sandy greyware vessels became more common. The range of vessels include reed flange bowls and lid-seated, neckless jars in Canterbury-region greyware fabrics, made from the Flavian period until at least the mid 2nd AD (Savage 2008, 162) although most were probably derived from the north Kent 'Thameside' industry (Monaghan 1987, 244–8, fabrics S1-3) along with a few more local products. Dishes, mostly plain roll-rim pie-dishes and shallow, straight-sides forms with plain or grooved rims (Monaghan 1987, classes 5C, 5E and 5F) outnumber the everted rim and 'cooking pot' style jar forms (classes 3H and 3J) in these wares. Activity in the late Romano-British period is sparse, but is represented by sherds of Overwey/Tilford ware from the Alice Holt industry on the Surrey/Hampshire border (Lyne and Jefferies 1979), Black Burnished ware from south-east Dorset, late grog-tempered vessels and a rock-tempered base, probably from a locally-sourced vessel. These late indicators, as well as the above mentioned sherd of Mayen ware, suggest activity on the site may have stretched into the early 5th century AD and adds to a sparse picture of late Romano-British activity in Kent (Booth 2006, 192; Green 2007, 216; Lyne 2008, 258; Savage 2008, 163; Seager Smith *et al.* 2011, 69).

The preference for grog-tempered vessels at this site has made dating of the Late Iron Age/Romano-British pottery problematic. This is the result of the continuity of such fabrics in East Kent during the 1st century AD (eg, Jones 2006; Thompson 2007, 189; Lyne 2008, 207; Savage 2008, 157; Jones 2009, 4; Thompson and Doherty 2013, 270–8), with the Roman Conquest having little impact on the range of fabrics and forms used. The native-style sand, flint and mixed tempered fabrics continued to be used until around AD 70 (Booth 2009, 7), while the grog-tempered wares maintained their position of dominance well into the late 2nd or early 3rd century AD, and after perhaps a brief demise in the later 3rd to early 4th century AD, re-emerged in the handmade grog-tempered tradition characteristic of the late 4th and

early 5th centuries over much of southern England. Some chronological changes are apparent within this fabric group (eg, Pollard 1988, 98–9; 1995, 704–5), but these distinctions remain largely subjective, often based on colour and/or hardness of firing, and are therefore of limited usefulness in an assemblage such as this, surviving only in poor condition. For the most part, then, associations with more Romanised fabrics and forms have been used to distinguish between pre- and post-Conquest groups and to provide more precise dating within the Romano-British period itself. The assemblage is discussed by area below.

Area 1

A total of 1483 sherds (10,654 g) of Late Iron Age and Romano-British pottery was recovered from Area 1. The material is in very poor condition, the surfaces are abraded or completely eroded, with a mean sherd weight of 7.2 g. It derived from 22 linear features (19% of the assemblage by count, 23% by weight), 11 pits (54% / 61%), 15 postholes (7% / 4%) and two urned cremation graves (20% / 11%). The material in the linear features and pits have mean sherds weight a little higher than average (8.7 g and 8.2 g respectively) while the pottery from the graves and postholes is smaller (3.8 g and 4.3 g respectively). Many of these features contained only small numbers of abraded body sherds that could not be closely dated. Only eight of the features produced more than 30 sherds of pottery, and of these, three contained only body and base sherds (pit 18123**,** and graves 18176 and 18214).

The largest group of pottery from Area 1 (611 sherds, 5764 g) was recovered from pit 18125, representing a nest of three fragmentary vessels of Late Iron Age date. A small, grog-tempered everted rim jar was found inside a slightly shouldered jar with an upright, flat-topped rim in a flint and grog-tempered fabric (rim diameter 360–400 mm), and both were within a large, flint-tempered bead-rimmed storage jar. The centre of the grog-tempered jar is missing, but it may have been perforated. It was not possible to reconstruct its profile. The grog and flint-tempered vessel appears to be rusticated around the shoulder area, and possibly below. It was not possible to reconstruct the profile of this jar, however wall to base angle is noticeably rounded and its walls are 10-12 mm thick. The rim of the grog-tempered jar and the flint-tempered jar had both been repaired in antiquity using an adhesive probably derived from birch-bark tar. The vessels are not closely datable but the grog and flint-tempered vessel is probably of 1st century BC date.

A group of 51 sherds (304 g) of Late Iron Age pottery from ditch 18677, slot 18388, mostly originated from a single vessel, an upright-necked jar with a shallow shoulder groove and slight scoring below, all in a very abraded state.

Pit 18172 contained 63 abraded sherds weighing only 125 g, therefore a mean sherd weight of just 2 g. They are grog-tempered and include three small, beaker-sized rounded jars with beaded rims (Thompson 1982, C1-2), one with a shoulder groove. A lack of Romanised fabrics is suggestive of a Late Iron Age date. Ditch 18696 contained 52 sherds (304 g) of highly abraded pottery of mid to late 1st century AD pottery. The vessels include part of a bead rim jar with a shoulder groove (Thompson 1982, C2-1), a necked jar/bowl with a sharply off-set shoulder and externally moulded rim and the complete profile of a wheelmade tub-like vessel with a flat base, sloping walls, a slight, externally curved neck and a flared rim (*cf.* Lyne 2008, 218, fig. 6.1, 6). It has a rim diameter of 160 mm and a height of 70 mm. Two surfaceless flakes of samian were also recovered.

Grog-tempered vessels formed parts of the burial deposits in cremation graves 18214 (two vessels) and 18176 (one vessel). All are represented by sherds from the lower walls and flat base of the vessels, but are highly abraded, most missing their surfaces. The two from grave 18214 include the lower parts of a fairly thin-walled jar and a carinated cup. The vessels probably date from the Late Iron Age period, but may extend into the post-Conquest period.

Post-Conquest activity in this area is attested by a small number of Romanised fabrics and forms including a samian form 18 platter, dating from the 3rd quarter of the 1st century AD (from pit 18609), a greyware bowl with a high, undulating flange (*cf.* Monaghan 1987, 138, type 5B2) of late 1st to mid 2nd century AD (from ditch 18663), and a greyware everted rim jar (Monaghan 1987, 3J), of 2nd to 4th century date (from pit 18309).

Area 2

Just 24 sherds (132 g) of Late Iron Age or early Romano-British pottery was recovered from Area 2. The material is in extremely poor condition with an average weight of 5.5 g, most of the sherds have lost their surfaces. They came from ditches 51178 and 51179, roundhouse gully 51176 and pit 51001 within the roundhouse.

Area 3E

The greatest concentration of Late Iron Age and Romano-British pottery was found in Area 3E (3764 sherds, 53,058 g). It derived from 44 ditches and gullies, 23 pits, nine postholes, four ovens, a tree-throw hole, and the colluvium (Table 8). Of these features, only 17 contained more than 30 sherds, and some were residual groups from later features.

1st century AD

Three ditches in the western half of Area 3E produced 22% of the entire Late Iron Age/Romano-British pottery assemblage by number and 30% by weight. These features appear to be spatially related, with ditches 50596/51208 and 50598 running east to west and ditch 50597 aligned north to south between them. The pottery recovered from their fills suggests they were contemporary, and infilled at some point during the second quarter of the 1st century AD. The largest group came from two slots through ditch 51208 (50277, 22% of the total weight and 50279, 78% of the weight), with a total of 1222 sherds (16,971 g) of 1st century AD pottery recovered from the feature. The material is almost entirely grog-tempered in fabric, with single greyware, oxidised ware and sandy ware sherds, and five small sherds (4g) in a whiteware fabric; the latter are thin-walled and probably derived from a butt beaker, or similar form. The lack of Romanised fabrics suggests a pre-Conquest date for this material. The pottery is highly abraded, with many of the surfaces now missing. A range of vessel forms were recovered, including the remains of a number of large jars probably used for storage of foodstuffs or liquids. One is represented only by body sherds, from the shoulder area of the vessel, with wide moulded bands (35–40 mm), concave on the interior, defined by deep, tooled horizontal lines, 7–8 mm wide, on the exterior (Fig. 6.3.09). The original thickness of the vessel walls is unknown as much of the interior surface has been worn away. The jar is similar to Thompson's (1982) B2 and B3 classes and may represent an attempt to copy features from one of the elaborately cordoned pedestal urns (Thompson 1982, A3). There is also the rim and shoulder from a storage jar with everted rim (Thompson 1982, C6-1), two cordons at the base of the rim, and a wide, flat cordon on the shoulder, decorated with diagonal impressions, and diagonal scoring below (Fig. 6.3.08). Another storage jar has a neck cordon and diagonally slashed shoulder cordon, with scoring below (Fig. 6.3.07). Eight other storage jars were also recorded; all are between 220 mm and 340 mm in rim diameter.

The most commonly occurring form from the ditch 51208 assemblage is a round-

bodied jar with beaded rim (Thompson 1982, C1-2), of which 43 examples were recorded (Figs 6.3.06, 13, 14, 19, 25 and 28). Of these, 22 have evidence of a single groove around the shoulder, and one has a double groove. At least 11 also have vertical or diagonal scoring/wiping below this groove. The measurable rim diameters range from 110 mm to 200 mm, with five examples of 110–120 mm, twelve of 130–140 mm, seven of 150–160 mm and three of 180–200 mm. The next most commonly occurring jar form is a necked type with everted rim (Figs 6.3.10–12, 18, 24 and 27; Thompson 1982, B1-1, B1-2, B1-3). Of the 24 examples, nine have a cordon at the base of the neck. The rims range in diameter from 80 mm to 220 mm, most with only a single example of each size, but with 11 examples of 130–145 mm. Other jar forms include one with corrugated neck (Thompson 1982, B2-1), three everted rim jars (Thompson 1982, C2-3) and a jar with pulled bead rim and offset neck (Fig. 6.3.20).

The other vessel types from this ditch are predominantly cups forms. They include an almost complete carinated, wide-mouthed cup with a cordon in the centre of the concave neck, just below the flared rim (ON 852, Fig. 6.3.29). The base of the vessel is now missing, but may have been a footring. The surfaces are predominantly oxidised but are now eroded, particularly the interior and lower exterior, the core is unoxidised. It is 110 mm in diameter and 90 mm high. There is also the complete profile of a plain, carinated cup, 80 mm in diameter and 66 mm high. This is again highly abraded, particularly on the interior, although traces of a black surface on the exterior indicate it was probably once black all over and quite shiny (Fig. 6.3.17, Thompson 1982, E1-4). Three wide-mouthed cups with everted rims measured 90–100 mm in diameter (Fig. 6.3.21 & 22); fragments from two other cups were too small to identify their form. There are also three butt beakers with shoulder cordons, one of 100 mm rim diameter (Fig. 6.3.26) and two of 130 mm (Fig. 6.3.15–16); a girth beaker; a platter with a rounded wall (Fig. 6.3.05; Thompson 1982, G1-10, copy of CAM 16) and two straight-walled platters (Figs 6.3.04 and 23; Thompson 1982, G1-11). Among the bases is a complete footring base that appears to have had its sides deliberately removed and may have been re-used as a dish, albeit an un-level one as the base was originally slightly convex in the middle.

Pottery from the western end of ditch 51208, recorded as ditch 50596, appeared contemporary. The 73 sherds (1197 g) were recovered from four slots through the ditch and include a butt beaker in a sandy, oxidised fabric and a number of grog-tempered vessels (two storage jars [C6-1], an everted rim jar [C2-3] and two necked jars with everted rim [B1-1 and

B1-4]. Two abraded sherds of flint-tempered pottery, and one grog and flint-tempered sherd, were probably residual.

Ditch 50597, running perpendicular to 50596/51208, also contained a large group of material, amounting to 574 sherds (10,141 g) of 1st century AD pottery (Figs 6.3.30-46). Slots were made through the terminals of the ditch and just north of the centre of the feature, but pottery was recovered only from the latter, from the second of three fills. The dumped material is highly abraded and the surfaces of many of the vessels are no longer present, leaving only a grey core. The pottery is almost entirely grog-tempered, with five very small and abraded sherds (4 g) in a whiteware fabric, two of which display the rouletted decoration characteristic of butt beakers. The lack of Romanised material suggests the group is entirely pre-Conquest in date. It is dominated by jar forms, but also has a significant number of cups, as well as a range of other vessel types. As with ditch 51208, the most commonly occurring jar form is a bead-rimmed, round-bodied vessel (Thompson 1982, C1-2). Of the 16 examples recorded, ten display evidence of a horizontal groove around the shoulder, some still retaining traces of diagonal, vertical or horizontal wiping or scoring below (Figs 6.3.33-35). They range in size from 80 mm to 220 mm rim diameter, but most commonly in the 130–140 mm range. Necked jars with everted rims (Figs 6.3.30–32) Thompson 1982, B1-1) were also fairly frequent, with seven vessels, of rim diameters 120–210 mm. A resin coating was noted on the exterior rim and neck of one (Fig. 6.3.31), and the upper interior and outer rim of another (Fig. 6.3.32). Two narrow-necked jars with tall rims and cordoned bodies were also recorded (Fig. 6.3.45). Other jar forms include two with rippled or corrugated necks and shoulders (B2-2, 110 mm rim diameter) and a storage jar (220 mm rim diameter, Thompson 1982, C6-1). These are, again, highly abraded, their surfaces missing or damaged.

The cups from ditch 50597 include much of a carinated vessel, with tooled groove above the carination (ON 890, Fig. 6.3.40). The vessel is 69 mm high with a rim diameter of 80 mm. The base is 45 mm in diameter and flat, the carination is located approximately a third up the body from the base. The exterior surface had been burnished, as had the upper interior around the rim. The impression of the leaves of a bracken plant are visible above the carination, adjacent to a second possible impression, circular in shape. Although grains are occasionally pressed into pottery, presumably incidentally, this impression may represent a deliberate act on the part of the potter. A highly abraded base from a second cup of this type (Thompson 1982, E1-4) was also recovered. Two other carinated cups from this feature

display cordons constricting their waists (Figs 6.3.39 and 42; Thompson 1982, E1-1). The complete profile of one was recovered, and a height of 65 mm recorded, but the rim is too incomplete to measure. Although now abraded and the surface missing from one side, it was once burnished. The other cup has a smoothed surface, probably once burnished, and rim diameter of 75 mm. Three squat, plain, everted rim cups are also present (Thompson 1982, E3-4), with rim diameters of 80 mm (Fig. 6.3.37), 100 mm and 110 mm (Fig. 6.3.38). The latter is 100 mm tall, and has traces of vertical wiping around the lower exterior vessel walls. A weakly carinated cup with cordons at the base of the neck and shoulder has a possible rim diameter of just 40 mm (Fig. 6.3.41; Thompson 1982, E3-5). Other drinking vessels include two butt beakers, one of barrel-shaped profile with a trace of a horizontal groove on the vessel's exterior surface (Fig. 6.3.44; Thomson 1982, G5-1) and a second vessel decorated with at least two tooled horizontal lines (Fig. 6.3.45; Thompson 1982, G5-6). Among the other vessels are an imitation of a Gallo-Belgic platter, form CAM 12 (Thompson 1982, G1-7) and an unoxidised conical lid with plain, rounded rim, 170 mm in diameter (Fig. 00.46; Thompson 1982, L6).

Three slots (of six) through ditch 50598, running parallel to ditch 50596/51208, produced 196 sherds (2577 g), again of mid 1st century AD date, pre-Conquest. The assemblage is almost entirely grog-tempered, with two flint-tempered sherds and three whiteware sherds, one of which is the base of a butt-beaker. Few rims are present, but include three round-bodied jars with beaded rims (Figs 6.3.48 and 49), a corrugated jar rim (Fig. 6.3.47), a storage jar and a plain, hemispherical cup (Fig. 6.3.50). The cup has a plain, rounded rim and a groove just under the rim on the interior, but the surfaces had entirely worn away. The condition of most of the other sherds from this feature is much the same. Ditch 50658, located just over 18 m to the east of ditch 50597 but on a slightly different alignment, contained 95 sherds (1300 g) of pottery that are similar in fabric and form to that from the other ditches in this area. A burnt or overfired base is amongst the material.

Other vessels recovered from small groups of material include the almost complete profile of a tall, narrow-mouthed, necked and cordoned jar (ON 850, Fig. 00.52; Thompson 1982, B3-8) from ditch 50587, probably dating from the second half of the 1st century AD. The base is missing and the exterior is eroded and/or spalled.

2nd century AD

A number of pits in the north-eastern corner of Area 3E contained pottery of 2nd century AD date. The largest group came from pit 50801 (90 sherds, 791 g) and includes the complete (but highly abraded) profile of a small, low-waisted, plain carinated cup in a sandy greyware, approximately 60 mm in height (Fig. 6.3.55), similar in shape to an example from Canterbury (Thompson 1982, 369, E1-4, no 7 [92]). Other vessels from this feature comprise two grog-tempered upright-necked jars, two greyware lid-seated, neckless jars (Fig. 6.3.54) and a reed-rim neckless jar (Fig. 6.3.57), probably Canterbury products, and a flanged flagon rim in an oxidised fabric (Fig. 6.3.56). A group of pottery from pit 50646 includes two vessels in an East Kent fine grog-tempered fabric: a bowl with out-turned rim and a dark-surfaced beaker with sharply everted rim and combed decoration, similar in form to neckless globular beakers (Monaghan 1987, 2H1). Coarse grog-tempered wares include an upright-rimmed jar and a rounded jar with bead rim. Many of the grog-tempered sherds are hard and oxidised, possibly over-fired, and may extend well into the 2nd century AD. A greyware upright-necked jar was also present.

The grog-tempered vessels from pit 50696 include an everted rim jar (Thompson 1982, B1-1), a round bodied jar with corrugated neck (Thompson 1982, B2-4), three upright-necked jars, a wide-mouthed jar/bowl with everted rim and a flat-topped jar rim. The greyware vessels, probably products of the Canterbury kilns, included a bowl with lid-seated flange, two reed-flanged bowls/dishes and a lid-seated neckless jar. Two plain, abraded body sherds in an East Kent fine grog-tempered ware were also recovered from this feature. Pit 50648 produced 77 sherds (758 g) of 2nd century AD pottery. Many of the grog-tempered sherds from this pit are hard and oxidised, suggesting they too had been subject to over-heating, and include three necked jars with everted rims (Thompson 1982, B1-2). The pottery from pit 50787 (65 sherds, 524 g) is broadly of 2nd to 4th century date, and includes two upright rim jars and a pulled bead rim jar in a grog-tempered fabric, an upright-necked bowl/jar in a fine greyware fabric and a greyware lid with upturned rim (Monaghan 1987, 12C).

4th century AD

The largest group of late Romano-British pottery (140 sherds, 2224 g) was recovered from the uppermost two fills excavated in slot 50563 of ditch 50866. A further 45 sherds of pottery of

late 1st to 2nd century AD came from the lower fills in this slot; the material from the other interventions was of 1st to 3rd century date, including a form 27 cup in a south Gaulish samian fabric found alongside a highly abraded fragment from an east Gaulish mortarium in the upper fill of slot 50803 (adjacent to slot 50563). The late Roman group was dominated by a late grog-tempered fabric (67% of the number of sherds) and forms include an upright-necked jar with possible claw-marks on the interior (Fig. 6.3.60) similar to products from the Alice Holt kilns (Lyne and Jefferies 1979, late class 10 jars), four everted rimmed jars (Fig. 6.3.59) and a deep straight-sided dish with plain rim (Fig. 6.3.63). Other coarsewares include an upright-necked jar with externally thickened, triangular rim in a fairly hard, sandy fabric with a moderate amount of flint (Fig.6.3.58). Among the greywares are two strainers from the Alice Holt industries (Fig. 6.3.62; Lyne and Jefferies 1979, late class 5C) and four everted rim jars (Fig. 00.61). Two body sherds of Overwey-Tilford ware were also recovered. The finewares comprise four abraded sherds in a fine, oxidised fabric and nine-sherds of Oxfordshire colour-coated ware, including a bead-rim bowl fragment (Fig. 6.3.64; Young 1977, C45) and a demi-rosette stamp, the latter indicating a date in the second half of the 4th century AD. Four sherds in a slightly micaceous, orange fabric with angular, white trituration grits, came from an unsourced mortaria. A grog-tempered neckless jar with reeded rim, and a lid, were residual in this feature. Other ditches that contained pottery dating from the late Romano-British period included ditch 50879 (five sherds including an externally rilled body sherd, of 4th century date) and ditch 50878 (eight sherds including a handmade grog-tempered jar with flared rim, of 4th century date). Fragments of highly abraded, oxidised pottery from ditch 50662 may have come from the Late Roman Oxfordshire industries but could only be tentatively identified.

Late Romano-British pottery was also recovered from two pits. The group from pit 50680 (22 sherds, 840 g) includes two large (778 g), very thick-walled (30 mm) pieces in a grog-tempered fabric that is predominantly oxidised. These probably derived from a very large dolia-type vessel or possibly a clay oven or chimney pot. Dating indicators comprise a very small, plain body sherd in an Overwey/Tilford ware and two abraded tiny fragments of Oxfordshire colour-coated ware. Possible Oxfordshire colour-coated ware sherds were also recovered from pits 50674 and 50754, and oven 50674.

Pit 50492 contained 14 sherds (393 g) of pottery dating from the 4th century AD, possibly into the early 5th century. The sherds included a plain body of Mayen Ware, a hard

very small plain body sherd in an Overwey/Tilford ware fabric and two abraded tiny fragments of Oxfordshire colour-coated ware. Five sherds from the flat base of a rock-tempered vessel were also recorded. Thin-sectioning indicated the rock fragments are of a siliceous siltstone, but could not be sourced (Quinn, report in archive). More locally produced vessels include a rope-rimmed jar with finger smears decorating the neck, in a late grog-tempered fabric (Fig. 6.3.65).

Area 3W

A much a much smaller quantity of pottery was recovered from five ditches in Area 3W (102 sherds, 994 g). The largest group (68 sherds, 718 g) was residual in probable medieval ditch 51198 (slot 50886). The pottery dates to the 2nd century AD and includes three grog-tempered necked, cordoned jar/bowls; a flagon with simple flared neck, downturned triangular rim and single handle in a reduced sandy ware and body sheds from a biconical beaker in a fine, oxidised ware. Material from other features is not closely datable but includes two grog-tempered necked jars with everted rims (Thompson 1982, B1-1), one of which was dark in colour, well burnished with burnished diagonal line decoration on the shoulder, and a greyware reed flanged bowl/jar, probably from the Canterbury region.

Areas 4S and 4N

A total of 355 sherds (1713 g) of Late Iron Age/early Romano-British pottery was recovered from Areas 4S and 4N. It came from six pits, one ditch, three gullies (two curving), a possible beam slot, a cremation burial, a posthole, a stakehole, three tree-throw holes, two irregularly shaped features, a palaeochannel, an alluvial layer and the subsoil. With an average sherd weight of 4.8 g, it is in very poor, abraded condition and many sherds have lost their surfaces. Possible roundhouse gullies 16206 and 16274 produced 64 and 50 sherds of pottery respectively. The sherds from 16206 were mostly grog-tempered, including an everted rim jar and plain jar (Thompson 1982, C203, C3), with three sandy ware fragments. The material from 16274 was all grog-tempered, including a jar with corrugated shoulder (*ibid.*, B2-3). The lack of Romanised wares is suggestive of a Late Iron Age date for these structures.

Cremation-related deposits

Pottery was recovered from samples of the three fills of grave 16120 (Area 4S), dated 100 cal. BC– cal. AD 110 (SUERC-64208, 2015 ± 29 BP). Five abraded and burnt body sherds and flakes of grog-tempered pottery were recovered from the lowest fill. The overlying fill produced 17 sherds from at least two grog-tempered vessels including a necked jar with everted rim, but all were burnt. The uppermost fill contained 31 abraded body sherds or surfaceless flakes of grog-tempered pottery. Three abraded scraps of grog-tempered pottery and one piece of cremated human bone were also recovered from feature 16142, but the bone was thought to be residual or intrusive (Powell, above).

Area 5

Area 5 produced the third largest assemblage of Late Iron Age and Romano-British pottery (1449 sherds, 15286 g). It derived from 23 ditches, a curvilinear gully, 13 pits, 22 postholes, an oven, a truncated circular feature, a cremation grave and four layers. Fifteen of these features contained more than 30 sherds. Most contained grog-tempered vessels dating from the middle decades of the 1st century AD, including ditch 15370 (262 sherds, 2535 g), ditch 15348 (97 sherds, 385 g), ditch 15356 (74 sherds, 600 g), ditch 15372 (69 sherds, 1426 g), pit 15209 (75 sherds, 968 g), pit 15237 (68 sherds, 807 g), pit 15203 (52 sherds, 695 g) and pit 15083 (51 sherds, 308 g). Other than those mentioned below, small quantities of Romanised fabrics were recorded from ditch 15372 (six sherds of whiteware from one or two cordoned flagon necks and a greyware everted rim jar fragment), ditch 15356 (a whiteware sherd), pit 15237 (a fine greyware sherd) and pit 15209 (an unsourced amphora sherd).

The largest groups of pottery came from three ditches that appeared to form part of a funnelled entranceway. Northern ditch 15370 produced 262 sherds (2535 g), predominantly of grog-tempered pottery including five necked jars with everted rims (Thompson 1982, B1-2), three rounded, bead-rimmed jars (*ibid.* C1-2), two everted rimmed jars (*ibid.* C2-1), a plain jar (*ibid.* C3), a storage jar (*ibid.* C6-1) and a butt-beaker (*ibid.* G5-6). A base fragment from a whiteware butt beaker was also recovered. The other northern ditch, 15371, also produced a large group (189 sherds, 1329 g). Most (92%) were grog-tempered wares, including a necked jars with everted rims (*ibid*, B1-2) and a platter with internal moulding (*ibid.* G1-6), but the presence of small quantities of Romanised fabrics, including a whiteware rouletted butt beaker, an oxidised pulley-wheel flagon, a highly abraded and laminated unidentified amphora sherd, suggest a slightly later date for ditch 15371. The southern part of this funnel

was formed by ditches 15348 and 15353. The former contained 97 sherds (385 g) of pottery, 81% were grog-tempered and included two round-bodied, bead-rimmed jars and three everted rimmed jars. The Romanised wares included 14 scraps of oxidised pottery, a South Gaulish samian cup (form 29), a greyware jar rim fragment and a whiteware body sherd from a vessel once repaired with a glue. The pottery from 15353 comprised 14 grog-tempered sherds (81 g), including a rounded jar with bead rim.

Of interest among the smaller groups of pottery from Area 5 is an almost complete plain, carinated cup, probably wheelmade (ditch 15378, ON 3, Fig. 00.51; Thompson 1982, E1-4), of early to mid 1st century AD date. It measures 85 mm in rim diameter, 70 mm in height and had a capacity of 200 ml. A plain, everted rim jar was also recovered from this feature. While most of the postholes in Area 5 produced only a few sherds, a group of 35 sherds (419 g) of 1st century AD grog-tempered pottery from posthole 15085 included fragments from a butt-beaker (Thompson 1982, G5-6) and 28 sherds (178 g) from posthole 15063 included a jar with rippled rim (*ibid.* B2-1), a round-bodied, bead-rimmed jar (*ibid.* C1-2) and a carinated cup with rippled neck. Two large storage jar sherds, weighing 331 g, recovered from posthole 15050 may have been used as packing. Shallow pit 15056 also produced some quite large, thick-walled sherds (70 sherds, 2188 g), including base fragments from from three Late Iron Age/early Romano-British storage jars, spread across its base.

Possible cremation-related deposits

A group (49 sherds, 37 g) of extremely eroded whiteware sherds came from cremation-related feature 15139, but with an average sherd weight of 0.76 g, they are completely undiagnostic. However, a radiocarbon date for this feature was obtained, of 100 cal. BC– cal. AD 110 (SUERC-64207, 2013 ± 29 BP).

Area 6

A total of 918 sherds (6485 g) of pottery was recorded from 19 features across Area 6, including a cremation burial (32 sherds, 365 g), 11 ditches (616 sherds, 5352 g), six pits (55 sherds, 280 g) and a tree-throw hole (26 sherds, 104 g). Pottery was also recovered from the subsoil or was unstratified (189 sherds, 384 g).

Cremation-related deposit

Cremated human bone had been placed in a Late Iron Age or early Romano-British wheelmade grog-tempered jar with flat base in feature 30003 (context 30005). A smaller oxidised ware vessel had been placed adjacent to this jar. The tops of the vessels had been truncated by machine and have not survived.

Other features

Half of the pottery from Area 6 came from ditch 30209 (465 sherds, 3370 g), almost all from the upper fill of slot 30012. This is predominantly abraded grog-tempered pottery and includes a plain jar (Thompson 1982, C3), six jar/bowls with everted rims and a shallow and plain-rimmed dish. Also present was a greyware dish with rounded flange and very small bead (Monaghan 1987, 5A4), typically of late Romano-British date but this example might be a little earlier. Two small oxidised ware sherds were also present. As a group the material is of 2nd century date or later. A smaller group of pottery (68 sherds, 308 g) came from ditch 30206, all highly abraded with few original surfaces but any diagnostic pieces are indicative of a 2nd century AD date. The largest group of pottery from the pits came from Romano-British pit 30177 (37 sherds, 155 g**)** but mostly comprise, small, abraded sherds of grog-tempered pottery with a little greyware, including a plain-rimmed dish (*ibid.* class 5E). The other pits each contained six sherds or fewer.

A small, ring-necked flagon of late 1st to 2nd century date, was unstratified (ON 54). Made from an oxidised, iron-rich, slightly sandy fabric, it has an expanded base and all body sherds appear plain. It is highly fragmentary (175 sherds, weighing just 225 g) with eroded surfaces.

Area 7

Fifty nine features across Area 7 produced 1034 sherds (10,558 g) of pottery. Approximately half came from 17 ditches and gullies (522 sherds, 4828 g), although only two contained more than 30 sherds. Other features containing pottery included 22 pits, 18 postholes, two tree-throw holes, a cremation grave, an oven and a shallow depression.

Cremation-related features

Fragments from the base of two vessels were found in grave 40185, probably of early Romano-British date. Both are grog-tempered and highly abraded; 47 sherds (466 g) are from one vessel (ON 66) with only three sherds (17 g) from the second vessel (ON 67).

Ditches

The condition of the pottery from the ditches in Area 7 is particularly poor. Fourteen slots through ditch 41106 produced 360 sherds (2986 g) of pottery dating to 2nd century AD. The group included fragments from a number of highly abraded imported vessels, comprising 17 sherds of samian (Central Gaulish where identifiable) including half of a cup, form 27, and a form 38 bowl; two joining but abraded sherds of Cologne colour-coated ware (Tyres 1996, 146; imported *c*. AD 70/80–165/10), four sherds of North Gaulish whiteware (probably from a Bushe-Fox 26-30 mortaria) and four from Dressel 20 amphora. The oxidised wares include an upright-necked jar in a whiteware fabric and a round-bodied, flanged bowl in an oxidised ware. Amongst the grog-tempered wares are four necked jar/bowls with everted rims, a round-bodied jar with beaded rim and a plain jar. The greywares include a grooved dish (Monaghan 1987, class 5F) and two flat-rimmed dishes (*ibid.* 5C1 and 5C2). Amongst the fine greywares is an extremely abraded group of body and base sherds, recorded as ON 55, while better preserved body sherds include some with barbotine dot decoration (ON 56), the latter are probably from a poppy-head beaker (Monahan 1987, 2A). A shoulder sherd from a beaker (Monaghan 1987, 2G, *c*. AD 70/90–120/130) was also recorded.

The material from rectangular building 41122 is highly abraded and includes greyware, grog-tempered wares and Dressel 20 amphora, but is only broadly dateable. Pit 40128 contained a group of 88 sherds (921 g) of pottery later 1st to 2nd century AD date, but all is highly abraded and fragmentary. Of note among the smaller groups of material is a cornice-rimmed beaker fragment (1 g) from ditch 41111, probably from the Argonne region of northern France (Anderson 1980, 28; *c*. AD 80–135).

Area 9

A relatively small assemblage was recovered from Area 9 (305 sherds, 3126 g). It derived from nine linear features, five pits, two postholes, a possible hearth, the palaeochannel and a colluvial layer. Only one feature (posthole 50064) contained more than 30 sherds, but all are grog-tempered body sherds. Among the vessels is a grog-tempered storage jar with cordon at

the base of the neck and incised arcs decorating the shoulder (ditch 51205), a late Romano-British drop-flanged bowl from the Wareham–Poole Harbour area of south-east Dorset (ditch 51202) and a burnt whiteware butt beaker (pit 50116).

Area 10

Very little evidence of Late Iron Age and Romano-British activity was identified from Area 10. Thirty two sherds (75 g) were scattered through six features and the subsoil.

Area 11

The assemblage was dominated by highly abraded, featureless body sherds, many in grog-tempered fabrics. Given the use of grog-tempered fabrics from the Bronze Age through to the late Romano-British period in this area, it has not been possible to date such body sherds. The majority of contexts that produced pottery of this date contained only undiagnostic body sherds or rims from jars that had broken at the neck/shoulder junction, or were of forms that were utilised throughout much of the Romano-British period, such as the plain-rimmed dishes.

Indicators of activity during the Late Iron Age/early Romano-British period included a highly abraded, necked cordoned jar (Thompson 1982, B1-1) from pit 56143; an everted rim jar with rippled shoulder (B2-1), from ditch 56277; a necked jar with everted rim from ditch 56280; a rounded jar with beaded rim (C1-2), a rounded rim from a dish or bowl and a pedestal base from penannular ditch 56517; a small everted rim jar with girth groove (C2-2) from pit 56590; two bead-rimmed jars, a butt-beaker and a body sherd with rectangular lug, from pit 56730; a necked jar with out-turned rim from pit 57119; cordoned body sherds from ditch 56902 and combed/scored body sherds from pit 57053. A flint tempered pedestal base with small, central post-firing perforation came from ditch 56272.

Little pottery was indicative of middle Romano-British activity, but the base of a possible poppyhead beaker, with traces of barbotine dot decoration (pit 56014) may have been an early to middle Romano-British product from the North Kent Marshes; and a highly abraded samian fragment may have been part of a mortarium (form 45) rim, dated not earlier than the late 2nd century AD.

Late Romano-British pottery was recovered from thirteen ditches, four gullies, eleven pits, two postholes, two layers and the subsoil. The material was dominated by locally

produced wares, predominantly grog-tempered fabrics, although vessels imported from further afield were also present. A single sherd of Mayen ware was recorded from layer 56445. This lid-seated jar rim (Alzei form 2, Unverzagt 1916), from the Eifel region of Germany, is indicative of a mid to late 4th century date. An unidentified ware, but probably from a similar source and date, was recovered from ditch 56309. Vessels from the Oxfordshire industry included colour-coated bowls (Young 1977, C45, C47, C49, C51 and C75) and a beaker (C22/23). Whilst most were produced from the mid third century onwards, the necked bowl C75 form is not earlier than the second quarter of the 4th century AD. Unusually, one of the C75 bowls had a brown, rather than red, slip. The Oxfordshire whitewares included the complete profile of a highly abraded mortarium (M22) from pit 57111. Other sherds in this fabric were also all from mortaria (pits 56845, 56692, gully 56304 and ditch 56060). A sherd from a mortarium with black slag trituration grits, from ditch 56310, is unsourced but may have come from the Crambeck or Catterick industries in Yorkshire, the Mancetter-Hartshill kilns on the Warwickshire/Leicestershire border, or the Nene Valley. A single small sherd of New Forest colour-coated ware came from gully 56226. A small quantity of Overwey/Tilford ware, produced in the Surrey–Hampshire border area during the 4th century, was also recovered, including two hooked rim jars (ditches 56275, 56902, 57082 and pit 56835).

The local grog-tempered wares, recovered from ditches 56060, 56275, 56517 and 56902, pits 56333, 56235 and 56845, layer 56445 and the subsoil, were dominated by copies of Black Burnished ware forms such as the cooking pots, drop-flanged bowls and plain rimmed dishes, These forms were also copied in sandy wares, with a dish/bowl with beaded and flanged rim from gully 57250 and drop-flanged bowls from ditches 56902 and 56277, and pit 56824. Late Romano-British forms in greyware fabrics included a drop-flanged bowl from gully 56304 and a strainer, probably from the Alice Holt industry (Lyne and Jefferies 1979, class 5C), from posthole 56095.

Repaired vessels

Evidence for the repair of ceramic vessels using birch-bark tar was recognised on a number of vessels of Late Iron Age/Early Romano-British date. This practice is now known to have been comparatively common (Marter Brown and Seager Smith 2012, 5–6), especially in this part of

east Kent during the Late Iron Age and Romano-British period, but extends back to at least the Late Bronze Age/Early Iron Age (Jones 2009 online archive report, 25; Seager Smith forthcoming).

Two vessels from ditch 18665 (Area 1) have traces of an ancient glue repair. Two plain body sherds in a grog-tempered fabric have thick deposits of the birch-bark tar-derived adhesive on one broken edge and adjacent surfaces. A footring base sherd from a sandy ware vessel also displays traces of an ancient glue repair, on the interior surface at the wall/base join. A large, flint-tempered bead-rim jar and a smaller, grog-tempered jar from pit 18125 (Area 1) had both been repaired with a black resin. On the flint-tempered jar it is visible on the break between two joining sherds, but not on the surface, whilst on the grog-tempered jar the resin is visible at thick blobs around the rim, mostly on the exterior but with a little on the interior. A grog-tempered jar with slightly everted rim, from ditch 50556 (Area 3E), has a black pitch/resin spread around the neck of the vessel. A single whiteware body sherd from 1st century AD ditch 15348 (Area 5) has traces of an adhesive on one broken edge, although none of the original surfaces of the sherd have survived. The upper part of a necked jar with everted rim (Thompson 1982, B1-1) from pit 40561 (Area 7) has a black coating around the rim/neck. A small, plain grog-tempered body sherd from 1st century AD ditch 50121 (Area 9) has traces of a glue repair on one broken edge and the adjacent face.

Re-used vessels

The flat base from a grog-tempered jar, found among a group of 2nd century AD pottery from medieval ditch 50875 (Area 3E), had been trimmed to form a disc 85 mm in diameter, perhaps for use as a lid, weight or hot-plate. A footring base, found in ditch 51208 (Area 3E), had been removed from a vessel, presumably after breakage. This may have been re-used as a shallow dish. A hole had been drilled from the inside out through an irregularly-shaped greyware body sherd from natural feature 50682 (Area 3E), possibly in a failed attempt to create a spindle whorl. The perforation is now partially filled with a post-depositional, iron-rich concretion. A square-shaped perforation, approximately 35 mm across, had been chipped into the base of a fairly straight-sided, thick-walled vessel from ditch 15372 (Area 5). The base from a grog-tempered jar from ditch 50556 (Area 3E) had been perforated with at least two holes, 9 mm in diameter, post-firing. Such alterations are generally interpreted as indicative of a deliberate change of use, and the practice is well known in Late Iron Age and

Romano-British contexts across southern England. While traditionally associated with the production of cheese (Harding 1974, 88), these vessels could have been used to drain/strain liquids from solids in a wide variety of industrial and domestic contexts, as time-pieces or as flower pots, while others may have been rendered useless in more ritualistic ways (Fulford and Timby 2001, 294–6).

Medieval, Post-medieval and Modern

The medieval pottery (175 sherds, 1607 g) was predominantly from Area 3E, with small quantities from Areas 2, 3W, 4, 5, 8, 9 and 11. Context groups are again small and only one feature (ditch 50879) contained more than 30 sherds.

The most common fabric type is a moderately coarse sandy ware, sometimes with shell/chalk inclusions, broadly comparable with the products of the 13th-century Ashford Potters Corner kiln and probably also manufactured at other sites in the Ashford area. Vessel forms are largely confined to jars with flat-topped and squared rims belonging to the developed, late 12th–13th century industry, although one piece from the rim/handle area of a skillet came from the primary fill of enclosure ditch 51193 and a glazed jug body sherd came from enclosure ditch 51194. At least two of the jars have applied, impressed strip decoration.

Although unsourced, the miscellaneous fine sandy ware fabric group includes one piece from the flared rim of a jar or dish, probably of 13th or 14th century date (intrusive in Romano-British ditch 15348), glazed jug sherds (ditches 50659, 50875 and 50879) and a group of 20 oxidised body sherds with red (straight and curving lines) and yellow (glazed panels) slip decoration (ditch 50867), probably from a jug made in the Surrey/Sussex area. The single internally and externally expanded jar rim suggests that all the non-local, gritty, sand and flint-tempered sherds are of 11th–12th century date. This fabric only occurred in Area 2 (ditches 51177, 51179 and 51181).

One sherd (9 g) of post-medieval redware was unstratified in Area 10. Modern pottery includes a sherd from a British stoneware jar of late 18th–19th century date, found alongside residual Romano-British sherds, in post-medieval ditch 50874 in Area 3E and a flowerpot fragment came from possible trackway 100604 in Area 10.

Medieval pottery from Area 11comprised seven sherds of Ashford Potter's Corner (ditch 56275 and 56273) ware and a flint-tempered sherd with applied thumb strip (ditch 56372). A single sherd of post-medieval redware was also recovered from ditch 56275.

Discussion

The earliest use of pottery on the site was during the Early Bronze Age. This relates to the burial of cremated human remains within a Collared Urn, found within an evaluation trench located to the north-west of Area 4S. The discovery of this vessel is of regional significance as few have previously been recovered from Kent. Of the ten listed by Longworth (1984, 216–17), four accompanied the burial of cremated human remains, one with an inhumation burial, one from a possible grave and two from barrows. The origins of the tenth example were unknown, other than that the vessel was found near the village of Stodmarsh (Hasted 1931, 295). The CTRL excavation produced further examples from Northumberland Bottom (Edwards 2006a) and possible examples from Cobham Golf Course (Edwards 2006b).

No evidence of settlement activity is reflected in the ceramic record from Cheeseman's Green until the Middle Bronze Age. Thick-walled, flint-tempered pottery, occasionally decorated with fingertip impressions, was recovered from a number of features including ditches in Areas 2 and 7, a pit in Area 3E, and a ring ditch in Area 10. Pottery of Middle Bronze Age date was also recovered from a cremation burial in Area 10, although the sherds were undiagnostic and from the bodies of at least two vessels. A continued presence on the site through the transition from the Middle to the Late Bronze Age is indicated by a progression in vessel form, from the Bucket Urn-style vessel to a thinner-walled, tub-shaped vessel with more convex walls, recovered from Area 7. Material indicative of a Late Bronze Age date came predominantly from Area 10 and again included evidence for settlement, associated with structures 55277 and 55227.

Early to Middle Iron Age pottery was recovered from ditches, pits and postholes in Areas 1, 2, 3E, 3W and 7. Precise dating within this range is problematic due to the long currency of many of the forms in use during this time and the fragmentary nature of the vessels. The most commonly occurring form was the shouldered jar, broadly dated 10th to 6th centuries on sites across south-eastern England. Only two features contained large enough groups to be indicative of an Early Iron Age date: adjacent pits 50899 and pit 50949 of Area

3W. Ditch 18697 of Area 1 produced a typologically earlier Late Bronze Age/Early Iron Age rim. During the Middle Iron Age, there was a shift away from the more angular and shouldered profiles to more rounded or neutral-shaped forms, including vessels classified as saucepan pots and belonging to a tradition current across Wessex and into the south-east during the Middle Iron Age. Examples of this form were recovered from ditches 18166 and 18632 in Area 1, and posthole 40011 in Area 7.

During the Late Iron Age, grog-tempered ceramics dominate assemblages in the region and the Cheeseman's Green vessel forms conform to the standard range seen in the east Kent 'Belgic' ceramic style zone (Thompson 1982, 12–14; Pollard 1988, 30–2). Although difficult to recognise in this assemblage, surface treatments included scratched or scored exterior surfaces, and while burnishing became increasingly common, decoration continued to be rare. Grog-tempered fabrics dominate the 1st century AD groups, with greywares and other Romanised fabrics coming into use from the late 1st to early 2nd centuries AD. This preference for grog-tempered fabrics is mirrored at other sites in the Ashford area, including Boys Moat Hall (Booth and Everson 1994), South-east of Park Farm (Jones 2012) and the CTRL sites (Beechbrook Wood, Leda Cottages: Booth 2006). Vessels in flint-tempered and sandy fabrics were also in use on the site, but were less commonly encountered. Of particular note is a nest of three vessels of Late Iron Age date from Area 1 (pit 18125), made in three different fabric types. A small, grog-tempered, everted rim jar had been placed inside a larger, and coarser, flint and grog-tempered jar with upright rim, and both then put into a large, flint-tempered, bead-rimmed jar. That these jars had been used in antiquity is suggested by the birch-bark adhesive noted on the rims of the largest and smallest vessels. The vessels had been placed in a small pit, just 0.45 m in diameter and 0.23 m deep, in what must have been a deliberate act of deposition, representing something with far greater meaning and significance than the deposal of rubbish.

The bulk of the assemblage derived from activity during the second quarter of the 1st century AD. Ditches 50597 and 50596/51208 (Area 3E) were spatially related but also chronologically similar. Although a range of different vessel forms were recorded from these ditches, there is a clear dominance of round-bodied jars with bead rims, shoulder groove and wiping or scoring below, and also of drinking vessels. The rim diameters of the jars are frequently in the 130–140 mm range, suggesting an individual's cooking/eating vessel. The cups are very tactile, sitting comfortably in the hand. Unfortunately it is not possible to

ascertain if there were used within a family situation or wider social events, but possibly for both. The range of forms is similar to those from South-east of Park Farm, but the focus differs, with a greater number of necked jars with everted rims and corrugated vessels at South-east of Park Farm, and very few cup forms.

The large groups of pottery from Area 3E, representing quite discreet dumps of pottery, raises the question of possible pottery production in the area. The relatively restricted range of forms would be in-keeping with this. Many of the vessels appeared to be grey in colour, but closer inspection has found little evidence that this is a result of a firing accident but instead relates to severe damage to the surfaces of the sherds as a result of the post-depositional environment, exposing the core. Few sherds can be conclusively shown to be burnt. A possible oven or kiln towards the centre of Area 3E, feature 50674, produced very little pottery (22 sherds, 117 g), comprising a possible abraded scrap of Oxford colour-coated ware and two grog-tempered body sherds from a charcoal layer within the base and very small abraded sherds in a range of fabrics from the overlying fills. Oven 51212 in the east of Area 3E contained 11 sherds (35 g) of undiagnostic greyware and grog-tempered pottery.

Fired clay

Grace Perpetua Jones and Lorraine Mepham

Perforated weights

A group of at least nine perforated weights were recovered from pit 16005 in Area 4N, seven of which survived almost complete. The only other finds from this pit comprised a small group of worked flint. These were particularly large weights, of 1651 g to 3193 g, 120-145 mm in height and 110-135 mm in diameter. The perforations were fairly standard in size, 20 mm diameter, but some widened to 25 mm at one end. They had been made in two related fabric types, both a silty fabric with a moderate amount of rounded, iron oxides and occasional coarse quartz grains; however the iron oxides in one (used for ON 18-22 and 24) were up to 2 mm in size, and the iron oxides in the other (used for ON 17, 23 and 25) were much larger, up to 7 mm. The clay had been poorly wedged prior to firing in an oxidising atmosphere, the resultant weights have swirls of buff and orange clay.

Cylindrical, perforated weights were used in textile manufacture during the Middle to Late Bronze Age, to provide tension on a warp-weighted loom. Yet these examples are outside of the range of sizes found on other sites in south-eastern England. A group of ten cylindrical loomweights from a house platform at Black Patch, East Sussex, weighed 435-1200 g (Drewett 1982, 371). A group of nine complete, or nearly complete cylindrical weights from a pit at from Imperial College Sports Ground, Harlington, were smaller than the examples from Cheeseman's Green, weighing 1360-1972 g, and shorter (90-110 mm) but of a similar diameter (115-130 mm) (Brown and Mepham 2015, 177). Between four to six cylindrical weights were recovered from a pit at Dagenham Heathway, an intact example weighed 2,147 g (Rayner 2014, 131). A nearly complete example from Terminal 5, Heathrow, weighed 1376 g. The weights from Cheeseman's Green are considerably larger than all of these examples, however ethnographic evidence indicates that weights of this size may be used in the manufacture of textiles. Research by Hoffmann (in Oye 1988, 69) indicated weights used in the post-medieval/modern period may be as much as 3000 g or more. Oye also notes that weights of 3-4 kg are used on the Faroe Islands for the weaving of fine linen, 'showing that heavy loom-weights do not necessarily imply coarse fabric made from thick yarn' (ibid). Alternatively, it has been suggested that larger weights may have been used as

thatch weights (Bradley et al. 1980, 275), or that perforated cylindrical objects may have been used as kiln/oven furniture, however there is no evidence of these weights being utilised in this context.

Three fragments from triangular objects, perforated across the corners, came from Late Iron Age posthole 18115 (Area 1). Another corner fragment from a similar object came from ditch 50596, of 1st century AD date (Area 3E). Such objects are a well-known form, common in Iron Age contexts across the whole of southern Britain and remaining current well into the 2nd century AD (Wild 2002, 10). Traditionally, they have been interpreted as loomweights used in textile weaving but it is now considered more likely that they were bricks associated with ovens and/or kilns, and perhaps used as linings or pedestals (Lowther 1935; Poole 1995). The provenance of the fragments from posthole 18115, found in a dumped deposit with other undiagnostic fired clay having the appearance of hearth lining, tends to support the latter interpretation. Evidence of the use of these objects in a hearth or oven was discovered on the East Kent Access Road, a white salt glaze on their surfaces indicated their use in salt evaporation processes during the Early to Middle Iron Age to Early Romano-British periods (Poole 2015, 304).

Spindle whorls

Four ceramic spindle whorls were recovered from Late Iron Age features (beamslot 16280, Area 4; ditch 51172, Area 3W and ditch 15370, Area 5) and an alluvial layer (50003). Two had been fashioned from tiles, in oxidised sandy ware fabrics. These were discoidal in form, 35-37 mm in diameter, 14-15 mm thick and weighing 16-22 g; their perforations were 10 mm. A third fragmentary example of this type had been made from an iron-gritted pottery fabric. Another partial whorl was hemispherical in form, 25 mm high and approximately 29 mm in diameter. It had been made from a grog-tempered pottery fabric, but presumably made as this object from the prepared clay, rather than re-use of a pottery vessel. Similar spindle whorls were recovered along the route of the East Kent Access Road (Poole 2015, 321).

Structural material

Amongst the structural material is a group of fragments (total weight around 15 kg), all in a similar slightly sandy fabric, with some rare flint and grog/clay pellet inclusions, recovered from Romano-British pit 40128 (Area 7). These fragments represent the possible remains of

an oven. The majority are featureless, but 25 pieces have flattish surfaces and 28 have possible ‘rod’ or ‘wattle’ impressions, while three fragments display curved or concave surfaces, one with possible finger prints. One large fragment from Romano-British brick-built oven 50674 (Area 3E) may represent some sort of internal structure.

Worked flint

by Erica Gittins

Introduction

The assemblage consisted of 6644 pieces, as in Table 10. The material comprised mostly debitage from the reduction of nodular flint during tool manufacture during the Mesolithic period.

The majority of the material was concentrated in the centre of the site, primarily in Areas 4N and the southern end of Area 9 with a smaller concentration further north in Area 8. Otherwise, densities seem to indicate a general low level of the material across the excavations, with the only other possible focus of activity in the combined Areas 3E and 3W. A breakdown of the assemblage by area is given in Table 11.

Raw Material

A variety of raw material types are present. The two most notable are a very good quality black flint with a thick white chalky cortex, and a medium to dark brown and grey flint with a large number of cherty inclusions and a thinner buff to off white cortex. There are also a large number of worn pebbles and cobbles which vary greatly in colour. Finally, there is a small quantity of distinctive Bullhead (glauconitic) flint.

In terms of source, the good quality black flint is typical of downland geology and likely to have been collected from surface exposures on the North Downs which lie at their closest perhaps 8 km to the north from the site. Bullhead flint occurs locally in the Thanet sands and will have been collected from the local drift geology. The pebbles and cobbles are likely to derive from local river gravels, or perhaps from the coast (12 km to the south-east at its closest point). The distinctive brown flint, utilised preferentially in the manufacture of tranchet axes, is difficult to source, but likely to have derived from the local drift geology.

Certain types of raw material were favoured and have been used extensively, particularly the brown cherty and inclusion-heavy flint. The quantity of black good quality flint is relatively less proportionately, which may simply reflect limited importation of this material onto site, or the differing purposes to which it was put. There are differences in the usage of this material, in particular heavy usage of large cherty nodules for tranchet axes. The dark good quality flint has been reduced almost exclusively by hard hammer, and was restricted to flake, blade, and bladelet production – many of which may have been subsequently removed from the site. The cherty flint was also used with limited success in flake and blade production, and in combination with the obvious axe manufacture site has overall produced a greater quantity of flakes as demonstrated by a number of trimming and sharpening flakes which represent a sample of the likely much larger total. In direct contrast the Bullhead flint has been carefully reduced with some indications of soft hammers. There are also instances of collected tabular Bullhead flint from which attempts have been made to remove small flakes.

In terms of chronological and typological differences, very little distinction between raw material usage in different time periods is possible to detect, with all of the types apparently used in the Mesolithic period, except to say that the bulk of the cherty material appears to have been utilised in the Mesolithic period for the manufacture of tranchet axes.

Condition

The general condition of the assemblage is very good, close to mint or in mint condition. There is otherwise very little variation in the condition of the assemblage. This indicates that although not *in situ* the majority of the material has not moved far from its original place of deposition, as evidenced by the refit in 16003 (below).

There is some patina evident on a few pieces throughout the assemblage. Partial patina on pieces is rare: they are usually fully patinated or not at all, and the overall proportion of patinated pieces is quite small. In a small number of cases, retouch was seen to have taken place through patina, suggesting later Prehistoric working (below).

Refits

The entire assemblage from Areas 4N and 9 (approximately 4500 pieces) was laid out and examined in detail to search for refits. Several attempts were made to find refitting pieces,

with the author sometimes assisted by other lithics specialists to ensure a comprehensive approach. Although sequences in visually distinctive raw materials that evidently came from individual cores were identified in individual test pits and from the material collected by hand from the surface, demonstrating that knapping was occurring, only a single instance of refitting pieces was found among the whole assemblage: two small flakes from a small pebble of Bullhead flint were found to refit. This phenomenon is undoubtedly due to the fact that only a sample of the material was retrieved.

Chronology

No Palaeolithic material was recovered. The largest component of the assemblage dated to the Mesolithic period (probably the Late Mesolithic, although an earlier Mesolithic element cannot be ruled out). Smaller elements of Neolithic (Early and Late) and Beaker material were identifiable, usually on the basis of chronologically distinctive tool types and cores. Individual pieces may have been of Bronze Age or later date.

Mesolithic

Diagnostic Mesolithic artefacts included microliths, truncation, notched pieces, burins and tranchet axes, along with cores and debitage from their reduction. This material concentrated in Areas 4N and 9, although tool types were distributed more widely (below). The mass of debitage leaves no doubt that flint working was taking place on site, and that implements (primarily microliths and axes) were being manufactured, maintained and used there.

Microliths

Microliths form the second most frequent class of retouched tool recovered from the site, after scrapers (see Table 10). The composition of the microlith assemblage by type (after Clarke 1934) is given in Table 12.

Microliths were retrieved from the subsoil in five areas (Areas 3, 4N, 6, 8 and 11) and redeposited in later features in Areas 4N and 11. By far the largest number came from Area 4N (22 examples: 61%), with the next largest group (five examples) in Area 8 and three pieces from each of Areas 3, 6 and 11.

The majority of the types are late forms (the D types and geometrics, together 20 examples: 55%; with the addition of the B types (6 examples) 72%). The remaining types fall

into Clarke's types A and C, the obliquely blunted points. These obliquely blunted and bi-truncated points (together with a single microburin: see below) suggests that there may also be a small earlier Mesolithic component to the assemblage (17.6% of the total).

While these obliquely blunted points are usually taken to be Early Mesolithic forms, Reynier (1994) has suggested that chronological distinctions might be apparent in terms of the size and shape of blanks used in their manufacture. Consequently, the lengths and breadths of all examples of types A and C were measured, and the results are in Table 13.

The results how that, while the average ratio of breath to length is 1:2.36 for the A and C types combined and 1.1:84 for the A types alone, the range is far greater for individual pieces, from 1:6.2 to 1:2.5 for the C types (average 1:3.5) and 1:3.85 to 1:2.14 for the A types (average 1:1.83). What this suggests is that there is some degree of chronological variation among the obliquely blunted points, with both earlier and later types represented.

Among the assemblage as a whole, then, early and late forms are present, with later forms predominating. Most common are rod types (almost 30% of the total) followed by various forms of Clark's type D (geometrics) at 23.5% of the assemblage. Of the remainder the most common forms are Clarke's B types (Straight-backed), followed by A types (obliquely blunted), C types (obliquely bi-truncated), and a few unclassifiable pieces.

Microburins

Only one microburin was recovered, from a test pit in Area 4N. The microburin is a proximal example with the notch towards the right. Although this singular find may be a factor of recovery strategy, it could also indicate that microliths manufactured using the microburin technique form only a small part of the assemblage. This is most possibly because the majority of the microliths (and the assemblage as a whole) dates to the Late Mesolithic, with only a small number of pieces being early types more likely to have been made with the microburin technique.

Truncations

Truncations were recovered from the subsoil in Area 4N (three examples), 6 (two examples) and 8 (one example), from an unstratified location in Area 1 (one example), and redeposited in a later feature in Area 3E (one example). All of the examples are lateral, made at a shallow angle across the distal end of blades. Most are flat, but one is slightly concave.

Notches

Blades with deliberate generally semi-circular notches occurred as single examples from the subsoil in Areas 4N and 11 and redeposited in later features in Areas 3E, 3W and 11. Although not definitively Mesolithic, these pieces are made on blades that appear to belong in that period.

Burins

Only one example of a burin was recovered, redeposited in a later feature in Area 11.

Tranchet axes and related implements

Core tools form the largest group of Mesolithic tools after the microliths, and the third largest group overall (after scrapers and microliths) with twenty-three examples (tranchet axes and adzes, picks and unclassifiable related implements) recovered from across the site, as in Table 14. The pieces came from the subsoil in Areas 1 (four examples), 3 (three example), 4N (seven examples), 8 (five examples), 9 (two examples), and were redeposited in later features in Areas 1 (one example) and 7 (one example).

Most of the pieces are relatively fresh and show no signs of rolling. Many however are frost damaged, with at least one with 'pot lid' scars.

Typologically, adzes have been defined as more or less lenticular core tools with tranchet removals, a markedly asymmetrical profile at the blade end and one flat or near flat face. Axes are defined as tools with a similar morphology but a less asymmetric profile (these two categories are not absolute as they tend to blend into each other). Picks are a more slender form in relation to their length, less lenticular (often verging on square or triangular) and have a pointed 'blade' end, not generally defined by a tranchet removal. Nearly all are made on nodules of brown cherty flint which were undoubtedly selected for their robustness and pre-existing shape which allowed for the convenient manufacture of axes.

Many of the implements are relatively crude, but many exhibit a deliberate sequence of reduction that is identifiable across the axes and adzes. Even the cruder complete pieces are deliberately shaped, and represent finished implements rather than rough-outs.

The core tools, with the exception of the pick forms, show a very similar reduction sequence, implying a template and intentional reduction, rather than just expedient removal of

flakes to produce a robust edge. The implied *chaîne opératoire* involves the reduction of the nodule – sometimes only partially, and often quite roughly, with severe flaking angles common – with the sides shaped using steep blows, which could create the effect of narrowing the nodule. This reduction sometimes created a flat surface, or saddle, on one face. Another distinguishing feature of some of the axes and adzes is the presence of a protuberance or hummock toward the centre, rather than a saddle, often cortical. Flakes from the shaping of axes (all from Area 4N) show that manufacture was taking place on the site. These features, together with deliberate crushing of the margins, may have been intended to facilitate hafting, and to prevent 'slippage' of the tool in its haft when in use. Broken examples of axes seem to have snapped at a predictable point along the length below the blade, suggesting flexion breaks which again indicate that the implements were hafted.

This initial shaping was followed by the more careful forming of the blade end with the removal of a transverse flake supplemented by secondary flaking on the opposite side of the implement in line with the long axis. These 'toes' often show very careful working, and are unlikely to have been made using direct hard hammers, unlike much of the other shaping of the pieces. Evidently, the purpose of these toes was to shape the blade more finely, often giving a markedly concave profile.

Butts tend to be cortical, or to have only minimal working, although many have been shaped to some degree, even if that only amounts to having been roughly squared off. The purpose of this shaping is difficult to ascertain, unless again it was to facilitate hafting or use. None of the complete butts show any sign of wear that might have resulted from use, so the shaping is unlikely to have been functional in the sense of providing another working surface.

Although this same basic template can be seen in many of the pieces there is a marked difference in fineness between the more and les carefully worked pieces, and it is possible that there was some social significance to the making, possession or use of finer axes. Resharpening debitage (five flakes removed blade edges from axes, all found in the subsoil in Area 4N) indicate that axes were maintained and repaired, and the majority of the resharpening flakes come from better made examples of both axes and adzes on mostly made on better quality (less flawed) brown cherty flint.

The afterlives of some of the core tools are evident in a number of fragments of broken examples used as cores, and also in the three examples which have been heat-affected.

These three are not evenly or heavily burned, and it is possible that the burning was used to remove the pieces from broken or damaged hafts.

There is a clear distinction between picks and axes/adzes, almost certainly functional in nature. The picks are much more expedient in their production, typically showing hard hammer technique designed to produce a pointed end at a different angle to the tranchets. Margins again show mashing and crushing which may suggest that they were hafted, although the tools could conceivably have been hand held. In appearance they look like digging tools, with all the emphasis towards the creation of a solid point, in marked contrast to the flat cutting tranchet edges of adzes and axes.

Cores

Cores were recovered from across the site, with 460 examples forming 6.91% of the overall assemblage. Flake, blade and bladelet cores were present (238 flakes cores, 50 blade cores and 49 bladelet cores) with 123 being fragmentary and less certainly assignable. These last include a number of tested nodules, some of which have been smashed into pieces, while others have had experimental flake removals from one surface before their immediate discard. Many cores had been subsequently used as hammerstones.

These figures give only an approximation of the industries and their intended products, since many cores were seen to produce both blades and flakes, or blades, bladelets and flakes. Consequently, in an attempt to better understand the nature of working and to investigate the chronological implications of the core types, the sub-assemblage from the subsoil in Area 4N was subject to further analysis (Appendix 6).

The retouched tools from the same area suggested that the assemblage should be largely but not entirely Mesolithic in date, and this assumption was borne out by the analysis of the cores, many of which showed traits common in Mesolithic industries, regardless of whether the individual pieces were classified as ‘flake’, ‘blade’ or ‘bladelet’ cores. 66% of the cores had cortical backs, for instance, while the analysis showed that the majority of cores had either one platform, or two platforms at opposite ends of the nodule (Fig. 6.5), and that of those platforms 72% has signs of preparation (Fig. 6.6).

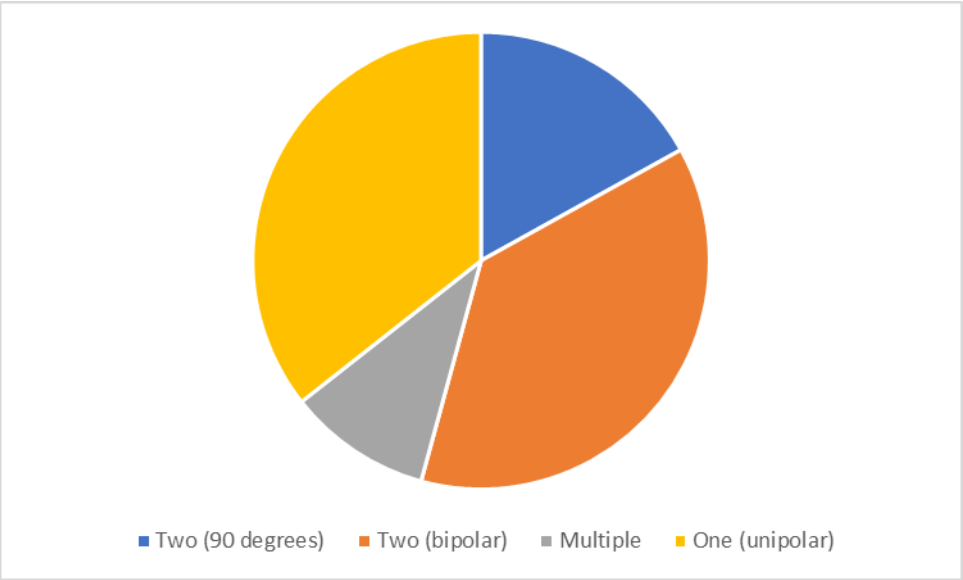

Figure 6.5 Cores from the subsoil in Area 4N: platform type

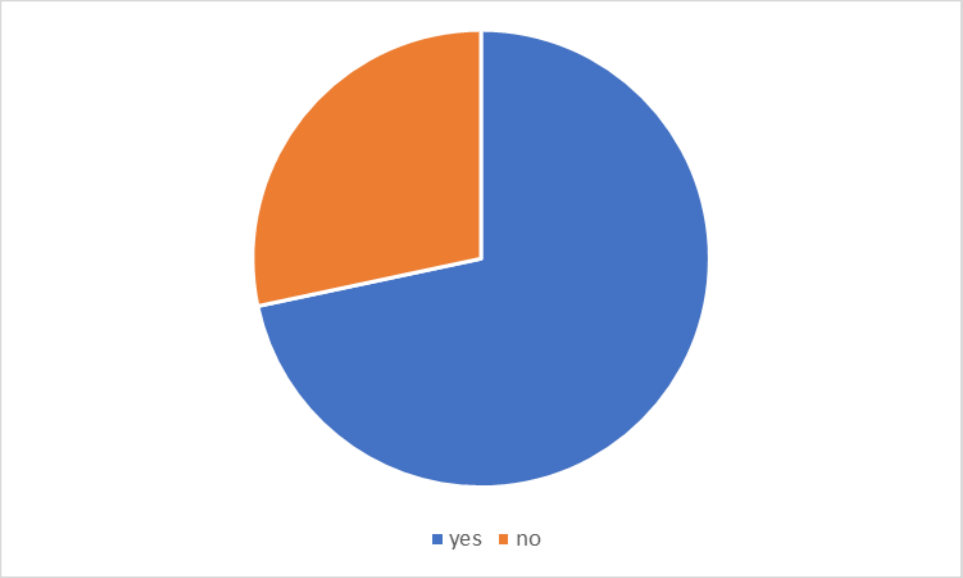

Figure 6.6 Cores from the subsoil in Area 4N: platform preparation

Many cores were carefully worked and maintained, with platform edge abrasion apparent on 43% of examples. The breakdown of platform edge abrasion by number and arrangement of platforms is shown in Fig. 6.7, which suggests that the technique was used predominantly on those cores with one or two (opposed) platforms.

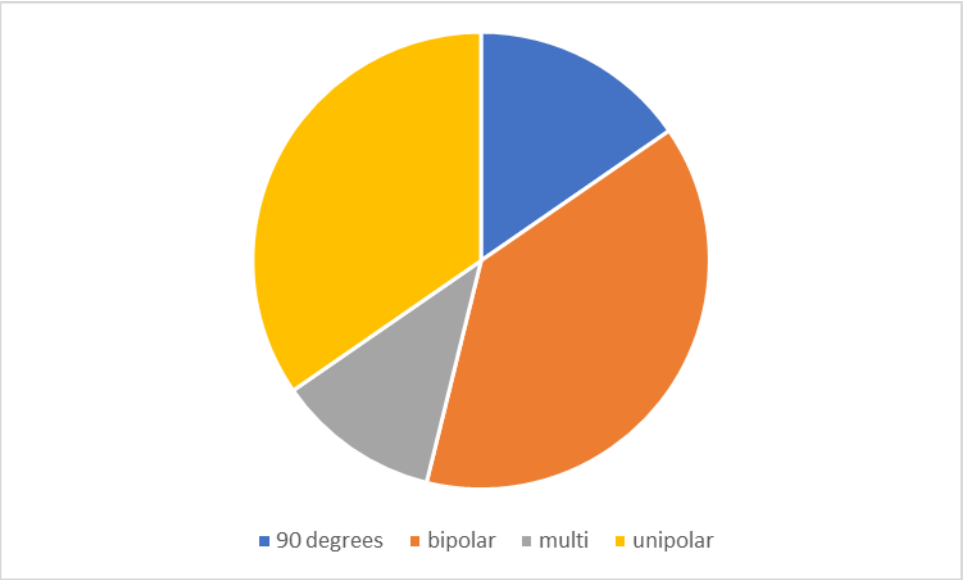

Figure 6.7 Cores from the subsoil in Area 4N: platform edge abrasion

Most cores were abandoned (Fig. 6.8) due to either being worked to exhaustion (38%) or regression of the platform edge angle (35%), with 23% being discarded once cherty inclusions had become so prevalent that faces became unworkable. The remaining 4% were abandoned due to knapping errors (mainly hinge fractures disrupting core faces).

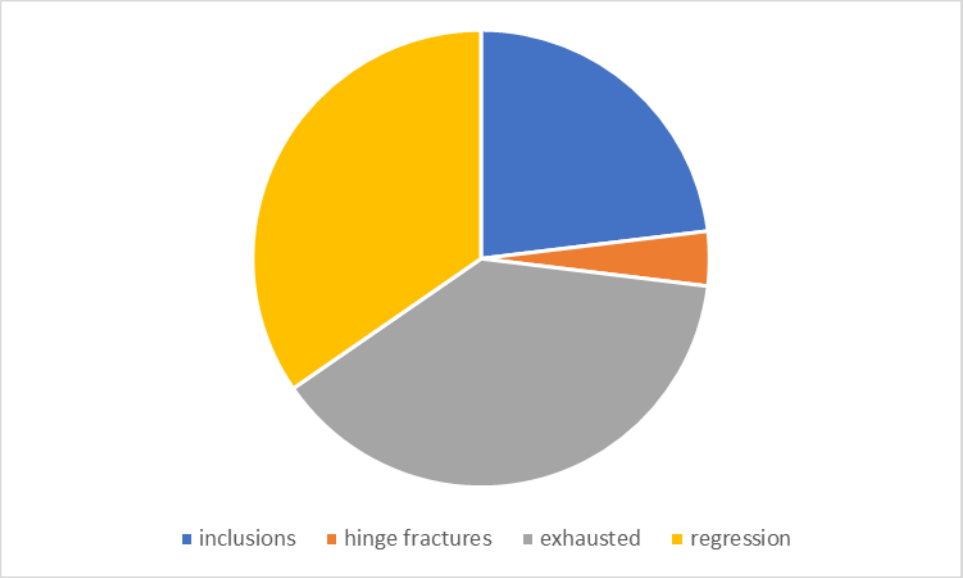

Figure 6.8 Cores from the subsoil in Area 4N: reasons for abandonment

Debitage

Debitage (flakes, blades, bladelets, irregular shatter, chips, core preparation and maintenance) accounted for 88% of the assemblage. Although some of the material undoubtedly dated to the Neolithic period or later (see below), the bulk of it derived from the Mesolithic industries described here. Debitage was encountered across the areas, but again the majority came from Area 4N, and this element was analysed in more detail (Appendix 7).

In the assemblage as a whole there are a large number of '*flancs de nucleus'*, or flakes which remove the flaking face of the core in order to remove flaws or knapping errors and rejuvenate the face for further removals. Less frequent were core platform rejuvenation flakes and tablets, but of those several were of the triangular form removing only the platform edge rather than the whole platform, often found in Mesolithic assemblages.

As with the cores, a breakdown of the assemblage into flakes, blades and bladelets gives only a general picture of the industries represented. From the site as a whole, 4814 pieces were classed as flakes (72.49% of all debitage) while 226 were classed as blades (3.56%) and only 74 as bladelets (0.82%). This gives a ratio of blades and bladelets to flakes of 1:16, but obscures the fact that many of the smaller pieces of debitage are likely to be blade and bladelet segments, and that a high proportion of the flake material derives from industries geared towards the production of blade blanks using a combination of hard and soft hammers. Examination of the material in Area 4N, especially in terms of butt type and stage in the reduction sequence, indicates that much of the material is technologically consistent, regardless of whether flake, blade or bladelet. All stages of the reduction process are represented (Fig. 6.9) but primary pieces are somewhat under-represented, suggesting perhaps that nodules may have been brought to the site in a partially-prepared state.

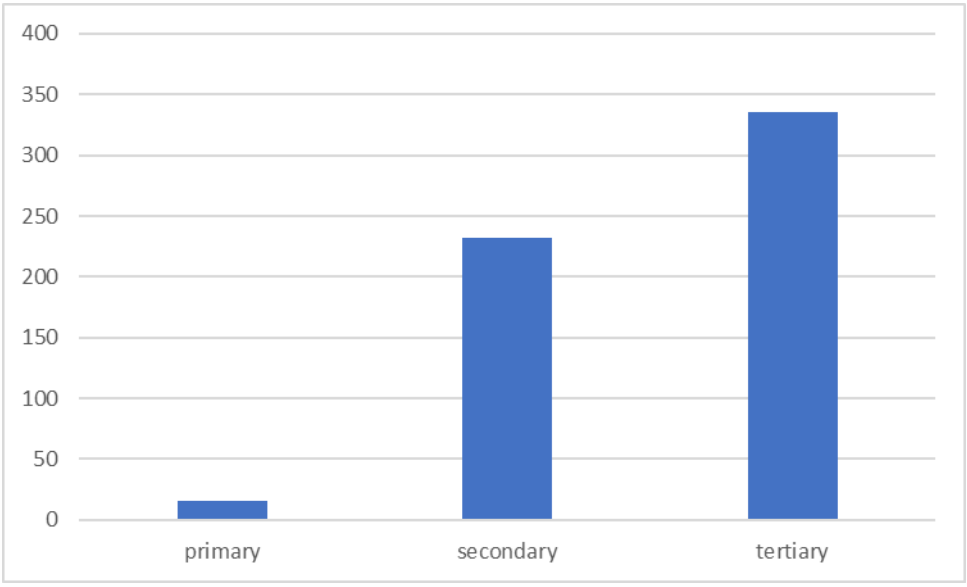

Figure 6.9 Debitage from the subsoil in Area 4N: by reduction stage

This is perhaps borne out by the low numbers of debitage with cortical butts (Fig. 6.10) and the even smaller number of pieces with cortical butts which were primary flakes (Fig. 6.11).

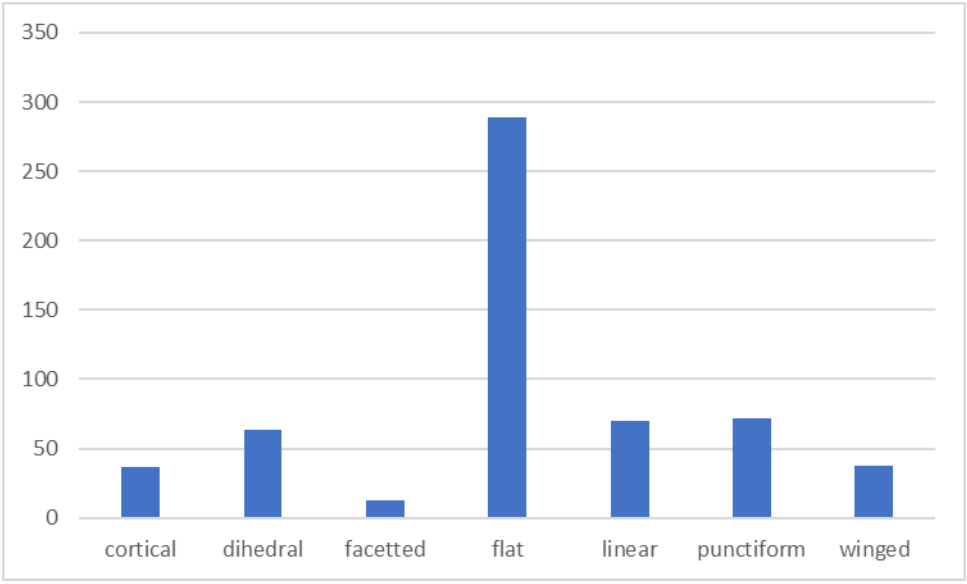

Figure 6.10 Debitage from the subsoil in Area 4N: by butt type

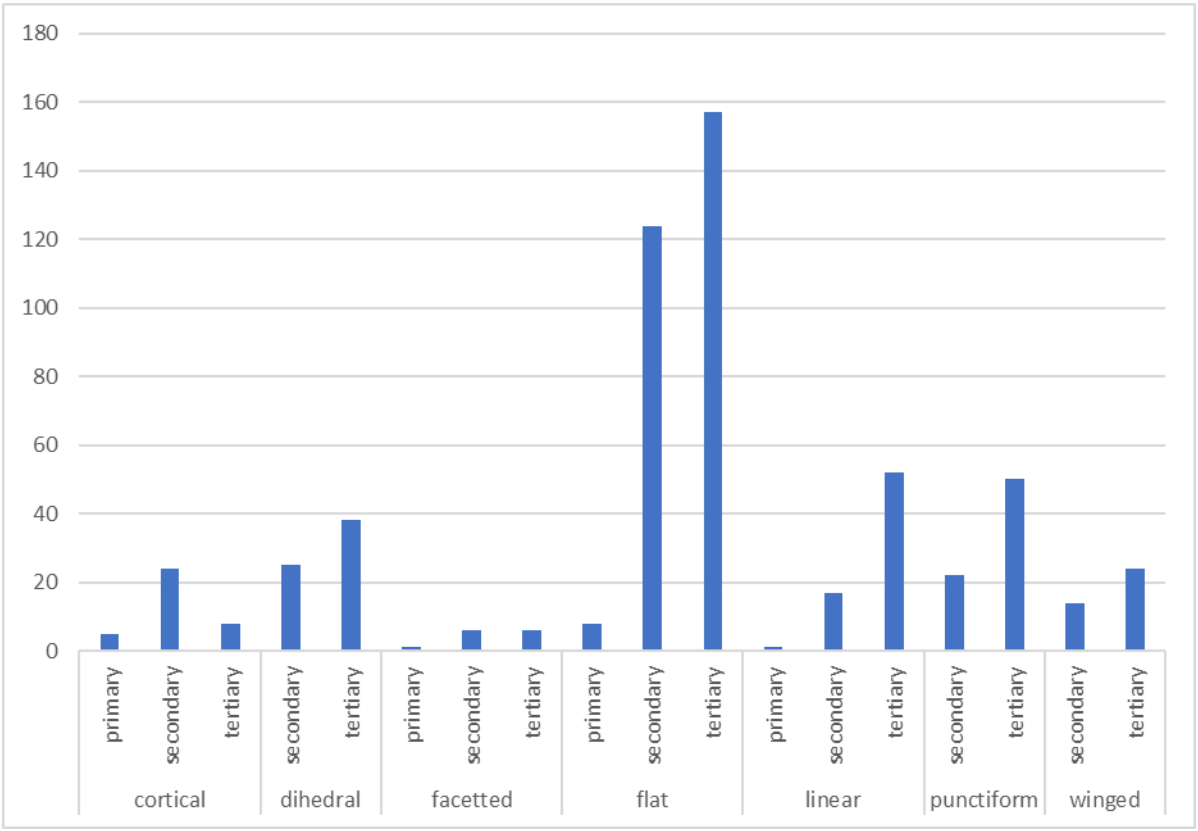

Figure 6.11 Debitage from the subsoil in Area 4N: by butt type and stage

Of the butt types themselves (classified following Inizan *et al*. 1992), 50% were flat, with almost three quarters of the remainder divided equally between linear, punctiform and dihedral types (12% of linear and punctiform, 11% of dihedral) (Fig. 6.12).

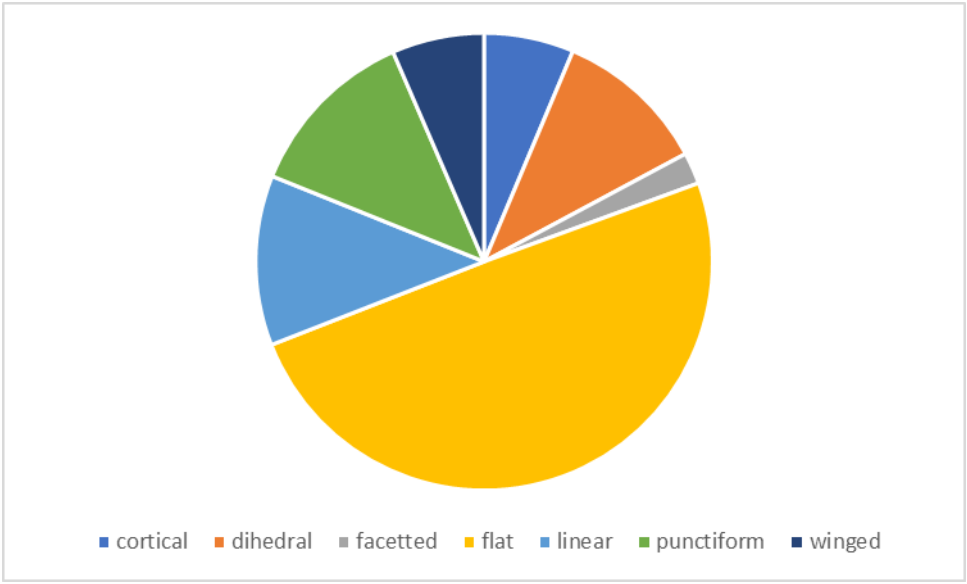

Figure 6.12 Debitage from the subsoil in Area 4N: by butt type

Some differences were apparent between blades and flakes (Figs 6.13 and 6.14), with flakes having a higher proportion of flat butts (52%) and a more even distribution between the minor types than the blades, which had fewer flat butts (41%) and far higher proportions of linear and punctiform examples (24% and 26% respectively). This is entirely in keeping with expectations and visual observations of the use of soft hammers in blade production, a mode which most usually results in butts of linear and punctiform type (Inizan *et al*. 1992, 80).

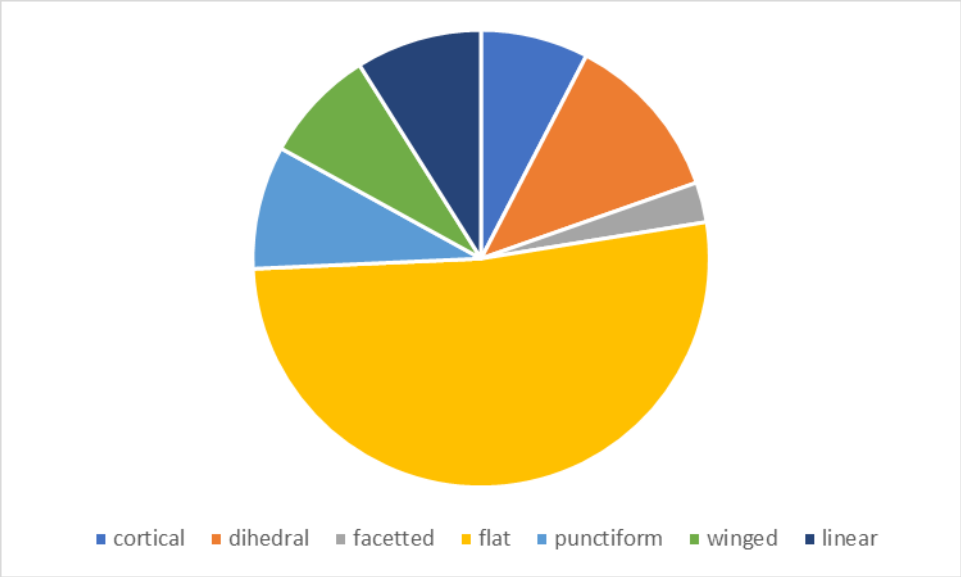

Figure 6.13 Debitage from the subsoil in Area 4N: by flake butt type

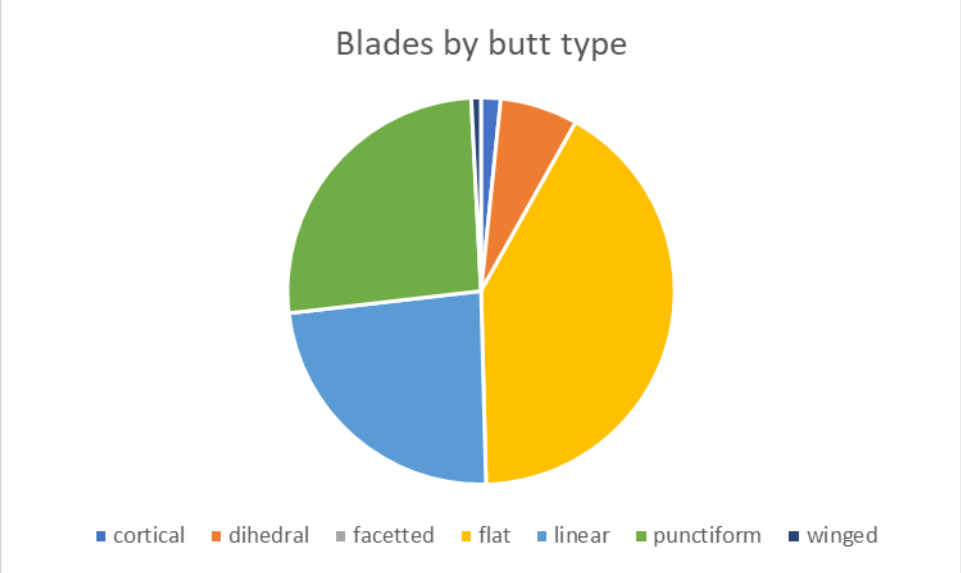

Figure 6.14 Debitage from the subsoil in Area 4N: by blade butt type

The combined data for blank, butt type and stage in the reduction sequence are shown in Fig. 6.15.

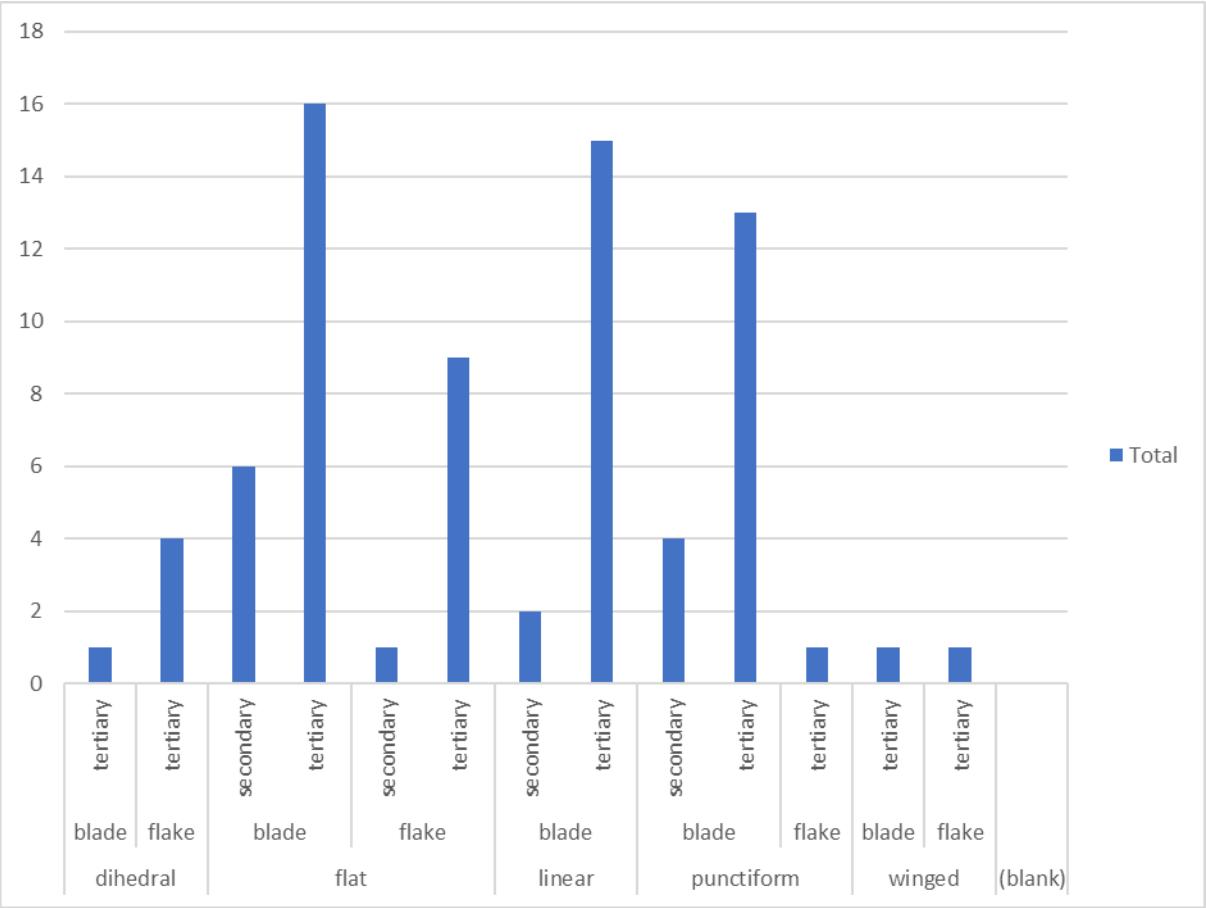

Figure 6.15 Debitage from the subsoil in Area 4N: by butt type, stage and blank

Early Neolithic

Although the majority of the identifiable assemblage dated to the Mesolithic period, there were diagnostic tools and other pieces indicating activity on the site in later periods. As shown in the analysis of cores from Area 4N (above) cores with two platforms at 90 degrees or with multiple platforms are likely to be Neolithic or later. Diagnostic pieces are discussed below.

Leaf shaped arrowheads

The only definite Early Neolithic pieces were two leaf shaped arrowheads, recovered from the subsoil in Areas 7 and 11. Such a small number of diagnostic pieces precludes discussion, pointing only to the occasional visit to the area, probably to hunt along the river's margins.

Late Neolithic

Diagnostically Late Neolithic pieces were similarly few. Three transverse arrowheads were found, one in the subsoil in Area 10, two redeposited in later features in Area 11. Two keeled cores came from Area 7 (one redeposited in a later ditch, one in the subsoil) while Levallois cores came from the subsoil in Area 3W and a later ditch in Area 7. A snub piercer of Late Neolithic type was redeposited in a ditch in Area 3E, while a thick secondary trimming flake worn smooth on the right edge in a manner similar to Late Neolithic scraper/knives came from subsoil in Area 4N.

Beaker

The only pieces identifiable as belonging to this period were four barbed & tanged arrowheads, redeposited in later features and layers in Areas 3W and 7, and in the subsoil in Area 11 and Trench 43 in B4-B8 Spine Road.

Late Neolithic/Early Bronze Age

More generally Later Neolithic and Early Bronze Age material is represented by multi-directional flake cores in Area 4N and a multi-platform core redeposited in Area 10. It is possible that some of the other less diagnostic tools belong to this period, including some of the knives. Of these, two edge-flaked knives were found in Areas 1 and 10, two knives were found in Areas 3E and 11, a plano-convex example came from Area 6. All of these were redeposited in later features. A backed knife, a combination piercer/knife and another knife came from the subsoil in Area 8, and another backed knife was collected from an unstratified location in Area 1.

Later prehistoric

Indications of later prehistoric knapping were uncommon. A piercer, redeposited in Area 5 was of a form typical of the Bronze Age, while a scraper redeposited Area 11 was a similarly

crude form. A few tools with 'miscellaneous' retouch were made on previously patinated pieces.

Other pieces

Apart from the material discussed above, there were a small number of other pieces recovered from the site which do not fit easily into any period. These include the small numbers of piercers and denticulates, which could belong to any of the periods, and more notably the scrapers, which form the most numerous class of tool recovered from the excavations. These are particularly hard to date closely, being a common form throughout prehistory. In this case, the absence of any diagnostic types (thumbnail scrapers, scrapers on blades) makes the assignation of individual pieces impossible, and all that can be said is that proportions of the scraper assemblage are likely to belong to all of the periods otherwise attested by the lithic evidence.

Worked Stone

by Ruth Shaffrey

A total of 21 objects were recovered from three phases of work at Cheeseman's Green (Appendix 4). There are a small number of hammerstones and hones, but the bulk of the assemblage consists of rotary querns and millstones. The more complete examples are catalogued here while details of the less diagnostic pieces can be found in the site archive. There are four rotary querns, one saddle quern, two possible quern fragments, and fragments from seven millstone fragments as well as three hones and four hammerstones.

Four rotary querns comprise one of late Iron Age/early Roman 'Kent 1' form found in a fill of ditch 51208 (50532) in Area 3E (dated to the mid 1st century AD; #1). A second quern was retrieved from pit 40128 (40129) in Area 7 in almost 300 fragments weighing 16.5kg. The lava of this quern was much degraded, but the most well preserved fragments examined for this report indicate a rotary quern of approximately 45cm diameter with a vertically grooved circumference. Lava rotary quern fragments were also found in Area 6 in ditch 30202 (30012) but are not diagnostic and not catalogued here. A Millstone Grit rotary quern fragment of indeterminate diameter was found in Area 5 ditch fill 10634 and probable

quern fragments of Millstone Grit and Greensand in the fill of ditch 50661 (50632, Area 3E) and fill of pit 40154 (40155) in Area 7.

Fragments from probably seven mechanically powered millstones were found, five in Area 7, one in Area 3E and one in Area 5. Two fragments were found in postholes that formed part of large rectangular building 41122 (40120 and 40156; #3 and 4). These seem likely to be part of the same millstone, though they do not adjoin, and the millstone may have been broken up to use as packing. The primary use of these millstones must therefore predate building 41122. The larger of the two fragments (#4) retains a small part of the eye and a ring around it – the diameter of this ring (350mm) suggests the fragment was part of a substantial millstone.

Two millstone fragments were found in features that may have been associated with two pairs of ovens in Area 7 (40307 and 40339; #5 and 6). The larger of these has a wide central eye of up to 210mm diameter indicating its function as a millstone. The smaller fragment appears to be from the same stone, though it does not directly adjoin. As with the fragments used as packing in postholes of building 41122, these suggest a millstone was broken up for reuse.

Three millstone fragments were found in enclosure ditch 41106 (#7-9). One comprises three fragments of a stone some 75cm in diameter, but having worn down to a very thin 33 mm thick (fill of ditch 40239, #7). One fragment from fill 50056 has a diameter of >65 cm (#8) and a second fragment has a diameter of 80cm (#9). They are not part of the same millstone, but a third fragment has been grouped with #9 as it appears to be part of it (although does not adjoin). Two further fragments were found outside Area 7. One millstone from Area 5 ditch 13503 (13504 #10) retains a small part of a central rynd chase and measures approximately 63cm diameter. A fragment from Area 3E ditch 50866 (50364, SF 857 #11) measures >64cm diameter.

A single saddle quern (#12) of probable Folkestone Beds Greensand was found in Area 6 (fill 30012 of ditch 30302). This has been well used on both faces and an edge. Other worked stone includes three hones. One is a rectangular flat whetstone (SF 32, 18001 #13) that has been extensively used while two are chunks of unworked stone with some wear caused by blade sharpening (fill 30019 of ditch 30017 and fill 41021 of depression 41019; not catalogued). Three flint and one quartzite hammerstones include one with significant

percussion damage round the circumference (16003 #14) and three with light damage which might be natural (16002 and 16003; not catalogued).

Discussion

The presence of seven mechanically operated millstones strongly suggests that a Roman mill was located very near to Area 7. The millstone fragments found in this area (along with one each in Areas 3E and 5) were either discarded in ditches or reused in hearth structures and posthole packing. With the exception of the fragments associated with the hearths, the primary use of most therefore probably predates the central building in Area 7, if only by a few years. This suggests a 2nd century AD or earlier date for the Roman mill.

All the millstone fragments are made from Millstone Grit except a single example of Lodsworth Greensand (Sf 857 #11). This is the first millstone of Lodsworth Greensand to be identified in Kent and it extends the distribution of millstones of that stone type into the eastern periphery of where its querns reached (Shaffrey and Roe 2011). The dominance of a single lithology in millstone assemblages, shown here by Millstone Grit, is common although at Ickham, Greensand was the favoured material, closely followed by Millstone Grit (Riddler and Spain 2010, table 58). Overall in Roman Kent, Millstone Grit was the favoured millstone material and was used alongside Greensand and Lava (Shaffrey 2015, Figure 1). It is possible that lava millstones were used at Cheeseman's Green but haven't survived and at nearby Westhawk Farm, three millstones of Millstone Grit and one of lava were recovered, indicating that lava millstones were in use in this area. The millstones at Westhawk Farm were all dated to the second half of the 2nd century AD (Roe 2008) and are therefore probably broadly contemporary with those at Cheeseman's Green.

The mill in which the millstones were used does not appear to have been in the excavated area, but given the nearby location of the 17th century Swanton Mill on the East Stour River some 1.5km from Area 7, it seems likely that a Roman watermill was located on the same river and probably nearer to site than Swanton Mill, given the number of millstone fragments. This is supported by the evidence for crop processing from the environmental evidence and the number of ovens. The presence of germinated grains in some of the samples may indicate the occurrence of brewing and a link has been made in several places for the use of millstones to crush grain prior to brewing (eg at Northfleet in Kent; Shaffrey 2011). It is therefore not unreasonable to suppose that such a link is plausible here. Whether or not the

mill was used to produce flour, or was involved in the brewing process (or both), any further archaeological investigative work close to the East Stour River here should be focused on looking for the remains of the Roman mill.

Metalwork

by Lorraine Mepham, Katie Marsden and Nicholas Cooke (coins)

Coins

Four coins were recovered (see Appendix 5). These comprise a single Late Iron Age potin coin and three early Roman coins (a silver denarius and two large copper alloy coins. Their condition is mixed: both the Late Iron Age potin coin and the silver denarius are in good condition, with little sign of corrosion or wear, whereas the two copper alloy coins are both badly corroded, with significant loss of the original surfaces of the coins.

Three of the four coins could be identified to period – the fourth (Area 6, ditch 30209) is a heavily corroded *As* or *Dupondius* of the 1st or 2nd century AD, but could not be dated closer.

The earliest coin from the site is a Late Iron Age coin cast in potin, a tin-rich bronze mixture (Area 1, Middle/Late Iron Age enclosure ditch 18697). This is a fine example of the Kentish Primary Series, bearing a stylised helmeted bust on one side and a butting bull on the reverse, and dates to the early to mid first century BC.

The earliest of the dated Roman coins (Area 7, enclosure 41106) is a silver *denarius* of Domitian struck between AD 85 and 86. This saw relatively little wear prior to its loss or deposition. The later (Area 6, layer 30036) is a heavily corroded sestertius of Hadrian (AD 117 – 138).

Metalwork

The metalwork, apart from coins, includes objects of copper alloy, lead and iron.

Copper alloy

Of particular interest amongst the copper alloy are three objects recovered together from the subsoil in Area 4. These comprise two small ingot fragments and a socketed tool, possibly a punch. These are of Late Bronze Age date and may represent part of a dispersed hoard: an interesting addition to the known hoards of this date from Kent, although outside the main

concentration of Carp's Tongue metalwork hoards, frequently including ingots, recorded along the north Kent coast, and in particular around the Isle of Thanet (Perkins 1991; Lawson 1995; Andrews et al. 2009). Also of interest is a Bronze Age socketed spearhead recovered from the top of the natural subsoil in Area 1. The spearhead is in extremely poor condition.

Other copper alloy objects include a tiny fragment from the catchplate of a Romano-British bow brooch (Area 5, Late iron Age/early Romano-British boundary ditch 15381); a small fragment which may derive from the bow of a second bow brooch, although Middle/Late Iron Age pottery provides the only other associated dating (Area 7, pit 40107); a section from a circular-sectioned ring of approximately 50 mm diameter, of unknown date and function (Area 5, undated posthole 15007; see Hooley 2001, 104, fig. 42, 167-8); and two small unidentified fragments (Area 6, Romano-British ditch 30209, Area 3E, Late Iron Age/early Romano-British ditch 51208). Part of a small copper alloy button was also recovered from subsoil layer 56002 (Area 11). It is 10 mm in diameter, the external surface is gilded and decorated; it is of late medieval/post medieval date.

Lead

The lead objects include seven small waste fragments from Area 6 (ditch 30209, pit 30177, both Romano-British), and a possible rivet, perhaps for a repair (Area 5, Romano-British boundary ditch 15381). A sheet of lead folded in half and then in half again, was recovered from Romano-British ditch 15371 (Area 5). It appears to be covered in a thick layer of corrosion. The object has been X-radiographed, but no internal details are visible; it is not possible to ascertain if this represents a possible lead curse tablet or is simply a waste fragment.

Iron

The ironwork is in poor condition, and most objects carry heavy deposits of corrosion products. Identification has been primarily by X-radiograph, and some objects remain unidentified.

The majority of the iron objects comprise nails and nail fragments (60 examples). One hobnail found in cremation-related deposit 50854 (Area 3W) may derive from footwear, and therefore provides a possible Romano-British date for the deposit.

Two groups of sheet metal fragments from Area 3E (Romano-British ditch 50639, undated ditch 50744) may belong to vessels – it is possible that they may all belong to a

single vessel, as these two ditches intercut in the north-eastern corner of the site. The fragments include possible rim and base fragments.

Other objects include one blade fragment (Area 1, undated posthole 18192); a possible spoon bit (Area 6, Romano-British boundary ditch 30093; see Manning 1985, fig. 5, 3, though lacking the lanceolate head), a curved blade, probably from a scythe or billhook (Area 3E, Romano-British pit/ditch terminal 50427; *ibid*., fig. 14); a double spiked loop (late Roman ditch 56304).

Objects of later date include a horseshoe and button or token, both from Area 11. The horseshoe is complete but found unstratified. It is a wide web shoe, tapering towards the heel, of Clark (1995) type 3 (C13th/14th) or 4 (14th/15th century). There are three rectangular nail holes on each branch, and a right-angled calkin at each heel. The second object is circular in shape, 20 mm in diameter, possibly a post-medieval or modern button/token, found in subsoil 56002 (ON 19).

Waterlogged Worked Pollard

by Maisie Taylor and Catherine Barnett

A large hollow piece of waterlogged tree trunk recovered from feature 17814 (Area 4N), primarily for identification and dating purposes, proved to have a number of interesting features indicating that it was a piece of a pollard heavily worked near or soon after its demise. The removed pollard top had been placed vertically upside down in the feature. Radiocarbon dating has shown it to be of early Saxon date (see López-Dóriga, below).

A small fragment of the outer rings of the predominantly heartwood piece was taken for identification and dating. A fine slice was taken along three planes (transverse, radial longitudinal and tangential longitudinal sections) using a razor blade. The pieces were mounted in water on a glass microscope slide, and examined under bi-focal transmitted light microscopy at magnifications of x50, x100 and x400 using a Kyowa ME-LUX2 microscope. Identification was undertaken according to the anatomical characteristics described by Gale and Cutler (2000), Schweingruber (1990) and Butterfield and Meylan (1980). Identification was to the highest taxonomic level possible and nomenclature is according to Stace (2010).

The piece is of mature oak (*Quercus* sp.) and proved, under microscopic examination, to be in excellent condition, with no evidence of lignitic degradation, mineralisation, fungal

infiltration or insect activity. A large number of interesting features were observed on the wood. These are not tool marks *per se* but a series of facets, tear marks, depressions, healed scars from previous branch removals and sockets from near or after the demise of the tree.

The piece thickens at one end, where a number of sockets of small pole removals were noted, and this has been identified as the sprouting top of the pollarded trunk. All the bark was stripped and the sapwood removed, apart from one patch at this end. Below were a series of scoop-shaped/dished tear marks down the trunk, indicating that although the removals were probably started with a bladed tool, the branches were systematically ripped off down the tree, working along the grain. Repeated and superimposed marks have caused parallel fluting on the trunk. One narrow (12 mm) slot appeared too neat and thin for a tear mark and may have been caused by a narrow bladed tool. Five or more healed scars attest to one or more previous episodes of side branch removal during the life of the tree, indicating that it had been managed over the longer term. Several unhealed removals/sockets were also observed, indicating modification near or soon after the demise of the piece.

A series of shallow scoop-shaped depressions were also observed, sometimes at the top of tear marks. Regular fluting on the top lip of the pollard seemingly extends into the inner surface of the hollow trunk, bit it is unclear whether this may have been caused by wet rot during its life of the pollard or whether this is further evidence of anthropogenic activity. A regular, smooth slot which penetrates the full thickness of the preserved wood, and goes against its grain (and is therefore unlikely to be natural/post-depositional), appears to have regular small notches on the inner edges, perhaps indicating narrow tool use. In the main, however, the regular tear marks and depressions measure 35 mm, 40 mm and 50 mm, perhaps indicating the dimensions of the tools used to work the piece.

The lowest part of the trunk (although the uppermost in feature 17814) is jagged but there is minimal evidence of post-depositional degradation or truncation. A single rough chop mark indicates deliberate rough removal of the piece from the lower trunk at this point. It is feasible this occurred after the demise of at least the upper part of the pollard, it having become unstable or rotten. It may have been done to rejuvenate the pollard or to use this potentially already hollow piece for another purpose.

Animal Bone

by L. Higbee

Introduction

A total of 1832 fragments (or 2.905 kg) of animal bone came from deposits of Mesolithic, Neolithic, Iron Age and Roman date. A large part of the assemblage (81%) was recovered from the sieved residues of bulk soil samples, consequently it is highly fragmented and includes few identifiable elements.

Methods

The following information was recorded where applicable: species, skeletal element, preservation condition, fusion and tooth ageing data, butchery marks, metrical data, gnawing, burning, surface condition, pathology and non-metric traits. This information was directly recorded into a relational database (in MS Access) and cross-referenced with relevant contextual information.

Results

Preservation and fragmentation

The assemblage is highly fragmented due to poor preservation, and includes just 163 identified fragments. The sieved assemblage includes a large number of small unidentifiable splinters, most of which are burnt (i.e. charred and calcined). Burning removes the organic content (i.e. collagen) of bone and other calcified tissues and this makes it more stable in the burial environment than un-burnt bone. The un-burnt fragments have severely corroded and abraded cortical surfaces as a consequence of physical and chemical weathering.

Area 1

Bone was recovered from a small number of Middle to Late Iron Age and early Romano-British ditches and pits, and two urned cremation burials, 18176 and 18214. Identified fragments include a few cattle, sheep/goat and horse bones. The identified bones are all robust elements that have survived in a recognisable state despite being in a poor state. These elements include tarsals, ends of long bones and teeth. The cattle bones include two near complete, but fragmented mandibles, one from an adult and the other from a senile animal (MWS G and I, after Halstead 1985). The horse bones are all from enclosure ditches 18670 and 18694, and include several tarsal bones. The bones show signs of joint disease (eg,

spavin) commonly seen on horses used traction. Two sheep/goat bones were identified from the urned cremation burials, the bones include part of a humerus and a carpal.

Area 2
A single fragment of cattle tooth came from undated ditch 51180.

Area 3 East
Forty-five fragments of bone came from a small number of Late Iron Age to early Romano-British, and middle Romano-British ditches and pit 50801. The identified bones include a few cattle and sheep/goat bones and a single horse bone.

Area 3 West
Two small calcined fragments of bone were recovered from hearth 50949.

Area 4 North
A small number of bone fragments came from features in this area. The identified fragments include a few cattle bones and a sheep/goat bone from ditches 16270 and 16275, part of a Neolithic cursus. A further fragment of cattle bone was recovered from one of the test pits through the alluvium in this part of the development site.

Area 4 South
A total of 505 fragments came from postholes, pits and gullies (includes possible structure 16280) of Late Iron Age to early Romano-British date. The identified bones are mostly from sheep/goat, but there are also a few pig bones, a cattle vertebra and two phalanges from a bird of prey.

Area 5
Most of the identified fragments from Late Iron Age to early Romano-British deposits belong to cattle and sheep/goat, and there is a strong bias towards robust, durable elements. Two pig bones and a few bones from a small garden bird (or passerine) were also found.

A few fragments came from hengiform enclosure 15369, these include two cattle teeth and a pig tooth. Several other bones including cattle teeth and long bone fragments, a sheep/goat scapula and horn core and part of a pig mandible, came from re-cut 15323.

Area 6
Bone fragments came from a few postholes, pits and ditches, and a possible structure 30122 of Middle to Late Iron Age and Late Iron Age to early Romano-British date. The identified

fragments include several cattle, sheep/goat and pig bones. The bone recovered from Late Iron Age to early Romano-British pit 30124 includes a small number of sheep bones, a cattle tooth and two bone beads (ON 50). The beads are fashioned from the long bone shafts of a sheep-sized animal, and are completely white it colour (or calcined) having been heated to a high temperature.

Area 7

A few identified fragments came from Romano-British features, they a few sheep/goat and cattle teeth and a small piece of red deer antler.

Area 9

Bone fragments came from Areas 9A, B and D. Most of the identified fragments are from colluvium 50017 in Area 9A and belong to sheep/goat. Also of note from the colluvium are several refitting fragments of long bone shaft, the cortical thickness of which is consistent with that of an aurochs. Less common species include cattle, pig, red deer and beaver. Red deer is represented by a fragment of antler and beaver by an incisor tooth, both of which are from palaeochannel 50168 in Area 9D.

The animal bone fragments recovered from Mesolithic cremation burial 50160 include four fragments of roe deer and a piece of worked bone. The roe deer bones include part of the lower forequarter (radius shaft), and left ankle and foot (astragalus, tarsal and metatarsal). The worked bone, a piece of long bone shaft (45.1mm) split axially, has a flat facet along one edge. It is broken at both ends but tapers from 8.4mm to 6.4mm, presumably towards a point. Basic bone points of this nature have been recovered from other Mesolithic sites, including for example at Thatcham in Berkshire (Wymer 1962, 351–3).

Areas 2, 3, 8 and 9

A few bone fragments came from alluvium 50002/3 which spread across several areas of the site. The identified fragments include two cattle long bones, a pig tooth and a small piece of distal humerus from an aurochs.

Area B1–3

Bone fragments came from late prehistoric and Romano-British pits and ditches, including penannular ditch 56901. The identified bones are all from livestock, they include a fragment of sheep/goat radius shaft from cremation grave 56954.

Conclusions

The assemblage is extremely poorly preserved, highly fragmented, and includes few identifiable specimens. Most of the identified bones belong to livestock species. Less common species include horse, red deer, roe deer, aurochs and beaver. The condition of the material and the range of domestic species are typical of other Late Iron Age and Romano-British sites in the Ashford area (Ayton 2013; Charles 2008; Higbee forthcoming; Knight 2012).

Mesolithic burials are extremely rare in Britain (Gilmour and Loe 2015) and the Ashford example is even rarer because of the inclusion of pyre goods. The roe deer bones, part of the forequarter and left hindquarter, indicate that parts of the animal, possibly even a whole carcass, was placed on the pyre perhaps as a food offering. This practice widespread in later cultures so there is no reason to suppose that analogous events took place during the Mesolithic.

Cremated Human Bone and Aspects of the Mortuary Rite

By Jacqueline I. McKinley

Introduction

Cremated human bone was recovered from 19 contexts associated with 15 features distributed across eight areas of the site (Areas 1, 3W, 4S, 5, 6, 7, 9D and 11) and evaluation trench 202. The deposits include the remains of a minimum ten burials, five urned and five unurned, with a possible/probable further two unurned burials (deposit types uncertain). Secondary deposits of pyre debris were recovered from the backfills of most graves containing the remains of unurned burials and two of those with urned burials.

The urned burial remains were dated on the basis of the vessels functioning as urns (see Jones and Seager Smith); one Early Bronze Age, three Late Iron Age/early Romano-British and one early Romano-British (Table 15). In the absence of artefactual dating evidence from the unurned burial remains, bone samples were submitted for radiocarbon analysis and returned a broad range of dates from Late Mesolithic (two) to Late Iron Age/mid Romano-British (one), with two Middle Iron Age and two Late Iron Age/Early Romano-British (Table 15).

The three earlier prehistoric deposits were recovered from the western portion of the site on the south side of the East Stour River, within or on the margins of the flood plain (Areas 3W, 9D and Trench 202). The two Late Mesolithic graves formed distant singletons some 356 m apart, but both lay within areas from which extensive flint assemblages of this date were recovered.

The two Middle Iron Age singletons lay just over 600 m apart in areas apparently devoid of contemporaneous features/deposits (Areas 4S and 5). The Late Iron Age/Early Romano-British graves and the one Late Iron Age–mid Romano-British grave also formed dispersed singletons, mostly situated in the eastern half of the site, with the exception of the adjacent urned burial remains from Area 1 on the north side of the river (Fig. 3.14).

Small quantities of burnt animal bone were recovered from a further 29 charcoal-rich deposits (maximum 15 g, most <5g). This bone is generally heavily fragmented (< 5 mm) and degraded, and in six cases the morphology is too poorly distinguished to state with absolute confidence that it is either animal or human, but the balance is in favour of the former (see Higbee).

Methods

Recording and analysis of the cremated bone followed the writer's customary procedures (McKinley 1994a, 5–21; 2004a). The age and sex of individuals was assessed using standard methods (Beek 1983; Brothwell 1972; Buikstra and Ubelaker 1994; Gejvall 1981; Scheuer and Black 2000; Wahl 1982); levels of confidence include probable ('?'; *c.* 95% confidence) and most likely ('??'; *c*. 65–80% confidence). Interpretation of deposit type was undertaken with consideration the of various criteria of influence – contextual, taphonomic and osteological – outlined elsewhere by the writer (McKinley 1997a; 2013a). Animal bone species identifications were undertaken by L Higbee.

Most of the unurned deposits were excavated by quadrant (and where of sufficient depth (>0.10m), spit) to enable the deposit formation processes to be analysed. Similarly, the urned burial remains were excavated by spit and quadrant under laboratory conditions. A summary of the results, including the combined weight of bone for each context, is presented in Table 15; further details, including the individual spit/quadrant weight of bone, are held in the archive.

Results and Discussion

Taphonomy

The surviving depths of the grave cuts ranged from 0.03 m to 0.22 m, with just over half above the mean of 0.10 m. The two Middle Iron Age graves were amongst the shallowest (0.03–0.05 m), together with the Late Iron Age – mid Romano-British grave in Area 11 (at 0.04 m), and the Early Bronze Age burial remains were recovered from the deepest (the only one >0.20 m). The archaeological components – fuel ash, ceramics and sometimes cremated bone – were visible at surface level in many features, illustrating that an unknown degree of horizontal truncation had occurred at some stage. In several cases disturbance had clearly occurred during machine stripping of the site, eg, graves 16164 (Area 4S) and 30003 (Area 6), but in most instances the damage was earlier in origin. In grave 20204 the upper levels of the vessel had been damaged prior to the loss of whatever formed the lid (possibly ceramic in this case; see below), as illustrated by the bone (confined to the lower 90 mm of the vessel) being immediately overlain by collapsed sherds.

In the approximately 50% of cases where cremated bone was evident at surface level the amounts were variable but usually sparse (eg, Fig. 3.22); with some of the unurned burial remains the archaeological components were limited to the grave margins illustrating the form of the deposit (Fig. 3.31). It is likely that some bone will have been lost due to disturbance in a few cases, but the quantities were probably relatively small with the potential exception of the few very shallow graves (see above). Those features subject to the heaviest truncation will principally have been affected – the 40 mm deep remains of the urned burial in grave 18176 or the similarly shallow unurned burial remains in grave 57153 for example – however, grave depth alone is not a reliable or consistent guide to extent of disturbance. As noted above, the bone (633g) in the urned burial from grave 20204 all lay undisturbed in the lower 90 mm of the vessel and, although the greatest weight of bone in the assemblage was recovered from one of the deeper graves (16120, 0.16 m) the other three containing >500g of bone were between 0.08 m and 0.12 m deep, the second highest weight being from the former. This corroborates observations made elsewhere regarding the lack of correlation between surviving grave depth and the amount of bone recovered; the remains of intact unurned burials being

recorded in graves of only 0.07–0.10 m depth (eg, figures 36–38 Egging Dinwiddy and Schuster 2009).

The bone from most deposits is slightly worn/eroded and chalky in appearance, that from Areas 1 and 7 (Late Iron Age/Romano British urned burials) particularly so; the latter was also partly obscured by a tenacious ?clay/?manganese-based material adhering to the bone. There is no correlation between date, location, grave depth or deposit type amongst the better preserved remains (six contexts) which include urned and unurned burial remains from across the temporal and spatial range, recovered from the shallowest to the deepest graves. All except two of the deposits (one the redeposited 16143 and the other the possibly only partially excavated 50855), contain some trabecular bone; i.e. articular surfaces of the long bones and most of the axial skeleton, generally subject to preferential destruction in adverse soil conditions (McKinley 1997a, 245; Nielsen-Marsh *et al* 2000). The proportions are relatively substantial amongst the material from at least half the graves, with, again, no conclusive distinction between area, burial type or date. Whilst it is probable that bone loss will have occurred via this taphonomic mechanism in some instances at Cheeseman's Green, given the nature of the surface geology (alluvial clays), the quantities are likely to have been very small and to have had minimal impact on the size of the original deposit (but see *Bone weight* and *Fragmentation*, below).

Demographic data

A minimum of 12 individuals (MNI) are represented within the overall assemblage, one from each of the graves including the two probable/possible burial deposits (Table 1). All except one of those identified was an adult, seven of which were assessed as females (with varying confidence levels), a broad subadult/adult age range being attributed to the remaining individual. No adults of >45 years were confidently identified, most falling in the broad, mature adult range of 25–40 yr. No males were identified, though some or all of the six unsexed individuals could be male. The absence of immature individuals (<18 yr), other than the Middle Iron Age subadult/adult, who could fall in the upper reaches of the range, should not be viewed as unusual given the dispersed nature of these burial deposits. Such singletons distributed across the rural landscape, whilst relatively frequently encountered in archaeological investigations, comprise fortuitous discoveries not necessarily representative of the mortuary population from any one temporal phase when viewed in isolation.

Very small quantities of bone (<10g) were recovered from two undated features (16136 and 16142; latter might be Late Iron Age/early Romano-British) in Area 4S. The size, form and nature of the deposits, viewed together with the age of the individual(s) represented, were not commensurate with that of formal burial remains in either case, and they have not been included in the MNI. Less-than a handful of bone was distributed throughout the charcoal-rich fill of cut 16136 (0.07 m deep; 0.30 m diameter), possibly a formal deposit of pyre debris. In the 0.19 m deep cut 16142, some fine particle fuel ash together with the few grammes of bone were spread throughout the elongated feature (0.70 x 0.60 m) and probably represents material accidentally included from an incompletely cleared pyre site. Both features lay in the general vicinity (24–68 m) of cremation graves of various dates, and the bone within them could have derived from one of the same cremations as that recovered from one or more of the burial remains already included in the MNI. Feature 50854, probably Romano-British in date (iron nails recovered from fill), lay 13.4 m to the north of the Late Mesolithic grave 50921 in Area 3W. Unfortunately, the 0.10 m deep cut appears to have been only half excavated, meaning an unknown quantity of bone could lay undiscovered in the charcoal-rich fill left *in situ*. The very small amount of heavily fragmented bone collected is eroded and degraded, and both the quantity and condition suggests the deposit is likely to have represented redeposited pyre debris rather than burial remains, though this cannot be taken as conclusive.

The two Late Mesolithic burial remains from Cheeseman's Green join an exclusive cohort of only three cremation-related deposits of this date currently recorded from the mainland British Isles (the remains of one burial were reported from Co. Limerick, Ireland in 2009; Grey Jones 2017, table 2.1); all revealed by radiocarbon analysis. The one other example, from Langford, Essex, comprised the remains of an unsexed individual >8 years of age (Gilmore and Loe 2015). Numbers from elsewhere in Europe are also sparse; cremation is generally encountered on mortuary sites which also feature burial of the unburnt corpse, the latter appearing to form the predominant rite (Grey Jones 2011). Of the >100 sites listed by Grey Jones (2017) from which human remains of this date have been recovered, 13 included cremated remains; approximately 20 individuals, the majority of which were adults including similar numbers of males and females. Radiocarbon analysis of undated cremated bone is proving invaluable in increasing the corpus of data for these hitherto largely 'invisible dead',

with new examples from France, Luxembourg and the Netherlands being discovered via this mechanism on an increasingly frequent basis (Meiklejohn *et al* 2015; Meiklejohn 2016).

There is little comparable data for the Early Bronze Age from Kent, that which does exist generally comprising inhumed adult singletons (both sexes), predominantly from graves located in the east of the country (Anderson 1994; Parfitt 2004; Perkins and Gibson 1990; McKinley 2006a figure 3; 2015).

Early–Middle Iron Age burials from Kent are particularly sparse, Mays and Anderson citing a MNI of less than five in their 1995 review (380-1; Parfitt 2004, 16; McKinley 2006a, 12–3, figure 4), and although a few additional burials of this date have been found in the last decade the overall numbers probably still remain at <100 (McKinley 2014; 2015). Mortuary rites involving disposal of the unburnt corpse appear to have dominated with cremation burials accounting for around 8% of the more recently excavated remains (*ibid.*). The proportion of immature individuals within the Iron Age cremated bone assemblage from EKA2 was small compared with both the unburnt bone assemblage of the same date and the Bronze Age cremated bone assemblage, and it was suggested that some cultural influence might have been exercised, with immature individuals being preferentially subject to mortuary rites exclusive of the use of fire (McKinley 2015). Although only two individuals of this date were identified at Cheeseman's Green, the addition is clearly valuable given the small overall numbers from the county, and continues to uphold the apparent paucity of immature individuals amongst this cohort – though the true significance of this is as yet untested.

Most Late Iron Age and Romano-British burials from Kent are of cremated remains (eg, Booth *et al* 2008; Mays and Anderson 1995, 381; Hicks 1998; McKinley 2006a figure 4; 2006b; 2008a; Parfitt 2004, 16–17; Witkin and Boston 2006), Mill Hill, Deal providing a notable Late Iron Age exception (Parfitt 1995; 2003, 16). Although some large Romano-British cremation cemeteries have been found (eg, Biddulph 2006; Diack *in prep*.; McKinley 2008a; Frere *et al* 1987), many of the examples of this date comprised singletons or small dispersed grave groups as at Cheeseman's Green (eg, Booth 2011; Egging Dinwiddy and Schuster 2009; McKinley 2006a, figure 5). The latter small assemblage is also similar to most others in the region in the scarcity of immature individuals; for example, with the exception of the major cemetery at Pepper Hill, the majority of burials from sites excavated as part of CTRL Section 1 were devoid of immature individuals (McKinley 2006a; Witkin and Boston

2006), and at EKA2, whereas only one of seven cremated individuals was immature, one third of the inhumed individuals fell in this category (McKinley and Egging Dinwiddy 2015, tables 13.16 and 13.35). Whilst this might suggest a level of localised variation in the burial rite adopted for immature individuals (inhumation in preference to cremation), the potential effects of taphonomic factors and others inherent within the cremation rite requires consideration, and greater numbers would be needed to test the possible validity of an age-related variation in mortuary treatment.

Pathology

Pathological lesions were observed in the remains of seven adults from across the temporal range (Table 15). The intrinsic nature of cremation and cremation burials renders the calculation of true prevalence rates (TPR; i.e. number/proportion of a specific skeletal element affected by a condition) difficult and potentially misleading (McKinley 2004a). Consequently, discussion will be limited to a brief summary of the lesions and their potential significance.

Ante mortem loss of a minimum of three anterior (left canine–premolars) teeth was observed in the fragment of maxilla recovered from grave 57153 in Area 11 (Late Iron Age – mid Romano-British); the remaining anterior sockets were very shallow. As this comprised the only part of the dental supportive structure recovered, it cannot be ascertained whether the changes were restricted to this area or were more extensive. Consequently, the potential cause of tooth loss – which could include extensive wear, trauma or other dental disease such as caries or dental abscesses/apical cysts – cannot be deduced with confidence. There are no indications of other dental conditions, only alveolar resorption, and carious lesions/abscesses are less common in these anterior teeth. Loss due to trauma (a blow to the face) is a possibility as is extensive tooth wear, both of which could also be reflected in the shallow depth of the incisor sockets. The individual was not particularly elderly which could diminish the probability of excess wear (generally age-related) being the primary cause in this case.

Several fragments of skull vault from the Late Mesolithic grave 50160 show areas of increased porosity in the exocranial surface. The lesions are indicative of hypervascularity/ increased blood supply to the area, the potential causes of which include metabolic conditions such as iron deficiency anaemia and scurvy (Roberts and Manchester 1997, 166–173), though

restricted localised lesions might also reflect persistent scratching of the head to relieve the irritation of heavy lice infestation.

Enthesophytes are bony growths which develop at tendon insertions on the bone, the causative factors of which include advancing age, traumatic stress, or various diseases (Rogers and Waldron 1995, 24–25). It is not always possible to be conclusive with respect to the aetiology of particular lesions, but they are commonly seen in the posterior surface of calcanea – as in two cases here – where they probably reflect activity-related stress.

Lesions indicative of osteoarthritis – slight eburnation (polishing) and micro-pitting – were observed in a small marginal area of one femoral head from grave 18216. Lone osteophytes (new bone growth on articular surface margins), which often appear as a 'normal accompaniment of age' and reflective of 'wear-and-tear' (Rogers and Waldron 1995, 25–26), were seen in three spines, including the atlas/axis (neck) joint of one individual, and on the thoracic/lumbar body surface margins of two others. One other adult female has very slight lesions on the medial margins of the left patella.

Extra ossicles in the lambdoid suture (or wormian bones), recorded in two individuals, are a frequently observed asymptomatic morphological variation.

Pyre technology and cremation ritual

Oxidation

The white colour of most of the cremated bone indicates a generally high level of oxidation (Holden *et al* 1995a and b). Deviations from this norm, mostly comprising slightly grey hues, indicative of different levels of oxidisation, were observed in a small number of bone fragments from eight graves; involving remains from all temporal periods and areas of site other than Area 11 (possible related to the very small quantity of bone recovered from grave 57153), and including five of the seven females identified. Amongst the remains of two individuals these variations were limited to one skeletal area (lower limb); in a further two upper and lower limb elements were affected; in three others variations were seen in three skeletal areas (inclusive of the skull in only one); and numerous fragments from all four areas show variations in one individual (30005). Elements of the lower limb were most frequently affected (seven individuals), predominantly the femur (five cases). Parts of the upper limb from six deposits were affected, mostly one or more of the long bones, though in three cases one or more hand bones were also involved. Amongst the four deposits with variations in the

axial skeleton generally only one element was involved (rib), with spinal elements affected in two. Skull elements were least affected (two cases), predominantly the vault. Generally variations were seen in only a few fragments of any one element, sometimes only the inside (medullary cavities) or central areas of the bone (creating a 'sandwich' effect). A greater proportion of individual elements were involved (though never the entire bone) amongst the remains of the Late Iron Age/Early Romano-British adult female from grave 30005; skull vault, mastoid process and left maxilla, several areas of the spine, forearm and hand bones, femur and both patellae. This is also the only individual where slightly darker hues of grey and blue were seen.

Factors affecting the efficiency of oxidation have been discussed elsewhere by the writer (McKinley 1994a, 76–78; 2004b, 293–295; 2008b). The main mechanism suggested in most of the cases from Cheeseman's Green, where the frequency and level of variation is very low, is insufficient time to effect full oxidation of the bone (which may not have been considered a requisite of the rite anyway). This is most likely to be related to a slight shortfall in the quantity of wood used to construct the pyres, which influences both time for cremation and the temperature sustained. The dense muscle tissue attached to the femur (and to a lesser degree the humerus) frequently leads to these bones being amongst the last to be exposed to oxidation; the 'sandwich' effect, created by oxidation from the exposed cortex/medulla through to the core of the bone, being a relatively common feature. This is also likely to have been the main factor affecting the individual buried in grave 30003, but here other influences might also have been involved. The common inclusion of the hand and forearm bones could reflect their peripheral (cooler) position on the pyre, possibly connected to an overly narrow pyre construction (also a potential factor with the Late Mesolithic 50161). Some form of covering/wrapping (skin/fur/leather) around parts of the body, or – given the date – a solid-based funerary couch, would have had a insulating effect in the early stages of cremation slowing the commencement of oxidation.

Minor, and occasional major, variations in oxidation of the bone have been observed in archaeological cremation burials across the temporal range of the rite in the British Isles (eg, Bell 1988; Boyle 1999; McKinley 1997a; 2004c; 2008b), and currently few consistent temporal or geographic variations are apparent. The Late Mesolithic remains from Langford were uniformly white (Gilmore and Loe 2015). Bone from two of the Mesolithic sites (France and Luxembourg) shown in Grey Jones' table 2.1 (2017) were poorly oxidised, but in both

cases the suggestion is that the corpses were not 'cremated' as such (cremation being a mortuary rite used to transform the corpse from a fleshed state to dry (as opposed to green or semi-green), fragmentary bone through the medium of fire; McKinley 2013a), rather fire was being used as part of a defleshing process. The remains from Cheeseman's Green do, overall, show less variations in oxidation than seen elsewhere in the county. More intense, if not more extensive, variations were seen in some of the Late Iron Age remains from the neighbouring Brisley Farm, for example, and this is also the case for remains of all periods from the EKA2 sites (McKinley 2013b; 2015 table 13.36). Amongst the remains from EKA2, as at Cheeseman's Green, the most extensive variations were seen in the Romano-British examples, which suggested some temporal variation either in pyre construction and/or in tending. The writer has previously observed that body mass appears to have been a major factor in the efficiency of Romano-British cremations, large adult males most consistently demonstrating incomplete oxidation of the bone suggesting there may have been less flexibility employed in the size of pyres to accommodate the needs of individual corpses in this period (McKinley 2008b). Whatever the period, it seems that full oxidation of the organic components of the bone was not necessarily viewed as a requisite of the rite, the transformation from corpse to fragmented skeletal remains fulfilling the major requirements of the mortuary process.

Bone weight

The quantity of bone included in the burial deposits has a broad range of 30.3 g–911.3g; the lower end of the range derives from a heavily truncated (0.04 m deep) grave (57153) and the upper end from a grave (16120) containing intact unurned burial remains (NB. includes bone from bioturbated interfaces). There are variations between periods, but some of the differences undoubtedly reflect the level of disturbance and associated bone loss (including that of trabecular bone due to taphonomic factors), and cannot confidently be attributed to temporal distinctions as the recorded weights – in at least a small proportion of cases – will be lower (if only slightly) than those of the original deposits.

Since the type of deposit made in the Late Mesolithic feature (?grave) 50921 is uncertain (due to incorrect excavation methods and inadequate site records), only that from grave 50160 can be confidently taken as representative of a burial deposit. The quantity recovered is relatively low, representing about 23% of the average expected from an adult

cremation (McKinley 1993). Whilst this is more than the 118g from Langford, the latter is believed to represent the remains of redeposited pyre debris rather than those of a burial (Gilmore and Loe 2015). Not all the examples given in Grey Jones' table 2.1 (2017) include bone weights, many of the weights shown are inclusive of unspecified proportions extraneous material ('mixed'), and undoubtedly a variety of deposit types are represented. However, a maximum of 1979g was recovered from Pit A at Hermitage, Co. Limerick – denoted as 'mixed' – the deposit description being commensurate with that of a burial.

The quantity of bone from the Bronze Age grave (undisturbed burial) represents *c*. 40% of the average expected weight of bone from an adult cremation and falls within the median range of weights recovered for the period (McKinley 1993; 1997b, 142). The likely level of disturbance to the Middle Iron Age burial remains means any comment or comparisons could be misleading.

The mean weight of 459.8 g from the Late Iron Age/Romano-British burial remains (substantially affected by the inclusion of the heavily truncated grave 57153, excluding which the mean would be 525.7 g) is within the median/upper range of those recorded from assemblages of similar date elsewhere (McKinley 1997a, 68–9; 2004b table 6.6; 2015 table 13.37; Stirland 1989). The mean obviously includes several disturbed deposits but there is a marked difference between even the two undisturbed burials (both unurned) – 396.8–911.3g – where the maximum represents around 57% of the average expected from an adult cremation (McKinley 1993). The one conclusively Romano-British burial also falls in the upper median range (McKinley 2004b).

A variety of intrinsic and extrinsic factors may influence the weight of bone recovered from a burial and wide ranges in bone weights are common (McKinley 1993). These variations cannot be explained purely by differences in preservation and disturbance, mode of burial or the sex of the buried individual, and – with a few exceptions (eg, see McKinley 1997b) are likely to be linked to idiosyncratic local influences.

Fragmentation

A variety of intrinsic and extrinsic factors can affect the size of cremated bone fragments, many of which are exclusive of any deliberate human action other than that of cremation itself (McKinley 1994b; 2004b). Taphonomic factors comprise a major influence, and a misleading

impression of the condition of the bone at the time of burial can be formed without due consideration of these mechanisms.

The majority of the bone from the Cheeseman's Green burial remains was recovered from either the 10 mm or 5 mm sieve fractions, and the maximum fragment sizes have a relatively broad range of 26–68 mm (Table 16). However, these figures can provide only a guide to the levels of fragmentation to the bone at the time of deposition. Cremated bone is extremely brittle and post-depositional fragmentation commonly occurs along the lines of dehydration fissures formed in cremation which, particularly when infiltrated by soil in the burial environment, will often break-up during excavation (however carefully undertaken). Data from the urned burial remains from Cheeseman's Green demonstrates this phenomenon; measurements of the maximum fragment size taken *in situ* compared with those recorded in analysis show a reduction of up to 65%, though 10–20% was more common. Less clear is how much of the commonly observed >2mm/'dust' fraction – not included in the total bone weights as they are inclusive of large proportions of extraneous material – is also due to taphonomic processes and how much comprised part of the original deposits. This 'un-weighed' fraction is estimated to have represented in the region of 12% of the overall weight of bone on occasions, but generally it was much smaller, and in some cases almost non-existent – usually in those deposits where most bone fell in the 10 mm fraction. As the latter predominantly comprise the urned burial remains, taphonomic factors are largely implicated, the urn affording the bone greater protection from the adverse effects of the soil.

The figures for the Mesolithic material are similar to those presented by Gilmore and Loe (2015), with most of the bone recovered from the 10 mm fraction (44%) and a maximum fragment of 34 mm. The Bronze Age data falls in the median–upper ranges and the Iron Age and Romano-British in the median–lower ranges of figures recorded elsewhere (eg, McKinley 2015, table 13.38). Taphonomic factors are believed to be the major factor, after cremation, influencing the relatively high levels of fragmentation recorded. There is no conclusive evidence to support there having being any deliberate fragmentation of the bone prior to burial, and there are no definitive temporal differences.

Skeletal elements

Variable proportions of the bone from each burial were identifiable to skeletal element (a named bone within one of the four skeletal areas), ranging from a meagre 13% from the

heavily truncated urned burial 18178 to the 72% from grave 30003, both Late Iron Age/Early Romano-British. The Late Mesolithic and Middle Iron Age remains fell at the lower end of the median range (generally 30–50%, *pers. obs*.) with 35–39% and 29–39% respectively; the Early Bronze Age deposit lay at the upper end of the range with 52%.

As is commonly observed, each grave contained an assortment of bone fragments from all skeletal areas, with the frequently encountered over-representation of the readily identifiable skull elements, generally at the expense of the fragile axial skeletal elements (see *Taphonomy*). In both the Bronze Age and the Middle Iron Age deposits, the upper limb was also identified in greater than 'normal' proportions, though not to a significant degree. None of the deposits presented a distribution close to what is classified as 'normal' – 18% skull, 20% axial skeleton, 23% upper and 38% lower limb by weight (McKinley 1994a, 6). In most cases this is undoubtedly due to taphonomic influences and the ease of identification of some elements, but in two Late Iron Age/Early Romano-British cases other factors might also have been involved. A large percentage of the bone from grave 30003 was identified to skeletal element (72%), a disproportionate amount of which comprised lower limb fragments (52%). No one skeletal area appeared to have been detrimentally affected as a result, with even the axial elements being relatively well represented (13%). There are, however, indications for a distribution pattern within the burial deposit on the basis of skeletal area, with lower limb throughout, greater proportions of upper limb in two lower quadrants, and of axial skeletal elements in the upper spit and one central quadrant, and a marked absence of the readily identifiable skull elements in other than the upper-most spit. This suggests an ordered collection/deposition of elements, with those of the skull and, to a degree, the axial skeleton being added last. Rather than being deliberately excluded from the burial, it might be that these elements – particularly the skull – were being preferentially retained for disposal/distribution elsewhere, perhaps as *memento mori* (McKinley 2013a). A similarly ordered deposition might be suggested for the heavily truncated urned burial from grave 18176, where only 6% of the identifiable bone comprises skull – if predominantly deposited in the upper levels of the vessel these elements would have been those to suffer greatest in the disturbance. Such ordered deposition of remains and potential selection of skull elements for 'curation' has been observed in Romano-British burial remains from other sites in Kent (McKinley 2015, 422–423).

The small bones of the hands and feet are routinely recovered from cremation burials, and the writer has discussed elsewhere how their frequency of occurrence might be indicative of how the bone was collected from the pyre site for burial (McKinley 2004b, 300–1); the frequent recovery of such small elements suggests the bone was gathered by raking the remains off the pyre site and followed by winnowing to clear away any fuel ash (easing the recovery of the smaller skeletal elements) as opposed to individual hand-recovery of fragments (McKinley 2004b, 299–301).

One grave at Cheeseman's Green contained none of these small elements; small numbers (<8) were recovered from six graves (including the heavily truncated 57153) ; two other graves each contained 12; and 25–26 small elements were recorded from each of three graves. Other than for the two Middle Iron Age deposits, there is no consistency between the number of small elements recovered and their date, the three graves with the greatest numbers spanning the temporal range (Table 17). The data suggest that different modes of recovery may have been employed for different individuals, but on what basis is unclear. As with other aspects of the rite, idiosyncratic local influences – such as the preference of those undertaking the task at any one time – are likely to have played their part.

Pyre goods

Small quantities (<7g) of what is believed to be cremated animal bone were recovered from amongst the remains of four burials (Table 1); the fragments are too small/eroded to enable species identification though in one instance (grave 57153) the bone sems to have derived from an immature individual, probably a medium-sized mammal (see Higbee). Since it was a characteristic of the rite across the temporal range not to collect all the human remains for burial, it is probable that the remains of pyre goods were also overlooked (accidentally or deliberately) in this secondary part of the mortuary rite. The presence of cremated animal bone amongst the burial remains is a characteristic of the rite across the temporal range. There are variations in both the species encountered (and their nature/significance) and the frequency with which they occur; the later periods tend to have greater diversity in the species encountered and marked inter-site differences in the numbers of burials inclusive of such remains (eg, McKinley 1997b; 2000b; 2006c, table 5.1; 2015, 424–426).

Slight blue/green 'spot' staining was observed on bone fragments from four of the Late Iron Age/Romano-British graves and the redeposited bone from Area 4S. Elements from

the upper part of the body were predominantly affected – skull vault and mandible, humerus and metacarpal, rib and cervical vertebrae. Such staining is suggestive of the presence of some form of copper-alloy object(s) overlying the area of the upper chest – with the hand possibly crossed over the chest in one instance – during cremation. This type of staining, in similar skeletal locations, has been observed to cremated remains of this period from other sites in Kent (eg, McKinley 2008a; 2015, 426). This often occurs where no remains of copper-alloy pyre goods are found, indicating they were either accidentally overlooked during collection of remains from the pyre site or deliberately excluded from inclusion in the burial (*pers. obs.*); there is evidence from some Romano-British cemeteries for deliberate selection of certain types of pyre good for burial, others being left with the pyre debris (Cool 2004, 437–60; Polfer 2000).

Formation processes

A few comments relating to formation processes have already been made above (see *demography*, *taphonomy* and *skeletal elements*) including those related to the ordered deposition of skeletal elements in certain burials.

While details of the formation processes for the Late Mesolithic deposits are limited, it does appear from the site photographs that the bone in grave 50160 (?predominantly) lay in the deepest portion of the grave and that pyre debris had been added above/to one side of the burial deposit.

A similar deposit of pyre debris was clearly present in the Early Bronze Age grave 20204, made in the south-eastern portion of the grave after the urned burial had been made (Fig. 3.1). Some of this material had infiltrated the vessel fill but only following collapse of the vessel sides into the void above the bone (see *taphonomy*). Parts of a second vessel (base and body sherds; see Jones and Seager Smith) were also recovered from the upper levels 'inside' the urn, the sherds laying slightly below and amongst those of the collapse urn. Given its location and the elements represented it is likely that this vessel was placed in the mouth of the urn and functioned as a 'lid'. In the lower 40 mm depth of the vessel the bone lay horizontal, but in the upper half of the fill it was angled in towards the centre; this suggests either the presence of some form of organic material within the vessel around which the bone was arrayed or, that it may have been held in a loose ?textile bag which sagged centrally on being placed in the urn. The latter proposition may be supported by the uneven horizontal

distribution of the bone, where one quadrant consistently included more bone that the others throughout the depth of the deposit (30% by weight) and one other consistently less (19%). The use of 'primary' organic containers for bone buried within vessels has been convincingly demonstrated at several other Bronze Age sites (eg, McKinley 2015, 426; 2016; 2017), though in most cases the urn was inverted.

In both of the Middle Iron Age burials (unurned) the majority if the bone was found in the western portion of the graves: 51% (by weight) in western quadrant of grave 15049 with only 12% in the southern quadrant; 63% in the west half of grave 16164, with 37% in the north-west quadrant. In both cases the burials were probably made in an organic container with a secondary deposit of pyre debris made within the rest of the grave fill. Whether the positioning was simply fortuitous or carried some ritual significance is a matter of conjecture; a greater body of data would be required for the period before any conclusions could be drawn.

Over half the bone was recovered from one quadrant within the heavily truncated Late Iron Age/Early Romano-British urned burial remains in grave 18178, 79% laying in one half. Such an uneven distribution again suggests that the bone was held in a 'primary' container of fabric which lay askew within the vessel.

The Late Iron Age/Romano-British urned burial remains were recovered from different Areas of the site to the unurned burial remains of the same date. The former were all devoid of pyre debris in the grave fills whereas, in common with those of earlier date and the early Romano-British example, the graves containing unurned burials remains were inclusive of secondary deposits of pyre debris. The recovery of pyre debris from a variety of deposit types is a relatively common feature in all periods (McKinley 1997b; 2004b; 2013a; 2015). Whether its inclusion within grave fills represented a purely practical 'cleaning-up' process or part of the 'closure' of burial is uncertain, but its presence does suggest the relative proximity of the pyre site to the place of burial. Cremated remains are intrinsically portable, whether urned or carried in some other form of container (bag/basket), but it is less likely that a separate container of pyre debris would also be carried any significant distance or be subject to 'curation'. This raises the question as to whether the urned burials made within graves devoid of pyre debris relate to cremations undertaken at a distance from the place of burial, possibly even curated above ground for some time prior to final deposition, or if – as has been

suggested for other aspects of the rite – we are simply seeing idiosyncratic variations based on the preference of the deceased, their relatives or other mortuary ‘practitioners’.

7. Environmental Evidence

Charred and Waterlogged Plant Remains

by John A Giorgi

Introduction

Environmental bulk sediment samples were collected for the recovery of charred plant remains for information on the agrarian economy and human activities at the site, from the early prehistoric through to the Saxon period. A Romano-British pit/well was also sampled for the retrieval of waterlogged remains and evidence on the character of the local environment in the vicinity of the sampled feature during this period.

A total of 383 sediment samples were collected from a wide range of features from eight areas of the site (Areas 1–7 and 9) and evaluation trench 202, over half the samples being from Area 4. The majority were from Late Iron Age/early Romano-British and Romano-British contexts which accounted for 82% of the samples from datable deposits, with smaller numbers of samples from Early to Late Bronze Age (22), Early to Late Iron Age (14) and Saxon features (2). Almost 40% of the samples, however, were from undated contexts.

The volume of the samples ranged from less than 1 litre (largely spit or quadrant samples) to 40 litres. Samples were processed for charred plant remains by standard flotation methods, the flot retained on a 0.5 mm mesh and the residue on a 1mm mesh; smaller mesh sizes of 0.25 mm and 0.5 mm for the flot and residue respectively, were used for the recovery of the 'waterlogged' plant remains from the Romano-British pit/well sample. Over 3,000 litres of sediment were processed. The flots were dried with the exception of the 'waterlogged' sample, which was kept wet to limit deterioration of any fragile organic remains.

The assessment showed the presence of identifiable charred plant remains in 167 of the 383 samples although 52 of the productive samples were from undated features. Twenty-eight charred assemblages from datable features were recommended for further analysis along with the one plant assemblage from the Romano-British pit/well (Wessex Archaeology 2014a).

Virtually all the samples selected for analysis were from Late Iron Age/early Romano-British and Romano-British contexts. One sample was only broadly dated to the late

prehistoric period and another to the early medieval period, while radiocarbon dating of cremated bone showed a Late Mesolithic date (5720–5570 BC) for cremation grave 50160. The selected assemblages were from the following features, pits (nine samples), ditches (four) and postholes (four); hearths (three); cremation graves (two), gullies (two), beam slots (two) and ovens (two) and a building deposit (one) from all the sampled areas of the site except Area 2.

The charred plant remains from the selected samples were sorted from the flots and identified using a binocular microscope (with a magnification of up to x40) together with modern and charred reference material and reference manuals (Cappers *et al.* 2006; Jacomet 2006). All the remains were quantified with the exception of charcoal fragments and the waterlogged plant material, estimates of which were made using the following scale: + =1–10; ++ = 11–50; +++ = 51–150; ++++ = 151–250; +++++ = >250 items.

Results

The charred plant remains from the analysed samples are shown by period in Tables 18-20 and the waterlogged plant remains from the Romano-British pit 40960 in Table 21. Taxonomic order for the wild plants follows Stace (2010), which was also used for ecological data together with Hanf (1983) and Wilson *et al.* (2003). Nomenclature for the cereals follows Zohary and Hopf (2000). Over 5,000 charred items were quantified, with individual assemblages ranging in size from less than 100 to over 1000 items. Charred grains and cereal chaff made up the bulk of the evidence, accounting for 41% and 45% respectively of the quantified remains, while other plants, largely wild plant/weed seeds but occasionally other potential economic/food species, made up the other 14%. The waterlogged remains were from wild plants associated with a range of habitats.

There follows a discussion of the botanical remains by period and area, highlighting interesting assemblages and examining the nature and spatial distribution of any human activities across the excavated areas, including any changes between periods.

Mesolithic

A fill (50161) of cremation grave 50160 in Area 9, radiocarbon dated by bone to the Mesolithic (5720–5570 cal BC), contained a small charred plant assemblage of almost 50 hazel (*Corylus avellana*) nut shell fragments (weighing 0.7 *g*), a small number of dock

(*Rumex*) seeds and a possible seed of cleaver (*Galium aparine*) along with a fairly large amount of charcoal. The shell may represent food residues of gathered nuts, thrown onto the fire during the ceremony or placed there as food offerings. They may have also been incidentally burnt as part of hazel wood collected as fuel for the cremation together with the wild plant remains in the sample.

Hazelnut shells are ubiquitous on Mesolithic sites and were probably an important wild food resource at the time, as they appear to have continued to be into the Neolithic (Greig 1991, 301; Moffet *et al.* 1989).

Late prehistoric

A fill of ditch 50657 (slot 50389) in Area 3E produced a modest charred cereal grain assemblage, almost all the identifiable remains consisting of well-preserved barley grains, many of which were hulled and several twisted, evidence for six-row hulled barley. There were also traces of wheat grains, with a few glume bases showing the presence of hulled wheat. Several weed seeds of dock and possibly brome (*Bromus*) were also recorded. This assemblage is indicative of a virtually clean hulled barley deposit ready for use.

Late Iron Age/early Romano-British

Sixty seven of 104 samples from late Iron Age/early Romano-British contexts produced charred plant remains. The larger assemblages from 14 samples were analysed although the assessment results from the other 53 samples will also be considered in the following discussion. Cereal debris made up the bulk of the quantified material, grains and chaff accounting for 47% and 35% respectively of the total, while other remains, largely wild plant/weed seeds, made up the other 18%.

Cereals

Cereal grains were present in 54 samples and chaff fragments, mainly from hulled wheat, in 35 samples. The grains, however, were generally poorly preserved and just over three-quarters could not be identified further.

Hulled wheat was the best represented cereal, identified in 46 samples on the basis of both grains and chaff fragments, with evidence for spelt (*Triticum spelta*) and emmer (*Triticum dicoccum*) in 14 and 11 samples, respectively. Spelt was slightly better represented

than emmer although the majority of the hulled wheat grain and chaff could not be reduced to species; therefore, it was not possible to establish which of the two cereals, if any, was dominant at this time. There were also individual free-threshing wheat (*Triticum aestivum* type) grains in three samples. Barley was the second best represented cereal, identified in 35 samples, with a few hulled and twisted grains showing the presence of six-row hulled barley. A single barley rachis fragment was also recovered. There were a small number of oat (*Avena*) grains and awn fragments in ten samples but no diagnostic floret bases to establish if these were from cultivated and/or wild species. A few large culm node fragments in one sample may belong to wheat or barley straw.

Hulled wheat and hulled barley are the main cereals found in Late Iron Age and Romano-British deposits in southern England (Greig 1991, 306, 309). Spelt wheat tends to be the main hulled wheat in later prehistoric contexts although archaeobotanical evidence from Kent suggests that both spelt and emmer were important crops in their own right during the Iron Age, possibly sometimes grown together or alongside one another. Spelt, however, appears to be the dominant hulled wheat by the Romano-British period (Giorgi 2006). Sites of a similar date in the immediate vicinity show a mixed picture; at South-east of Park Farm spelt chaff was better represented in two early Romano-British pits but emmer chaff dominant in an early Romano-British hearth sample, while both were equally well represented in other contexts (Stevens 2012). Spelt, however, was the dominant cereal with only low amounts of emmer in Romano-British deposits at Westhawk Farm (Pelling 2008, 350). Both sites contained evidence for six-row hulled barley and wild oats (*Avena fatua*), while occasional grains of free-threshing wheat were recovered at South-east of Park Farm (Stevens 2012).

Legumes

Charred legumes were present in 20 samples, including a fairly large number in a sample from oven 15137. With the exception of two possible broad bean (*Vicia faba*) seeds in one sample, these remains could not be reduced to species and thus it is not possible to establish whether they are from cultivated and/or wild pulses, many consisting of small (<2 mm) vetch/tare/vetchling (*Vicia/Lathyrus*) seeds which are probably weeds. Broad beans have occasionally been recovered from other Late Iron Age/Romano-British sites in Kent (Giorgi 2006).

Wild plant foods

A few charred hazelnut shell fragments in six samples and two sloe/blackthorn (*Prunus spinosa*) fruit stones and possible haws (*Crataegus*) in single samples, may represent the residues of wild foods gathered from scrub/hedgerow vegetation close by or incidentally bought onto the site with wood to be used as fuel. Charred hazelnut shell was also found in Middle Iron Age deposits and sloe/blackthorn remains in an early Romano-British context at South-east of Park Farm (Stevens 2012).

Wild plant/weed seeds

There was a fairly low number of wild plant/weed seeds in the Late Iron Age/early Romano-British samples, probably mainly from arable weeds given their presence in assemblages largely dominated by cereal debris. The species range was very similar to that recorded in Late Iron Age/Romano-British samples at South-east of Park Farm (Stevens 2012), with the better represented species being goosefoots (*Chenopodium*), knotweeds (*Persicaria*), dock and grasses (Poaceae) – both large-seeded including brome and possibly oats, and small-seeded, for example fescue/rye-grass (*Festuca/Lolium*). Some of the small legume seeds may also be from weeds.

The weeds represented in the samples may grow in a range of soils although a few may provide tentative information on the range of soils being cultivated at the time; field madder (*Sherardia arvensis*) is usually found on light calcareous loams while black bindweed (*Fallopia convolvulus*), knotgrass (*Polygonum aviculare*), sheep's sorrel (*Rumex acetosella*) and ribwort plantain (*Plantago lanceolata*), are associated with sandy soils. Soils in the vicinity of the site consist of areas of recent alluvial silts, sands and gravels associated with the floodplain of the East Stour River, with base rich loamy and clayey soils to the west and free-draining slightly acid but base rich soils to the east. Two of the weed seeds in the samples, cleaver and blank bindweed, albeit represented by just one seed each, are usually associated with winter and spring-sown cereals, respectively.

Sample composition and cereal processing activities

The internal composition of charred plant assemblages may provide information on crop-processing activities being carried out, from the earliest stages through to storage and food

preparation. Different stages of the cleaning sequence may be highlighted by examining the proportions of grain, chaff and weed seeds in individual assemblages.

Fig. 7.1 shows the number of grains, chaff fragments and wild plant/weed seeds, in the five Late Iron Age/early Romano-British sampled features that contained more than 100 quantified charred plant items. Cereal debris was the dominant component in four of these assemblages from three pits and a hearth, accounting for between 85% and 98% of the quantified remains and representing virtually cleaned grain deposits. This pattern was also repeated for the smaller charred plant assemblages from this period, consisting largely of variable amounts of cereal grains and chaff fragments and relatively few weed seeds. Weed seeds from both large and small-seeded species made up only a minor component of the charred plant assemblages in virtually all the Late Iron Age/early Romano-British samples, suggesting that the earlier cleaning of the cereals, including the separation of the weed seeds by sieving, was taking place elsewhere, either on or off site.

The grains in these samples were mainly very poorly preserved and largely unidentifiable, and may have become accidentally burnt while being dried before milling or storage or, in the case of hulled wheats, during parching to facilitate de-husking. The chaff, virtually all from hulled wheat, may have also been accidentally charred as part of the same process or through its use as fuel following the pounding of the grains.

Grains were the dominant feature in two of the five large assemblages, from pits 16084 and 16086 (Area 4S), indicative of mainly clean grain with a little chaff from de-husking. The assemblage from pit 18172 (Area 1) contained more chaff than grains, much of which, however, consisted of awn fragments. Chaff made up 88% of the charred remains in pit/hearth 50132 (Area 9B), probably debris from the use of chaff as fuel for this feature following de-husking, while two more modest sized charred assemblages from nearby pit/hearths 50124 and 50114 produced a mix of grains (probably accidentally burnt during cooking) and chaff plus small numbers of weed seeds.

The other rich Late Iron Age/early Romano-British sample, from oven 15137 (Area 5), was significantly different in that other plant remains made up 70% of the quantified debris with relatively few grains (25%) and chaff fragments (5%). Over half of these remains consisted of legume seeds which could represent accidentally burnt debris from the drying of a food/fodder legume crop. Most, however, were small-seeded *Vicia/Lathyrus* seeds and could be simply weeds, possibly indicating low or decreasing soil fertility from over-

cropping, leguminous seeds thriving in such soils. All the weed seeds in this sample may have been used as fuel for the oven.

The more modest sized assemblages included a charred plant assemblage from linear feature 30124 (Area 6), which consisted almost entirely of poorly preserved cereal grains and some large legumes including possibly broad bean, with only traces of chaff and a few large weed seeds.

Romano-British

Thirty-seven of 90 samples from Romano-British deposits contained charred plant remains, 12 being selected for further analysis along with the waterlogged plant assemblage. The botanical remains recorded during assessment in the other 25 productive Romano-British samples are also considered in the following discussion. The Romano-British samples produced much greater amounts of charred plant remains than those from the Late Iron Age/early Romano-British features, with several thousand quantified items being counted. Cereal debris, however, again made up the bulk of the quantified material, grains and chaff accounting for 38% and 51% respectively of the total, and other remains, largely wild plant/weed seeds, making up the remaining 11%.

Cereals

Cereals were represented in 29 samples by both grains (27 samples), and chaff (17 samples) – virtually all from hulled wheat. Over half the grains could not be identified further.

Wheat was represented in 24 samples, with hulled wheat in 23 samples being the dominant cereal. The well-preserved remains show spelt to be the main hulled wheat identified on the basis of spikelets, grains and very large amounts of chaff, in 12 samples; There was only limited evidence for emmer, with one possible grain and a small amount of chaff, in six samples. Several assemblages included germinated hulled wheat grains and loose coleoptiles, evidence of possible brewing activities on site (see below). There were occasional and small numbers of free-threshing wheat grains in five samples.

Three samples contained just a few barley grains one of which was hulled, while there were small numbers of oat grains (and also awn fragments) in nine samples, several floret bases in two samples showing the presence of wild oat. A few large culm node fragments in two samples may belong to cereals.

Spelt tends to be the main wheat grain during the Romano-British period in southern England (Greig 1991, 309), as also shown in the evidence from Westhawk Farm (Pelling 2008) and from other Romano-British sites in Kent. The general pattern from the county reflects the results from Cheeseman's Green, spelt usually being the main cereal with smaller amounts of hulled barley, little emmer and only occasional free-threshing wheat grains (Giorgi 2006).

It is not possible, however, to establish if the dominance of spelt at the site signifies a change from the later Iron Age/early Romano-British occupation because the majority of the hulled wheat remains from the earlier samples could not be reduced to species. There is, however, less evidence for barley on the site during the Romano-British period, while free-threshing wheat continues to be represented by only a few grains in few samples. The evidence suggests that oats were not cultivated during this period although it has been suggested that the wild oats and brome seeds (present in large amounts), both common large arable weeds and therefore difficult to separate from the grain, may still have been used, particularly during poor harvests or if the grain was intended for animal feed (Pelling 2008, 354).

During the Romano-British period cereals may have been used for baking and porridge including a gruel known as *puls,* made from spelt wheat or barley and similar to modern Italian *polenta* (Renfrew 1985, 22). Spelt, the main cereal at the site, has excellent baking and milling properties (Jones 1981, 107) and contains the proteins necessary for a well-risen loaf; free-threshing wheat is also a good bread-making grain but was poorly represented on the site, as was barley which produces poorer quality flat bread but was good for griddle cakes (Cool 2006, 71). Barley may have also been used as horse fodder. The presence of large numbers of germinated grains in two samples from oven 40124 and posthole 40995, in the central building in Area 7, may be evidence for malting of the grains for brewing on the site. This will be discussed in more detail below.

Other crops and plant foods

Two possible broad beans in pit 40182 and a tentative identification of flax (*Linum usitatissimum*) in feature 41019 (both in Area 7) may represent the residues of other field crops, both of which have occasionally been found at other Romano-British sites in Kent (Giorgi 2006). Indeterminate legume seeds, including vetch/tare/vetchling, in eight samples

may be from cultivated and/or wild species. Legumes, which are high in protein, may have played an important role in the Romano-British diet, in soups/stews, or dried, ground up and used together with cereal flour. Beans may have also been used as horse feed. Flax seeds may have been used as food or linseed oil for lighting or cooking, with the fibres used for linen.

The only other potential food remains in the Romano-British samples were occasional hazelnut shell fragments in six samples which may represent debris from gathered and consumed wild foods. There is little other evidence, however, for scrub/hedgerow vegetation except for occasional hawthorn (*Crataegus*) thorn fragments and acorn (*Quercus*) capules, three of which were also found in three early Romano-British deposits at South-east of Park Farm (Stevens 2012).

Wild plant/weed seeds

Wild plant/weed seeds present in 23 Romano-British samples again made up only a small percentage of the quantified remains from this period although the species range was broadly similar to that represented in the late Iron Age/early Romano-British samples with a few exceptions; for example field madder, usually found on light calcareous loams, being absent. The presence again of black bindweed, sheep's sorrel, ribwort plaintain and hairy buttercup (*Ranunculus sardous*) may very tentatively point to the cultivation of sandy loam soils while occasional records for spike-rush (*Eleocharis*) and sedge (*Carex*) may suggest the use of damper areas of arable ground. Alternatively, these remains and other potential grassland plants, such as buttercups (*Rananuculus acris/repens/bulbosus*) and yellow rattle (*Rhinanthus minor*), may be the residues of collected and burnt grassland vegetation. Two weed seeds also found in the Late Iron Age/early Romano-British samples, cleaver and black bindweed, may again very tentatively suggest the winter and spring-sowing of cereals, respectively.

A notable feature of the Romano-British weed seed assemblage was the large number of wild grasses (Poaceae) in the samples, the seeds of which accounted for over half of the quantified remains, particularly large grass seeds and especially brome. As noted above, these seeds are difficult to separate from the grain other than by hand-sorting because they are of a similar size and are therefore characteristic of almost fully processed crops. Large grass seeds including brome also made up a sizeable proportion of the weed seed assemblages in Romano-British samples from Westhawk Farm (Pelling 2008, 354) and in late Iron Age and early Romano-British deposits at South-east of Park Farm (Stevens 2012, 32).

Sample composition and cereal processing activities

Fig. 7.2 shows the number of grains, chaff fragments and wild plant/weed seeds in the eight Romano-British sampled features that contained more than 100 quantified charred plant items that were from four pits, two postholes, a ditch and s shallow feature from Areas 3E and 7. Cereal debris was the main component in all eight assemblages, making up between 75% and 97% (but mostly more than 90%) of the quantified remains. The percentage of weed seeds in these samples ranged from 3% to 25%, with the majority of the seeds in the two richest weed assemblages, from oven 40124 and posthole 41009, being from large wild grasses, particularly brome. These assemblages are indicative of activities associated with the latter stages of crop-cleaning including the de-husking of hulled grains.

The ratio of grains to hulled wheat chaff varied. Spelt chaff was dominant in the samples from pit 50648 (Area 3E), and oven 40973 and posthole 41009 (Area 7), making up between 60% and 85% of the quantified remains; the chaff may have been accidentally burnt while being parched to facilitate de-husking and/or represents spent fuel from the burning of waste following the pounding of grain. There was a particularly high concentration of charred remains (263 items per litre of soil) in posthole 41009.

There were roughly equal amounts of grain and hulled chaff fragments in the charred assemblages from pit 50646 and shallow feature 41019 (both Area 7), which could derive from accidentally burnt hulled wheat spikelets; however, this is difficult to establish because it was not possible to identify the majority of the poorly preserved grains in these samples. Well-preserved cereal remains of spelt in ditch 41113 (slot 40929) (Area 7), on the other hand, did contain a number of charred spelt spikelets, possibly part of an accidentally burnt storage deposit. Hulled wheats may have been stored in their husks to prevent spoilage (germination, insect attack, fungal infestation).

There were occasionally germinated grains in a number of samples but larger amounts in the two charred assemblages from posthole 40995 and oven 40124 (both in the central building in Area 7) that may suggest malting activities. The proportion of germinated grain in the two samples, however, was low (12% and 14% of all grains) although it was difficult to establish whether the majority of the grains had actually sprouted because of the poor condition of the material; most of the well-preserved grains, however, did show signs of

germination. Loose coleoptiles were also found in oven 40124 and also posthole 41009 (just outside the building).

It is difficult to establish whether these remains are evidence of deliberate germination of spelt grains for producing malt for use in brewing or simply the residues of spoilt grain. Other sites close-by, however, have also shown potential evidence for similar activities including Romano-British deposits at Whitehawk Farm, although again the percentage of germinated to total grain was low at 10% or less (Pelling 2008, 350). A Late Iron Age pit and early Romano-British hearth at South-east of Park Farm also contained germinated grain, probably mainly of spelt (Stevens 2012, 33). Certainly there is evidence from a number of other Romano-British sites for the use of spelt for the production of malt for brewing (van der Veen 1989).

The other three more modest sized Romano-British charred plant assemblages (less than 100 items) were all from Area 7; those from oven 40983 and posthole 40156 were similar to the larger assemblages containing mainly cereal debris (grain and hulled wheat chaff) and very few weed seeds. The other sample, however, from pit 40182, contained very little cereal debris but largely wild plant/weed seeds from a range of species including a number of potential arable weeds, which may be debris from sieving of the crops used as fuel. Some of the wild plant remains may be from (damp) grassland habitats, for example yellow rattle, sedge, and spike-rush collected for various uses, for example, flooring, fodder, fuel. This sample also contained stem fragments including a few larger ones that may be from cereal straw.

The assessment results from the other Romano-British samples do not show any difference from the larger assemblages, largely containing traces of grain, chaff and occasionally wild plant/weed seeds. Cremation grave 15139 (Area 5) did, however, contain a few tuber and stem fragments, probably spent fuel from the cremation.

The distribution of the Romano-British charred plant remains

Ninety samples were collected from Romano-British contexts from four areas of excavation (Areas 3, 5, 6 and 7). Most of the charred plant remains in the 37 productive samples were from Area 7, which contained most of the rich assemblages concentrated in the area of the enclosure's central building and including the potential evidence for malting activities. The other two rich charred plant assemblages were from the eastern end of Area 3E, while only

occasional remains were found in only a small number of samples from Area 5 and in just one sample from Area 6.

The waterlogged plant remains

A small waterlogged plant assemblage was recovered from Romano-British pit 40960 on the edge of the valley floor in Area 7. There was only a limited species range although several habitats were represented. The presence of rush (*Juncus*) and spike-rush may indicate wet conditions within the feature itself or in the close proximity thereof, with Cladoceran ephippia (water flea eggs) indicating standing water within the pit. Several species, including common nettle (*Urtica dioica*) and fat hen (*Chenopodium album*), indicative of nitrogen-rich soils may point to human/animal activities and/or refuse disposal close by.

There were also the remains of birch (*Betula*), hazel, bramble (*Rubu*s Sect *Glandulosus*), blackthorn and ground ivy (*Glechoma hederacea*) which may indicate scrub/hedgerow vegetation close by although the hazelnut shell (also found as charred remains), brambles and sloe/blackthorn fruits, may represent the residues of wild foods gathered from elsewhere and bought onto site. There were also traces of charred hulled wheat chaff in the sample.

Medieval

One sample from the fill of a medieval ditch 50875 (slot 50728) in Area 3E, produced a modest sized charred plant assemblage with cereal grain making up just under a half of the quantified remains, although virtually all the grains were too poorly preserved to be identified further with the exception of two possible wheat and possible oat grains. No chaff was recovered from this sample. Other food remains consisted of two possible broad beans and a few hazelnut shell fragments. A small number of vetch/tare/vetchling seeds may be from either wild and/or cultivated pulses. Wild plant/weed seeds were mainly from large-seeded grasses including brome.

The charred material in this assemblage largely consists of the debris from the final stages of crop-processing and food preparation, accidentally burnt grains and large weed seeds which, as noted above, are often found in virtually cleaned cereals and can only be separated by hand-sorting. No further comment may be made on these remains because the cereals could not be identified to species.

Undated samples

Charred plant remains were present in 52 of the 146 undatable samples from features across the site. The amount of remains in these samples was low with the exception of four rich assemblages from Area 1 from pits 18194, 18370 and 18506 and one rich assemblage from pit 40967 (Area 7). The remains were broadly similar to those found in the datable samples, consisting largely of cereal remains (hulled wheat grain and chaff and barley grains), pulses (broad beans) and wild plant/weed seeds including hazel nut shell fragments.

Summary

The charred plant remains from Cheeseman's Green are fairly typical with regard to cereal cultivation during the late Iron and Romano-British periods in Kent. The late Iron Age to early Romano-British samples produced evidence for mainly hulled wheat and hulled barley although it was not possible to establish which of emmer or spelt was dominant, if any, at this time. The greater amount of cereal remains from the Romano-British samples, however, showed a clear dominance of spelt wheat and a decline in barley from the earlier period. It is possible that beans and flax may have been grown on a limited scale while wild foods (hazelnuts, sloe/blackthorn, haws) appear to have been gathered and consumed from time to time.

The small numbers of weed seeds limited investigation into other aspects of crop husbandry although there is very tentative evidence to suggest the use of sandy loams and possibly calcareous soils.

The dominance of cereal remains (grain and chaff) and presence of large weed seeds including *Bromus*, in the assemblages shows that the remains are largely indicative of the final stages of crop-cleaning, with the earlier processing activities possibly taking place off site or in an unexcavated area of the settlement.

The charred plant remains from both the late Iron Age and Romano-British samples are distributed over a very wide area; there are several concentrations in the late Iron Age/early Roman British phase in Areas 1, 4 (South), 5 and 9b although these areas are some distance from one another. The Romano-British period shows a concentration in the centre of Area 7, including possible evidence for malting activities, although there are also a few rich assemblages several hundred metres to the north-west within Area 3 (East).

Insect Remains

by Geoff Hill and David Smith

A single sample (1057), previously processed for the recovery of plant macrofossils, from the basal fill (40964) of a Romano-British pit (40960) was received for archaeoentomological analysis. This feature, located in the internal ditches of an enclosure (41106), was 1.2 m deep and contained Romano-British pottery. The plant macrofossil comprised a waterlogged sloe stone, hazelnut shell fragments and the seeds of bramble (*Rubus* spp.) and buttercup (*Ranunculus* spp.).

Methods

A 5 litre sample from pit 40960 was pre-processed by Wessex Archaeology for the recovery of waterlogged remains. The separate flot and heavy residue from this sample was then recombined and processed following the standard paraffin flotation methods outlined in Kenward *et al.* (1980). Insect remains were sorted and identified under a low-power binocular microscope at magnifications between x15 – x45. Where achievable the insect remains were identified to species level by direct comparison to specimens in the Gorham and Girling insect collections, housed in the Department of Classics, Ancient History and Archaeology at The University of Birmingham. The nomenclature and taxonomic order presented follows the BugsCEP database (Buckland, 2006) which uses Lucht (1987), revised Böhme (2005), and Gustafsson (2005).

Analysis of the insect remains follows a functional group approach specifically designed to incorporate aspects of both archaeological and palaeoenvironmental studies of beetle assemblages (Hill 2015a). This is a revision of both Robinson's (1991) and Kenward and Hall's (1995) approach, combining the environmental and synanthropic elements of each of these ecological groupings. Where possible, individual taxa are allocated a functional group code, reflecting their environmental or habitat requirements (see Tables 22–23). Ecological information is derived from the BugsCEP database (Buckland, 2006), with particular reference to the descriptions of Koch (1989, 1992). Where other sources of ecological information have been used, these will be cited within the following discussion.

If a taxon is fairly ubiquitous in terms of its ecological preference, or the identification of the taxonomic group to which it belongs is very broad, and a functional group cannot be assigned, the taxa is designated 'uncoded'. The relative proportion of aquatic and waterside species is initially calculated from the total assemblage, or, minimum number of individuals (MNI). The remaining ecological groupings are calculated only from the terrestrial taxa in the assemblage (tMNI) (ie, without aquatic or uncoded taxa, Table 23). Finally, the relative proportion of Kenward's (Hall and Kenward 1990) 'house fauna', which comprises a suite of beetles with a particular affinity to human settlement and waste, is calculated as a proportion of all terrestrial taxa recovered. The third column in Table 22 indicates the host plants of any phytophage (plant feeding species) recovered. The nomenclature for the plants follows that of Stace (2010).

Results

Preservation of insect sclerites was good, but the remains were highly fragmented which occasionally prevented full identification. A minimum of 61 individuals, from 42 taxa, were recovered in the single sample. The overwhelming majority of the assemblage is from terrestrial habitats (82%), with relatively few taxa from aquatic habitats (11%) or associated with watersides (7%). In terms of the terrestrial fauna recovered, the assemblage is dominated by beetles associated with foul material (FM = 39%) and open and disturbed ground (OD = 31%) ecological groups (Table 24).

Aquatic and waterside taxa

There were very few aquatic taxa recovered. The *Hydraena* spp., *Ochthebius* spp. and *Enochrus* spp. are usually associated with slow-flowing and stagnant waters (Hansen 1997). Similarly, very few wetland and waterside taxa were recovered. These taxa are typically 'generalists' which are commonly found in swamp and fens and in rotting organic refuse from wet grassland (Koch 1989; Duff 1993; Marsh 2009), such as *Bembidion mannerheimi*, *Lesteva longoelytrata* and *Rugilus erichsoni.*.

Open and disturbed ground and dung taxa

A number of species suggest the presence of open, disturbed or agricultural land. Two species, *Rhinoncus pericarpius, R. castor* are associated with dock (*Rumex spp.)* (Morris 2008). *Derocrepis rufipes* is found on a variety of Fabaceae (bean family) such as vetch (*Vicia* spp./*Lathyrus* spp.), broom (*Cytisus* spp.) and gorse (*Ulex* spp.) as well as the garden pea (*Pisum sativum* L.). Many *Gymnetron* species are associated with plantain (*Plantago* spp.) and are typically found in disturbed ground, verges and weedy areas. The 'ground beetle' *Clivina fossor* also is found on a range of agricultural land (Atty 1983; Lindroth 1974; Luff 2007). Similarly, all members of the *Trachyphloeus* genus, typically associated with dry and sandy or calcareous soils, can be found on stony, disturbed ground and pits.

A small number of individuals of *Aphodius* dung beetles were identified which may suggest some limited grazing nearby (Jessop 1986), although *Oxyomus sylvestris* is not uncommon, among vegetative heaps and in weedy places (Koch, 1989).

Tree and woodland associates

There are only a few taxa which directly indicate woodland or trees were present. *Anobium punctatum* is more likely to represent human settlement (see following section). The Longhorn beetle *Tetrops praeusta* is typically linked to rosaceous trees and shrubs in scrubby woodland or hedgerows (Duff 1993; Alexander 2002). *Athous* species are typically found on woodland margins, beside agricultural land, and in some cases are known to be pests of cereals (Jones and Jones 1974).

Foul material species and the 'house fauna'

The beetles associated with foul material (FM) represent the largest proportion of the assemblage and are its most diverse element. Taxa such as *Coprophilus striatulus*, *Tachinus* spp. and *Omalium* spp. and *Cercyon analis* are all typical of decaying organic detritus.

The remaining taxa in this group are also known synanthropes and include a significant number of the 'house fauna', such as *Cryptophagus* spp., *Atomaria* spp., *Latridius* spp. and the 'common woodworm' *Anobium punctatum.* In total these taxa account for 18% of all terrestrial beetles recovered in the assemblage.

Conclusions

The limited recovery of aquatic beetles suggests that this deposit (although waterlogged) did not contain standing water, and that it is therefore more likely that feature 40960 was a pit than a well. Furthermore the lack of waterside taxa suggests that the immediate surroundings also were relatively dry. An alternative scenario may be that this pit was not open for a long period of time before it was abandoned and infilled.

A number of taxa suggests that the pit was located in an area of dry, disturbed and weedy ground, with limited evidence for a wider agricultural landscape beyond this. There also is evidence, although quite limited, for hedgerow or some shrub cover in the local landscape. The comparatively low proportion of dung beetles present suggests that although livestock might have been in the vicinity, they were unlikely to have immediately grazed around or been watered by this pit. Certainly a number of other pit and waterhole features from the archaeological record have produced much higher proportions of dung beetles than are seen here, and seem to have been more directly involved with grazing (eg, Robinson 1979; Smith 2002; 2011). The number of taxa recovered that are from the 'house fauna' ecological group may suggest that some settlement waste or stabling material may have entered this pit.

These results are in keeping with wider analyses of sites nationally, which show woodland clearance and the development of both arable and pastoral landscapes at this time (Robinson 1978; 1979; 1993; Robinson and Lambrick 2009; Smith 2009a; 2009b; 2014; Hill 2015b; 2015c).

Wood Charcoal

by Dana Challinor

Introduction

The excavations at Cheeseman's Green produced a number of rich charcoal assemblages, predominantly dating to the later Iron Age and Romano-British periods. Of particular interest were the cremation burials and related deposits, which offered the opportunity to examine ritual fuel use, in comparison to domestic type fuel waste from pits, ditches, heaths, ovens and a kiln. Several phases of settlement activity were represented, with the potential to explore

differences and changes in woodland exploitation, selection and management practices from the use of fuelwood at the site. Charcoal from a rare Mesolithic cremation burial and an urned cremation burial from the Early Bronze Age were also analysed.

Methods

Charcoal >2mm in transverse section was considered for identification, though preference was given to larger >4mm fragments which could be assessed for maturity. Up to 50 fragments per sample were examined, depending upon diversity. The charcoal was fractured and sorted into groups based on the anatomical features observed in transverse section at X7 to X45 magnifications. Representative fragments from each group were then selected for further examination using a Meiji incident-light microscope at up to X400 magnification. Identifications were made by comparison with identification keys (Hather 2000, Schweingruber 1990) and modern reference material. Observations on maturity and other features were made where appropriate. Classification and nomenclature follow Stace 1997.

Results

Forty samples were examined; 34 were fully analysed, comprising the identification of 1120 fragments, and an additional 6 were scanned for comparison. The charcoal was in a poor to fair condition, with frequent high levels of sediment infusion. Iron and vivianite deposits (characterised by orange and blue-green staining, respectively) were also frequently observed especially in samples from the lower-lying areas of the site (Areas 2, 3E, 3W, 4S and 7). This is indicative of deposition in a waterlain or seasonally waterlogged environment.

Notes on taxa

Eleven discrete taxa were positively identified. Comments on habitat preferences, wood properties and burning qualities are drawn from various sources including Stace (1997), Edlin (1949), Gale & Cutler (2000) and Warren (2007).

FAGACEAE: *Quercus* spp*.,* oak.

There are two oak species native to England which are not distinguishable anatomically. Oak was ubiquitous in prehistory and commonly exploited for timber and fuelwood purposes. It

coppices well and provides a good firewood with a high calorific heat, especially when well-seasoned. It also makes a good charcoal fuel, albeit with a tendency to fragment.

BETULACEAE: *Alnus glutinosa*, Gaertn., alder.
Common alder is the sole species native to Britain, and is a common tree on riversides and in wetland habitats. Alder woodland would have characterised localised wetland areas. Alder is considered a poor fuelwood, slow to burn.

BETULACEAE: *Corylus avellana* L., hazel.
Hazel commonly associates with oak woodland, often forming a shrubby understory. Like oak, it coppices well and was important in woodland management practices. It makes a good fuel. Anatomically, hazel is very similar to alder and can be difficult to distinguish in poorly preserved charcoal.

SALICACEAE: *Populus* spp., poplar and/or *Salix* spp., willow.
These two genera can occasionally be distinguished anatomically, but only in exceptionally well-preserved material. *P. nigra* and the several native willow species favour wet soils and commonly grow in floodplains and near water sources. Neither was traditionally considered to make good firewood, although poplar was particularly ill-favoured.

ROSACEAE: *Prunus* spp., blackthorn/cherry.
The differentiation between the three native *Prunus* species can be difficult, and there is a possibility that *P. domestica* (plum), a Roman introduction, would have been present in the later phases. In some fragments, *P. spinosa* was identified on the basis of ray width and the presence of sloe stones in some Late Iron Age/Romano-British charred plant assemblages also suggests its presence (Wyles, assessment report). Some of the small roundwood fragments exhibited smaller rays (consistent with *P. avium,* wild cherry), but this is not a conclusive characteristic in immature wood. Blackthorn is a spiny shrub, light demanding and commonly found in hedgerows, scrub or open woodland. Both blackthorn and wild cherry provide good fuelwood with a pleasant smell.

ROSACEAE: Maloideae, subfamily, but including genera *Sorbus*, *Malus*, *Crataegus* and possibly *Pyrus* (referred to as hawthorn group).
There are many native species of the Maloideae family, which are rarely distinguishable by anatomical characteristics. They can be small trees or shrubs and are commonly associated with hedgerows and scrub. The wood of the Maloideae is generally dense and makes a good fuelwood, with some species producing a pleasant odour.

AQUIFOLIACEAE: *Ilex aquifolium* L., holly.
Holly is an evergreen tree or shrub, which can grow in the understory of oak woodland or in woodland margins and hedgerow or scrub and tolerates most conditions except very wet soils. It makes short-lived firewood, but can be burnt green.

RHAMNACEAE: *Rhamnus cathartica* L., buckthorn.
Buckthorn is a spiny shrub growing in hedgerow, scrub and open woodland habitats. It grows well in most conditions, including clay and peat, preferring moist, but well-draining soils. The wood has been used for turnery, but not commonly used for fuelwood.

RHAMNACEAE: *Frangula alnus* Mill., alder buckthorn.
A native shrub, preferring damp soils, alder buckthorn was not commonly used for firewood, although it was favoured in later periods as a charcoal fuel for making gunpowder.

ACERACEAE: *Acer campestre* L. field maple.
Field maple is the only maple native to Britain and grows as a small tree in several habitats, including woods, hedgerow and scrub. It can grow on clay, but prefers well-drained soils. The wood is attractive and used for artefacts and turning; it also makes a good firewood.

OLEACEAE: *Fraxinus excelsior* L. ash.
There is only one species of ash native to Britain and, although it does occur in broadleaf woodland, it is light-demanding and commonly found as a pioneer species, colonizing open areas. Ash coppices well and makes superior firewood, which burns well green.

Sample descriptions

Late Mesolithic cremation burial

Cremation burial 50160, from Area 9, was radiocarbon dated to the Late Mesolithic period. The fill (50161) contained a rich assemblage of oak charcoal, including some heartwood (Table 25). Many of the fragments exhibited slow growth, with little or no latewood pores. The preservation was quite poor, with heavy encrustation of sediment; however, no other taxa were evident and the assemblage appeared to be exclusively of oak. Oak, especially seasoned heartwood, provides a high calorific heat suitable for efficient cremation, which is indicated by the calcinity of the human bone in the burial (McKinley, above). The absence of hazel wood, despite the presence of charred hazelnut shells (Giorgi, above) suggests that the nutshells represent feasting or deliberate offerings, rather than accidental inclusions with the wood, although it cannot be assumed that all of the fuel and bier remnants might be visible in the selected burial deposit; the human bone remains represented only 23% of that expected for a whole body (McKinley, above). The rarity of Mesolithic cremations in Britain limits comparanda, but it is worth noting that oak charcoal was identified from the cremation burial at Langford, Essex (Gilmour 2015).

Early Bronze Age urned cremation burial

Two samples of charcoal from the single urned burial found during the evaluation (Trench 202) were analysed (Table 25). The assemblage from within the collared urn (20205), containing the bulk of the human bone, was dominated by oak, with traces of hazel and ash. In contrast, the sample from the upper fill of the burial pit (20207) was dominated by ash, with occasional fragments of oak. Some heartwood fragments were recorded in both the oak and the ash fragments, with the latter exhibiting slow growth. The contrast between the two assemblages suggests that they represent remains taken from different parts of the pyre; the charcoal from 20205 was included with the bone (either accidentally or as a deliberate offering) and was presumably part of the central bier/pyre structure, while the charcoal from 20207, perhaps derived from the periphery of the fire. There is also the possibility that wooden pyre goods may be represented. The assemblages were equally poorly preserved, friable and encrusted with sediment, with similar fragment sizes and did not indicate differential preservation caused by location within the pyre.

Oak and ash make highly calorific firewood, with ash requiring less seasoning than oak. Bronze Age cremations were commonly fuelled by oak, with regional examples (at least, of Mid-Late Bronze Age date) at Beechbrook Wood (Aldritt 2006), Isle of Sheppey (Gale 2008), Darent Valley (Druce 2011) and the A1 widening scheme (Challinor 2012). Ash-dominated cremations are less common, despite its excellent burning qualities. The dominance of a single taxon has been linked to possible ritual selection (Thompson 1999), and the specific use of oak to male adult burials (Campbell 2007). The latter is not always proven at other sites, but it is interesting to note that the burial at Cheeseman's Green was that of an adult female, with mixed use of both oak and ash in the pyre. In the absence of other features dating to this period at the site, it is not possible to make comparisons with other assemblages, but there is a general paucity of ash charcoal in the record from later periods, suggesting that ash was not widespread in the vicinity.

Early Iron Age hearth

A single sample from a hearth 50949 in Area 3W was examined. It contained a quantity of Early Iron Age pottery, animal bone and struck flints. The charcoal assemblage was rich, with good sized fragments and a diverse range of six taxa: oak, alder, blackthorn, hawthorn type, field maple and ash (Table 26). Much of the charcoal derived from roundwood, incomplete but consistent with branchwood or relatively young stems. Some small insect tunnels were observed in fragments of field maple, suggesting that the wood had either been deliberately seasoned, or derived from already dead wood. The mixed character of the assemblage is consistent with the use of a range of woods for domestic-type activities, reflecting the gathering of firewood from mixed deciduous woodland.

Middle and Late Iron Age unurned cremation burials

Of the four cremation burials in Area 4S, only two produced identifiable charcoal; grave 16164 which was radiocarbon dated to the Middle Iron Age and grave 16120, which produced a Late Iron Age date (Table 26). Both features had been excavated in quadrants, from which two samples were analysed (while samples from remaining quadrants were scanned). Both burials yielded abundant charcoal assemblages, which were entirely composed of oak. Determination of maturity was obscured by sediment infusion and some high levels of vitrification but most appeared to be from sapwood or roundwood, with occasional fragments

of heartwood. Two burr fragments were also recorded in the north-west quadrant of (16127). Similar to Bronze Age cremation practices (see above), the use of oak as fuel is well attested at Iron Age cremation sites. Interestingly, burial 16164, contained the remains of an individual over 15 years in age (probably originally held within an organic container), while grave 16120 contained the remains of a possible woman aged 30-40 years old (McKinley, above). Albeit limited to one burial per phase, the evidence from Cheeseman's Green indicates a continuing preference for the use of oak as pyre fuel, whatever the age or gender of the deceased.

Mid-Late Iron Age pit

Pit 30092 from Area 6 was initially described as cremation-related, but it contained only burnt animal bone. It is unclear whether the deposit represented domestic debris from cooking or feasting associated with funerary ritual. The assemblage was chiefly oak (with traces of alder/hazel and field maple) (Table 26); similar to those from the Middle and Late Iron Age cremation graves in Area 4S. However, there were also a number of Late Iron Age and Romano-British assemblages from pits and ditches which were also oak-dominant. Condition was poor, including vivianite staining in the alder/hazel fragment.

Late Iron Age ditches and gully

Samples from two enclosure ditches in Area 3E, a short linear feature of uncertain function in Area 7 and a drip gully from Trench 202 were analysed (Table 27). Although oak remained a prominent component of the assemblages, there was increased diversity with a range of other taxa, including hazel, poplar/willow, blackthorn, hawthorn group, buckthorn and field maple. Much of the charcoal derived from roundwood, exhibiting strong ring curvature with ring counts of ≤10 years and some twigs. This indicates use of branches or small stems. There were some oak heartwood fragments, but the majority of charcoal (as far as might be ascertained) was from roundwood or sapwood.

Late Iron Age-early Romano-British features

Four samples, dated to this phase, were examined: from pits 16084 and 16142 in Area 4S; and hearth 15196 and sub-rectangular ring ditch 15323 in Area 5 (Table 27). Pit 16142 contained a piece of cremated human bone that was probably associated with the cremation burials in

this area. The charcoal was extremely poorly preserved, leading to a large number of indeterminate fragments, which inhibited assessment of relative taxonomic abundance. It was clear, nonetheless, that there was a large component of oak, with some hawthorn and blackthorn types. This is not dissimilar to the cremation-related samples (see above). Interestingly, the other samples were also dominated by oak (with traces of field maple and probable holly). Since the two Area 5 samples (from hearth 15196 and ditch 15323) likely derived from domestic type activities, it shows that the exclusive (or predominant) use of oak was not reserved for, nor symptomatic of, cremation practices. There was, however, no trace of heartwood in these assemblages, which consisted mainly of roundwood and sapwood fragments.

Early Romano-British ovens

Samples from a row of five ovens, located inside the central building in Area 7 were analysed (Table 28). The condition of the charcoal was generally poor; soft, with notable vivianite staining in longitudinal sections. Although there were some differences in the taxonomic composition between the ovens, there was a strong component of oak and cherry/blackthorn type. Condition frequently inhibited differentiation to species and it is possible that more than one *Prunus* species was present. Much of the charcoal derived from roundwood (incomplete but with string ring curvature and <7 years' growth), indicating that the ovens were fuelled by bundles of firewood drawn from woodland and scrub/hedgerow habitats. This type of fuelwood would produce a high but relatively short-lived fire. Evidence for the use of some larger firewood logs, which would have provided more sustained heat, was indicated by the presence of oak heartwood, but this was generally infrequent. The function of the ovens is unclear, although oven 40983 contained a large quantity of burnt cereal remains, perhaps indicating a crop drying or processing activity. It is interesting that the character of these assemblages differs somewhat to the Romano-British pits in Areas 7, 5 and 3E.

Romano-British pits and kiln

The pits in Area 7 (40124, 40951), Area 3E (50630, 50646) and Area 5 (15020), along with kiln 50674, were not phased within the Romano-British period. Notably, all but two of these features produced charcoal assemblages exclusively composed of oak, including a large quantity of heartwood in pit 40951 (Table 28). The character of the remains differs from that

of the Early Romano-British ovens in Area 7, with an absence of hedgerow/scrub type taxa. The two exceptions were in Area 3E: pit 50646, which produced a mixed range of taxa, comprising hazel, oak, field maple, cherry/blackthorn and hawthorn group; and kiln 50674, which contained oak, alder, hawthorn group, field maple and, notably, ash charcoal (forming almost 40%). The kiln assemblage produced the only confirmed identifications of alder and ash in the Romano-British dataset, which is significant since these taxa have specific habitat preferences. Ash is commonly a coloniser species, thriving in open conditions, while alder prefers wet ground, especially river/stream side habitats, and would have flourished along the River Stour. While it is unclear why these species were used for fuelling kiln 50674, it is clear that they were not widely exploited for fuel use generally in this period.

Romano-British cremation grave

The assemblage from unurned cremation grave 15139 in Area 5 was exclusively oak, with heartwood and sapwood recorded (Table 28). The apparent absence of roundwood indicates that the pyre fuel comprised large logs from mature tree(s) – as might be expected for the sustained, high heat required for efficient cremation. The remains of an adult (21-30 years) were recovered from the burial, along with the re-deposited fuel remains. The charcoal remains are similar to the assemblages from the Middle Iron Age unurned burials in Area 4 South, as well as Romano-British examples from other sites at or near to Ashford (eg, Pepper Hill, Challinor 2006; West Hawk Farm, Challinor 2008; St Dunstans Terrace, Challinor 2014).

Late Romano-British pit

The charcoal from a single feature in Area 6, confidently ascribed to the Late Romano-British phase, was analysed (Table 28). The assemblage was dominated by oak, mostly trunkwood, with some heartwood present. It was similar to both the cremation grave 15139 in Area 5 and most of the pit assemblages from Areas 7, 3E and 5. An undated pit in Area 6 (18194) produced a more mixed assemblage, including oak, cherry/blackthorn and hawthorn group, but it was not fully analysed.

Undated

A number of features which produced rich and abundant samples of charcoal remained undated. Several were scanned and three were analysed (Table 29). Assemblages from hearths 16208 and 18004 in Area 1, posthole 40995 in Area 7 and pit 50967 in Area 3W were all dominated by oak. Pit 41000 from Area 7 produced a mixed assemblage of taxa, unusually with a significant quantity of alder and a single fragment of alder buckthorn. Of particular interest is the undated cremation burial 50854 in Area 3W. McKinley suggests that, due to the very small amount of heavily eroded bone, this assemblage may have been redeposited pyre debris rather than a burial. The charcoal assemblage was quite unlike any other cremation-related assemblages at Cheeseman's Green (including from the nearby Mesolithic burial 50160); dominated by willow or poplar with small quantity of oak. Neither willow nor poplar are traditionally considered good fuelwood (Edlin 1949) and are not commonly utilised for cremation purposes in any period. Willow, especially, prefers wet ground habitats, and could have grown in the lower-lying areas of the site. However, the feature was only partially excavated and the charcoal was, along with the recovered human bone, both sparse and in poor condition. It is probable that the assemblage does not adequately represent the cremation fuel, but a small element of fuel, pyre structure or the remains of a pyre good.

Conclusions

With the exception of the Early Bronze Age urned burial 20204 (which was mixed oak and ash) and the undated sample from 50854 (chiefly willow/poplar), all of the cremation-related assemblages were dominated by oak. This is consistent with the widespread use of this taxon throughout all the periods represented and its high burning qualities, which make it particularly suited to cremation. It is also consistent with evidence from similar periods at other sites in the region. The unusual Mesolithic cremation was also fuelled by oak.

For the later Iron Age and Romano-British periods, there was a greater range of feature types representing domestic and other associated settlement activities. A significant proportion of these assemblages were also dominated by oak (57% with >70% oak), showing that the use of this taxon was not (at least in these later phases) reserved for ritual purposes. Oak was present in 100% of the 40 samples examined, and for the Late Iron Age-Romano-British period, the next most abundant taxon – *Prunus* type – represents only 9% of the assemblage. Metalworking activities are likely to have utilised oak, as seen at other sites, such as West Hawk Farm (Challinor 2008), but this was likely to have been converted into

charcoal fuel, which would not be necessary for domestic fires. In any case, there was little direct functional association in the deposits at Cheeseman's Green. There were, however, two patterns emerging from the charcoal record that are worth mentioning. Firstly, ovens and kiln assemblages, with evidence for in situ burning produced more mixed assemblages, characteristically with hedgerow/scrub types, whereas pits with re-deposited fuel waste yielded solely or predominantly oak. Secondly, outside of the cremation-related samples, much of the charcoal derived from small roundwood and the character of this material was more consistent with the use of small wood (potentially supplied from managed woodland, though there is no particular evidence for this) rather than from large, mature woodland trees. This signifies that oak woodland represented the most important fuel resource in the area, but it may be that the age of the tree and character of the firewood (i.e. trunkwood or branches) determined the exact use.

Radiocarbon Dating

by Inés López-Dóriga

Introduction

In total, 14 radiocarbon dates were obtained (Table 30), with the aim to precisely date a series of otherwise undated cremation burial deposits and a deposit of pollarded waterlogged wood found in direct association with Mesolithic flint.

Methods

The aims of the radiocarbon programme were to clarify the date of various undated features in order to inform the analysis work.

Sample selection was made by Jacqueline McKinley (human bone), Cathie Barnett (wood) and John Giorgi and Inés López-Dóriga (charred plant remains). Where possible, only single fragments of cremated bone, charred hazelnut shell and waterlogged wood were selected for dating (see Table 30).

The samples were submitted to the Scottish Universities Environmental Research Centre (SUERC), University of Glasgow; ^{14}Chrono Centre, Queen's University, Belfast (UBA) and the Poznań Radiocarbon Laboratory (Poz). The dates have been calculated using the IntCal20 calibration curve (Reimer *et al.* 2020) and the computer program OxCal (v.

4.4.2) (Bronk Ramsey 2009) and cited in the text at 95% confidence and with the end points rounded outwards to 10 years (calibrated dates) or 5 years (modelled dates). Calibrated date ranges are given in plain type, posterior density estimates (modelled date ranges) in italics (Bayliss and Marshall 2022).

A Bayesian approach has been adopted for the interpretation of the chronology. Although the simple calibrated dates are accurate estimates of the age of the samples, it is the estimated dates of the archaeological events, represented by those samples, which are of interest.

Results

All of the 14 radiocarbon dating samples were successfully measured (Table 30).

Mesolithic cremation burials

The two possibly Mesolithic cremation burials (50161 and 50922) were targeted for radiocarbon dating, with four radiocarbon dates obtained for 50161 and one for 50922.

The four measurements for cremation deposit 50161, interpreted as a single deposit, were obtained on two pairs of samples: a pair on cremated bone (SUERC-64210 and Poz-80116) and a pair on charred hazelnut shell fragments (Poz-80222 and UBA-32261). The four measurements are not internally consistent (function R_Combine in OxCal): ^{14}C mean value of 6618 ± 18 BP: 5630–5480 cal. BC (χ^2-Test T′= 37.5; (5%) =7.8, v= 3) . However, each pair of dates is statistically consistent, the bone with a ^{14}C mean value of 6704 ± 23 BP (χ^2-Test: v =1 T′=2.7 (5%) =3.8) and the hazelnut shell with a ^{14}C mean value of 6496 ± 27 BP (χ^2-Test: v =1 T′=0.0 (5%)= 3.8). The radiocarbon dates obtained on the bone are older (5665–5560 cal. BC) than those on the single hazelnut shell fragments (5515–7375 cal. BC). This is not necessarily surprising, and two possible reasons (offsets) are usually put forward to explain the issue of disagreeing paired dates (see Discussion below).

A single radiocarbon date on cremated human bone has been obtained for cremation deposit 50922: SUERC-75539, 7019 ± 30 BP, 5990–5800 cal. BC.

Iron Age/Romano-British cremation burials

Cremated bone fragments from five unurned burials were directly dated. The five dates obtained fall within the later Iron Age, although the final part of the 95% probability extends

in some cases into the Romano-British period due to the nature of the calibration curve: burials 15048 and 16165 were made sometime between the second half of the 4th and the first half of the 2nd centuries BC (SUERC-64209: 2173 ± 27 BP and SUERC-63877: 2201 ± 29 BP) or early part of the Middle Iron Age, and burials 15138 and 16127 were made in the 1st century BC or the early 1st century AD (SUERC-64207: 2013 ± 29 BP and SUERC-64208: 2015 ± 29 BP), equating to the Late Iron Age/Early Romano-British periods. A fifth burial (57154) was made sometime between the second half of the 1st century BC and the first half of the 2nd century AD (SUERC-104079: 1942 ± 26 BP).

Saxon waterlogged timber

A mature oak possibly pollarded timber, containing Mesolithic material in a void where the heartwood had rotted, was selected for radiocarbon dating (Taylor and Barnett, above). In total four dates were obtained on samples of waterlogged timber that made up this deposit. UBA-20906 and UBA-32568 were obtained on the outer heartwood from the hollowed-out timber. UBA-32566 was obtained on the most external rings of the preserved sapwood and UBA-32567 was obtained on a wood fragment found inside the hollowed trunk. All the four measurements are early Saxon, although not statistically consistent (χ^2 test fails- ν =3 T′=9.0 (5%) = 7.8) but the two heartwood measurements are (χ^2 - ν =1 T′=0.3 (5%) = 3.8).

Discussion

Mesolithic cremation burials

Two cremation burials were radiocarbon dated to the Mesolithic period: deposits 50161 and 50922. However, disagreement between the dates obtained on the cremated human remains and other short-lived charred plant remains from the same deposit (see above) suggests the results are, unsurprisingly, not straightforward. The consistent pair of cremated bone dates is older than the consistent pair of short-lived charred plant remains suggesting there is a problem with one of the pairs. Radiocarbon dating apatite (the inorganic component of bone, which contains carbonate) in cremated bone has been a crucial development in the history of radiocarbon dating and it is thought to be generally safe from the point of view of contamination from the depositional environment (eg, Lanting 2001, Cherkinsky 2009, Zazzo and Saliège 2011). However, it is likely the cremated bone dates in this deposit are artificially

old (i.e. have an older radiocarbon age than their true age) and the short-lived charred plant remains provide an accurate date for the burial event.

Two main reasons may explain this old bone phenomenon in this particular scenario: dietary offsets, old-wood effects or a combination of the two. On the one hand, a dietary offset would be applicable in the case of human remains from individuals that had an important aquatic source of food in their diet, due to the often large in-built reservoir effects and extended trophic levels in aquatic environments (either fresh-water or marine; eg, Ascough *et al.* 2012). Although this scenario has often been considered technically not applicable to cremated bone, due to the measurement of C content in the inorganic component (apatite), rather than the organic/collagen component (where dietary offsets are represented), recent evidence may contest this assumption (Annaert et al. 2020). On the other hand, an old-wood effect due to the use of fuel with an in-built offset (such as old wood or long-lived tree species, or peat) and the exchange of gases between the bone being cremated and the fuel during the cremation process (eg, Olsen *et al.* 2013; Snoeck *et al.* 2014; Snoeck *et al*. 2016; Zazzo *et al.* 2009). Depending on the nature of the fuel and the position of the bone in the pyre during the cremation process, the offset can vary and involve from decades to even millennia. A combination of both processes may explain the old dates (Annaert *et al.* 2020, Hüls *et al.* 2010). Fortunately, dating other items associated to the cremation deposits, such as short-lived plant remains, exempt from offset issues, can allow to overcome the issue with dating cremated bone.

For cremation deposit 50161, the $\delta^{13}C$ values fall within normal parameters (-24.60‰) for baseline terrestrial plants/herbivores in temperate Europe, but the dominance of oak on the charcoal studied from the site (see Challinor, above), suggests the likely use of this long-lived taxon as the main source of fuel, which likely transferred its old-wood effect to the cremated bone. Therefore, the two dates on individual fragments of short-lived hazelnut shell, presumably also used as fuel, are likely to be closer to the true age of the burial. The model for the four radiocarbon dates for cremation deposit (50161) is shown in Figure 7.3. In this model (good agreement A_{model} 100) it is assumed that the combined bone date provides a *terminus post quem* for the date of the burial (modelled as '*after'*): it is likely that the burial was made during the 55th or early 54th century cal BC (Fig. 7.3: modelled as *Last_Deposit_Cheeseman's_Green_burial: 5515–5365 cal BC*).

For cremation deposit 50922, a single date has been obtained (SUERC-75539, 7019 ± 30 BP, 5990–5800 cal. BC). This is considerably earlier than the former cremation deposit (50161); however, this chronology relies on a single measurement obtained on cremated bone. The associated $\delta^{13}C$ values are slightly high (-18.70‰), potentially suggesting the use of a depleted fuel (such as lime or peat, for example) in the cremation process, or a dietary offset on the cremated individual. This result is therefore slightly unreliable and only provides a *terminus post quem* for the cremation burial, which could be refined with measurements obtained on plant short-lived material from the same deposit (as in cremation deposit 50161).

The radiocarbon dates on the cremated burials from Cheeseman's Green are very similar to the dates for the other Mesolithic cremation burial found at Langford, Essex (Gilmour and Loe 2015), the first such published deposit in Britain. The dates for the Langford burial deposit were obtained on both cremated bone and oak charcoal (modelled as *Last_Deposit_Langford: 5640–5555 cal. BC*), although they are internally consistent, their $\delta^{13}C$ values are dissimilar, and there is no valid reason to reject an old-wood effect there too.

Iron Age/Romano-British cremation burials

All five dates obtained fall within the Iron Age/early Romano-British period (Fig. 7.4), being largely consistent with those obtained on later Iron Age cremation burials in the neighbouring site of Waterbrook Park (Gittins *et al.* in prep.;).

Saxon waterlogged timber

Although containing Mesolithic material in a void where the heartwood had rotted, the waterlogged mature oak timber with signs of pollarding (Taylor and Barnett above) was dated early Saxon date with four different, although statistically inconsistent, measurements. This can partly be explained due to the long life expectancy of oak trees, with the measurements merely indicating the date of formation of different rings as opposed to the date of the tree being felled or dying. The dates are from different parts of the tree's trunk but none were from the outermost ring. The measurements, modelled as a sequence according to their position within the trunk, have a low agreement suggesting there is a problem with the samples. The measurement on the external sapwood rings (UBA-32566) is likely to give the most accurate *terminus post quem* for the felling date of the tree with an estimated gap of 20 years; however, this sample has the oldest radiocarbon age of the four and could therefore be problematic.

Given the conflicting evidence from the measured samples, it is difficult to establish with precision the date of the tree, which must have been felled or died at some point between the 4th and the 6th centuries AD (Fig. 7.5).

8. Discussion

The archaeological investigations at Cheeseman's Green have revealed a settled landscape subject to near-continuous occupation and reorganisation from the Middle Iron Age into the Romano-British period. This evidence complements the growing body of material from sites of these periods in the environs of Ashford, such as at Brisley Farm (Johnson 2002; Archaeology South East 2006; Stevenson 2013), Waterbrook Park (Gittins *et al.*in prep.), Foster Road (Powell 2010; Powell and Birbeck 2010), Boys Hall Moat (Booth and Everson 1994; Booth *et al.* 2011), South-East of Park Farm (Powell 2012), Westhawk Farm (Booth *et al.* 2008), Orbital Park (Philp 1991) and West of Blind Lane, Sevington (Oxford Archaeology 1999), as well as more widely in Kent (Champion 2007; Booth *et al.* 2011).

Evidence pre-dating the Middle Iron Age was generally dispersed and limited, with the exception of unexpected and very important evidence of Mesolithic inhabitation.

Mesolithic

The discovery of two cremation burials radiocarbon dated to the Mesolithic period is unprecedented in England, and this alone would make Cheeseman's Green a nationally important site. Only one other confirmed burial of this date is known in the country, at Langford in Essex (Gilmore and Loe 2015). The Early Mesolithic site at Castleconnell, Hermitage, Co. Limerick, Ireland (Collins and Coyne 2003) provides another insular example, while the Early Mesolithic site of Le Petit Marais de la Chaussée-Tirancourt, just north-west of Amiens in the valley of the Somme and much closer at only 100 miles to the south-east across the Strait of Dover, contained cremated remains among other mortuary rites (Meiklejohn *et al.* 2010).

Mesolithic cremation burials are equally infrequent elsewhere on the mainland of Europe, where inhumation is far more prevalent (Grey Jones 2011). Only 13 of the more than 100 sites in north-west Europe listed by Grey Jones (2017) from which human remains of this date have been recovered included cremated remains, from approximately 20 people, mostly adult, and both male and female. Over the whole of Europe, from the 250 or so Mesolithic burial sites known (and among the more than 2000 individuals interred within them), only 13% contained cremations, and only 20 contained cremations alone (Grünberg 2016, 14-15).

Among this limited dataset and across such a wide area, meaningful comparisons are difficult, but the presence of a bone pin and animal (probably food) remains in one grave, while the other may have been unaccompanied, is not unusual, either in terms of the difference between the two or in terms of the types of materials in the accompanied grave.

The presence of two broadly contemporary graves begs the question of whether or not Cheeseman's Green was a cemetery in the Late Mesolithic period. Several factors make this a difficult problem to resolve. The shallowness of the surviving examples suggest that, had there been more burials on the site, they could very easily have been lost to later activity. On the other hand, the extent of the investigated areas means that if there were other burials they must be widely separated over a large area, with no clusters or foci within the excavations. Comparable sites, few as they are, suggest that in all probability there was no large number of graves on the site: over two thirds of known Mesolithic mortuary sites have only one or two graves (whether inhumation, cremation or mixed rite) and to find "several exclusive cremation pits at one site is exceptional" (Grünberg 2016, 15). Even if there were only ever two people buried at Cheeseman's Green during the Mesolithic period, it remains a remarkable discovery.

The Cheeseman's Green examples are then a very important addition to the corpus of known European Mesolithic cremation burials, more so because – unlike the example from Langford – they are associated with a large quantity of contemporary evidence. Although it is impossible to be precise, the microlithic component of the flint assemblage is predominantly narrow-blade and geometric, typical of the Late Mesolithic and entirely in keeping with the radiocarbon dates from the burials in the second half of the 6th millennium BC.

The separation of the cremation burials by over 300m, and the distribution of the associated lithics, suggest utilisation of higher ground on the margins of the floodplain of the East Stour and of isolated topographic highs in otherwise low-lying areas. Microliths (and very limited evidence for their manufacture) indicate a range of tasks typical of Mesolithic campsites – hunting, fowling, perhaps fishing – utilising small blade armatures in a range of tools.

The presence of large numbers of tranchet axes, particularly in Areas 4N and 10W, close to the spots where the cremated remains of Mesolithic people were interred, may however indicate more long-lasting, less transient activities than the expedient use of the river's margins for food procurement. The evidence for the manufacture and maintenance of

axes (in an area with no immediately available source of suitable flint) indicates that some tasks were being undertaken preferentially in those spots. It is tempting to imagine that hazel scrub was cleared and trees were being felled – perhaps the large oaks attested by the charcoal from the Mesolithic graves– for the purposes of building cremation pyres. An alternative scenario could involve the felling and hollowing of tree trunks for the building of boats.

Whatever the activity taking place at Cheeseman's Green, it appears to have been very localised, but not in total isolation. Investigations at Park Farm recovered a flint assemblage of in excess of 10,000 artefacts, most of which were considered to be of 7th millennium date. At the adjoining Waterbrook Park (Gittins *et al.* in prep) a small group of truncations, notched tools, microliths, burins, and associated manufacturing waste (including a single tranchet axes sharpening flake) indicates another probable camp site, while a further small assemblage of Mesolithic flint was recovered from Westhawk Farm (Barton 2008). Elsewhere in the valley of the East Stour, two scatters of Mesolithic flint were revealed at Smeeth near Sellindge in advance of construction of High Speed 1 (Glass 1999; Welsh 1998). Other sites in the vicinity have produced very scant evidence of Mesolithic activity, while the PaMeLa database of lithic artefacts (Wessex Archaeology and Jacobi 2014) records a notable absence of findspots to the south of Ashford, with the majority of evidence occurring to the north and north-west on the higher downs.

Neolithic and earlier Bronze Age

Whatever the use of the site in the Late Mesolithic, Neolithic and earlier Bronze Age activity is most notable for its absence. No features of Neolithic date were encountered anywhere within the excavations, and the small numbers of stone tools dating to the period (leaf-shaped and transverse arrowheads) need indicate nothing other than occasional hunting trips. This is again typical of many sites in the immediate area: at Waterbrook Park a single pit contained an Early Neolithic pot while stray finds of leaf-shaped and transverse arrowheads further attest to hunting along the river's margins (Gittins *et al.* in prep.).

Earlier Bronze Age (Beaker and Early Bronze Age) activity is similarly sparse, with only a single pit containing three sherds of Beaker ceramics (and therefore not definitively a Beaker period feature) and a single Early Bronze Age urned cremation encountered. The presence of this burial suggests that by the Early Bronze Age there must have been some more permanent human presence somewhere in the locality, but at neither Cheeseman's

Green nor Waterbrook Park was any substantial trace of settlement or agriculture encountered, suggesting that those sites lay on the periphery of settled areas.

Later Bronze Age and Iron Age

The first traces of any substantial use of the area date to the Middle Bronze Age, concentrated in Area 10W, which seems to have been a preferred location repeatedly in earlier prehistory. Here, a ring ditch marked the location of a possible small barrow which – if not Middle Bronze Age in origin, as seems likely – was certainly a focus for activity in that period, with pottery from the ditch and centre of the enclosed area, as well as in a small number of other features in the immediate vicinity.

Although formal division of the landscape is not yet evident, it is possible to envisage small unenclosed settlements associated areas of agricultural and mortuary activity (not necessarily exclusive). Scattered Middle Bronze Age evidence was encountered across the excavations (mostly pottery of Deverel-Rimbury type, much redeposited in later features) in a pattern similar to that at the adjoining Waterbrook Park.

This putative settlement in the Middle Bronze Age becomes increasingly visible in the Late Bronze Age, with evidence of settlement in Area 10E and important if scattered evidence elsewhere: a pit containing a group of loomweights in Area 4N indicate permanent settlement in the vicinity by the Late Bronze Age at the latest, while a copper alloy spearhead in Area 1 and a small number of other pieces in Area 4 (possibly elements of a dispersed hoard) indicate a certain degree of wealth, and integration into wider social and economic systems.

Elements of the suggested extensive late prehistoric field system were encountered in most areas of the site. Although the dating evidence is limited, the system has an apparent coherence based on its relatively early stratigraphic position (where this could be, and was, recorded), its conformity across the landscape to a broadly consistent orientation, and the general uniformity in the scale of its ditches.

The first widespread establishment of recognisable field systems in southern Britain (and more widely) occurred in the Middle Bronze Age, when large areas of the landscape were covered by field systems of rectilinear form, within which there were dispersed settlements, waterholes and trackways. The evidence, albeit limited, of Middle to Late Bronze Age activity in Areas 10W and 10E, surrounded by part of such an extensive rectilinear field

system raises the possibility, therefore, that some of the field systems recorded on the site are of Bronze Age date.

It is certainly during this period that the first activities leaving a substantial archaeological trace at the neighbouring Waterbrook Park took place, with both open and enclosed settlememt, field systems and burials attested (Gittins *et al.* in prep.). Other nearby sites show a similar pattern: East of Park Farm a low level of later Bronze Age activity indicates settlement in the vicinity (Powell 2012); at Foster Road this period was represented by possible field and trackway ditches, a roundhouse and an area of craft or industrial activity (Powell 2010); at Westhawk Farm a possible rectilinear field system may be of Bronze Age date, although dating was not secure, and a later date is possible (Booth *et al.* 2008, 25), while at Brisley Farm a possible rectilinear field system aligned NE-SW was stratigraphically early (Stevenson 2013, 22).

As is the case more widely in Kent (Champion 2007) and further afield (Wait and Cotton 2000), this later Bronze Age activity was followed by an apparent break in occupation until the Middle Iron Age.

Middle and Late Iron Age

Apart from those fields which can reasonably be dated to the post-medieval and modern periods, largely due to their correspondence to mapped field boundaries, the majority of the field systems encountered during the excavations at Cheeseman's Green appear to be of either Iron Age or Romano-British date with the beginnings of widespread landscape division in the Middle Iron Age (probably, as at Waterbrook Park, towards the very end of that period). In many contexts the datable finds from the ditches provide unreliable evidence for the dating of the field systems, with sherds of pottery often being few in number and abraded, and some likely to be either residual or intrusive. At some locations, however, pottery was found in sufficient quantities to provide reliable dating for some of the ditches, as in Area 1 where it was almost exclusively of Middle/Late Iron Age date, and substantial quantities of Late Iron Age pottery was recovered from a number of ditches in Area 3E. On balance, therefore, it seems most likely that – even if the origins were slightly earlier – the larger part of the field system was laid out at some time during the Late Iron Age, with the *floruit* in the Late Iron Age and early Romano-British period.

In few places could the sizes of the resulting fields be discerned, many areas containing only partial remains, but the relatively good survival in Areas 10E and 10W suggest an organised system of fields, with access points between them. There were also trackways, probably for the movement and management of livestock both between fields and between different parts of the landscape. The trackway in Area 10W, for example, appears to have linked the top of the ridge with low-lying area (now drained by the Ruckinge and Bilham Dykes) to the south-west.

The layout of the field systems appears to have been largely unaffected by the local topography, extending with little evident variation in form across both the valley floor and the adjacent areas of higher ground. Some accommodation appears to have been made for the Bronze Age round barrow, which appears to have been partitioned off within a small sub-enclosure, the layout of which and the features it contained suggesting that this was still a significant feature in the landscape. No such respect was given to the Late Bronze Age oval structure 125 m to the south-east, which was bisected by one of the field boundaries.

There are suggestions that the elements of the field system were modified over time, but the relatively small number of locations where this is evident may indicate that the field system was relatively short lived. While much of the Romano-British reorganisation of the landscape was clearly undertaken within the context of the late prehistoric field system, many of the later ditches cut across and slight the earlier features.

Although predominantly given over to agriculture, evidence of other activities was recovered among the fields. Urned and unurned cremations were recovered in Areas 1 and 4S/9E, while in Area 5 a subrectangular structure is interpreted as some form of ceremonial monument. Two similar structures, one circular and one penannular, situated in a large field or enclosure in Area 11, are likely to be of a similar date and function, while three rectilinear structures of varying sizes (two smaller and one of comparable dimensions) lay within the generally Late Iron Age/early Romano-British enclosures and field systems at Waterbrook Park (Gittins *et al.* in prep.), where they were similarly devoid of closely dateable material.

Within the network of field systems, enclosures and trackways, settlement could be seen in a number of locations. An early phase of open settlement, perhaps dating to the very end of the Middle Iron Age and preceding much of the enclosure of the landscape, was located in Area 1 at the foot of the slope on the edge of the valley floor, where seven roundhouses and two possible granaries were encountered. This settlement appears to have

fallen out of use relatively quickly, as it is overlain by Late Iron Age field ditches, but in Areas 4S, 5 and 6 roundhouses and associated features are suggestive of settlement continuing in use into the early post-Conquest period.

The establishment of field systems and settlement in this period is a very common phenomenon in the locality, with comparable evidence recovered from South-East of Park Farm (Powell 2012), where a small nucleated valley floor settlement of late Middle Iron Age date lay at the start of a period of unbroken occupation and landscape organisation that continued into the early Romano-British period.

Romano-British

The proximity to the site of the Roman road from Lympne to Maidstone undoubtedly exercised some influence on the arrangement and type of Romano-British activity attested in the excavations. While much of this conforms to the Late Iron Age pattern of arrangements of fields, trackways and enclosures, within some of which were arrangements of postholes suggesting granaries or other small buildings related to agriculture, and some possible roundhouses, there are indications of industrial and less prosaic use of the area.

Industrial activities are suggested in Area 3E, where both pottery production and metalworking are attested, and possibly in Area 7, where quantities of slag including a near-complete furnace bottom suggest metalworking, although probably not in the immediate vicinity.

The enclosure in Area 7 is interpreted as having a possibly religious function. This is due in part to a process of elimination ruling out other potential functions – military, settlement, agricultural – and partly due to a combination of its inherent characteristics – its location, morphology, component parts, and aspects of its artefactual and ecofactual remains – which combine to support such an interpretation.

During its excavation it was initially viewed as some form military enclosure on account of its rectangular shape, and the rounded corners of the internal fence-line. However, despite the evident care taken in its construction it clearly does not conform to any form of Roman military fort or camp: the large entrance at the south-east for example, appears to be inconsistent with a defensive function for the ditch.

Another possibility is that it comprises some form of high status settlement enclosure, possibly associated with villa of which further traces have yet to be found. At Thurnham the

Roman villa (Booth *et al.* 2011) was bounded by a large ditched enclosure with a post row fence along its inside edge, the enclosure also containing a temple as well as other buildings. However, although there was clearly a building of some importance at the centre of the Area 7 enclosure, the presence of a distinctive arrangement of hearths appears to rule out a domestic function. Numerous ovens were recorded at the shrine complex at Springhead, where – as at Cheeseman's Green – there was evidence of large-scale malting and brewing.

A rectangular enclosure at Westhawk Farm containing an octagonal post-built structure interpreted as a shrine is significantly different to the Area 7 enclosure. A possibly closer parallel was recoded at Westhampnett, where a square ditched enclosure approximately 18 x 18 m wide with an internal post setting, was subsequently extended to 18 x 26 m, and then subsumed within one end of a larger rectangular enclosure at least 30 x 60 m. There were no internal features to give a clue as to its function, but a religious or ritual use was considered the most likely (Powell 2008; Fitzpatrick 2008).

The function of the apsidal feature is central to the interpretation of the enclosure as a whole. In plan this part of the enclosure boundary has the appearance of a small apse, a feature which in pre-Christian Roman temple architecture often functioned to frame the statue of a deity. The London Mithraeum, for example, had a semicircular apse at its western end in which was the plinth for a cult statue (Hall and Shepherd 2008, 32–6). If so, this would strongly suggest a religious aspect to the enclosure's use.

The evidence from Cheeseman's Green takes its place alongside a growing body of material around Ashford, of which the sites at Westhawk Farm and Park Farm East are perhaps the most illuminating. At Westhawk Farm, a Roman small town lay close to the junction of the road from Lympne to Maidstone with that from Canterbury to Richborough. A north-east to south-west aligned road separated regular plots containing rectangular buildings and metalworking evidence from a large open area and shrine (Booth 2001). At Park Farm East field systems and cremation burials were encountered (Wragg 2003; Powell 2012).

Saxon, medieval, post-medieval and modern

The Saxon date from the large hollow pollarded oak trunk inverted in a pit in Area 4N was surprising, given the complete lack of contemporary features, deposits or finds from the excavations or preceding fieldwalking, and the little evidence for early Saxon occupation in

the wider area. This feature, located on the valley floor, is of unknown function, and it is difficult to propose a utilitarian explanation for its existence.

However, two adjacent large waterholes/wells, with timber structures at their bases, were found at Foster Road and radiocarbon dated to cal. AD 580–660 (NZA-28894, 1444 ± 25 BP) and cal. AD 590–660 (NZA-28893, 1427 ± 25 BP); they lay close to a sunken featured building from which a single sherd of organic-tempered Saxon pottery was recovered (Powell and Birbeck 2010). A number of hearths radiocarbon dated to the 5th–7th century have been found near South Willesborough, 1.2 km to the north-west (Deeves 2007, 242), as well as possible grave-goods from an early Anglo-Saxon burial (*ibid.*, 9). A radiocarbon of cal. AD 1020–1210 (Beta-171102, 950 ± 40 BP) was obtained from one of a number of similar hearths at Brisley Farm (Stevenson 2013, 201). Late Anglo-Saxon charters suggest an established settlement pattern by the mid-9th century period with identifiable manorial estates and parishes (Sweetinburgh 2004a, 28).

Evidence for medieval and post-medieval activity is almost entirely agricultural in nature. Only very small quantities of material were recovered from the excavations, and the reconstruction of the landscape depends mostly on documentary sources.

Appendices

Appendix 1. Bronze Age and Iron Age pottery fabric descriptions

F1 A soft, rough fabric containing a common amount (20%) of calcined flint, 0.5–5 mm, angular, poorly sorted; rare (1%) iron oxides, <1 mm, sub-angular, in a silty clay matrix; MBA–LBA

F2 A soft, rough fabric containing a moderate amount (10%) of calcined and detrital flint, 0.5–4 mm, angular, moderately sorted, in a silty clay matrix; MBA–LBA

F3 A soft, silty fabric containing a sparse amount (5%) of calcined flint, 0.25–1.5 mm, moderately sorted, angular, in a very fine, sandy clay matrix; MBA–LBA

F4 A soft, rough fabric containing an abundant amount (40%) of calcined flint, 0.25–2.5 mm, angular, moderately sorted, in a silty clay matrix; MBA–LBA

F5 A soft, rough fabric containing a very common (30%) of flint (predominantly detrital), 0.25–4 mm, angular, moderately sorted, in a silty clay matrix; MBA–LBA

F6 A soft, rough fabric containing moderate (10%) detrital flint, 0.25–2 mm, sub-angular to angular; sparse (3%) quartz, coarse-grained and rounded, in a silty or very fine sandy clay matrix; MBA–LBA

F7 A soft, rough fabric containing a common amount (20%) of calcined flint, 0.5–10 mm, angular, poorly sorted; rare (2%) argillaceous inclusions, 2 mm, rounded, in a silty clay matrix; MBA–LBA

F8 A soft, rough fabric containing moderate (10%) flint, 0.2–3.5 mm, sub-angular to angular, poorly sorted; rare (2%) medium-grained quartz, rounded; MBA–LBA

F9 A soft, silty fabric containing very common (30%) flint, 0.25–0.75 mm, angular, poorly sorted, in a silty, slightly micaceous clay matrix; MBA–LBA

F10 A soft, rough fabric containing a common amount (20%) of calcined flint, 0.5–9 mm, poorly sorted in a silty clay matrix; similar to F7 but has a higher proportion of larger inclusions; MBA–LBA

F11 A soft, rough fabric containing a common amount (20%) of calcined flint, 0.2–3.5 mm, poorly sorted, in a silty clay matrix; MBA–LBA

F12 A soft but rough fabric containing a moderate amount (15%) of flint, 0.25–1.75 mm, angular, poorly sorted; sparse (7%) quartz, medium to very coarse-grained, well-rounded to sub-rounded; rare (2%) iron oxides, 0.25–1 mm, rounded; EIA–MIA

F13 A soft, rough fabric containing a very common amount (30%) of calcined flint, 0.25–3 mm, angular, poorly sorted; EIA-MIA

F14 A soft, slightly rough fabric containing a moderate amount (10%) of flint, 0.25–2 mm (mostly <1 mm), poorly sorted; rare (2%) iron oxides, ≤1 mm, rounded; EIA-MIA.

FG1 A soft, silty fabric (now burnt) containing sparse (5%) calcined flint, 0.5–1 mm, angular, moderately sorted; sparse (5%) grog, 0.5–1.5 mm, angular, in a silty clay matrix; MBA–LBA

FG2 A soft but rough fabric containing a very common amount (30%) of calcined and detrital flint, 0.25–2.5 mm, angular, moderately sorted; moderate (15%) grog, 1–2 mm, sub-angular to angular, moderately sorted; rare (1%) iron oxides, <1 mm, rounded; iron staining within fabric; MBA–EIA

FG3 A soft, slightly soapy fabric containing a moderate amount (10%) of flint, 0.25–2.5 mm, angular, moderately sorted; moderate (15%) grog, 2–5 mm, angular, moderately sorted in a silty clay matrix; MBA–LBA

FG4 A soft, soapy fabric containing a common amount (20%) of grog, 1–3 mm, moderately sorted, angular; sparse (5%) calcined flint, 1.5–3.5 mm, angular; rare (1%) quartzite, 3 mm, sub-rounded; rare (1%) quartz, coarse-grained, rounded, in a silty clay matrix; MBA–EIA

FV1 A soft, silty fabric containing sparse (3%) flint, mostly detrital and uncalcined, 0.25–0.75 mm, angular, moderately sorted; sparse (3%) organic inclusions, linear, up to 2 mm; rare (1%) medium-grained quartz, rounded, in a very fine/silty clay matrix; EIA–MIA

G1 A soft, soapy fabric containing a common amount (20%) of grog, 0.5–3 mm, sub-rounded, moderately sorted; EIA–MIA

G2 A soft, soapy fabric containing a very common amount (30%) of grog (oxidised buff and orange, and unoxidised), 0.25–2 mm, angular; EIA–MIA

G3 A soft, soapy fabric containing a common amount (20%) of grog, mostly buff-coloured, 0.25–2.5 mm, sub-rounded to angular, moderately sorted; occasional coarse to very coarse-sized quartz grains, well rounded; surfaces appear to have a moderate amount (15%) of fine-grained glauconite, but far fewer grains visible in section; EIA–MIA

G4 A soft, soapy fabric containing a common to very common amount (20–25%) of grog, 0.5–0.6 mm, sub-angular to angular in shape, poorly sorted; EBA

I1 A soft, silty fabric containing a common amount (20%) of iron, 0.5–1 mm, sub-rounded to rounded; sparse (3%) flint, up to 6 mm, angular, EIA–MIA

Q1 A soft, silty fabric containing a moderate amount (15%) of quartz, 0.25–0.7 mm but mostly medium-grained, sub-rounded to rounded, well sorted; rare (2%) chalk, 0.25–0.5 mm, sub-angular; EIA–MIA

Q2 A soft, sandy fabric characterised by a matrix containing abundant very fine quartz with sparse (7%) fine to medium-grained quartz, with occasional rounded coarse-sized grains; quartz component includes black grains of the same size as the quartz but their identification is uncertain, ?glauconite; EIA–MIA

Q3 A soft but rough fabric containing a moderate amount (10%) of flint, angular, 0.25–7 mm, poorly sorted; moderate quartz, 0.25–0.5 mm, sub-rounded, well sorted; sparse (3%) voids from organic inclusions, up to 2.5 mm; rare (2%) iron; there is considerable variation in size and sorting of the quartzite in this fabric; EIA–MIA

Q4 A soft but rough fabric containing a moderate amount (10%) of flint, angular, 0.25–7.5 mm, poorly sorted; sparse (3%) quartz, rounded, up to 0.4 mm; sparse (5%) iron oxides, up to 1 mm, rounded; EIA–MIA

Q5 A soft, sandy fabric containing abundant (50%) glauconite, very fine to fine grained, very well sorted; sparse (3%) flint, angular, up to 2.5 mm; sparse (3%) quartz, medium-grained, rounded; EIA–MIA

Q6 A soft, sandy fabric containing moderate (15%) quartz, 0.25–1.25 mm, rounded; sparse (5%) iron, 0.5–2 mm, sub-rounded to rounded; rare (1%) flint, up to 2 mm, angular; EIA–MIA

Q7 A soft, silty fabric containing few visible inclusions: sparse (3%) iron, up to 0.5 mm, rounded; rare (1%) quartz, 0.5 mm, sub-angular; rare (1%) organic inclusions, linear, 1.5 mm; EIA–MIA

Q8 A soft, silty fabric containing sparse (3%) ferrous sandstone, 0.2 mm, sub-rounded in fine, sandy matrix with common very fine black grains and sparse (7%) medium-sized quartz, sub-rounded; MBA–LBA

Q9 A fairly hard, sandy fabric, containing abundant (40%) medium-grained quartz, sub-rounded, well sorted; probably Iron Age

Q10 A soft, sandy fabric containing abundant (40–50%) glauconite, fine-grained, well rounded, very well sorted; moderate (10%) quartz, medium-grained, rounded; sparse (7%) flint, 0.25–2.5 mm, angular, poorly sorted; MBA–LBA

Q11 A soft, silty fabric containing a sparse amount (5%) of flint, 0.5–2 mm, angular, in a very fine, sandy clay matrix, may have a scatter of medium to coarse grains of quartz, rounded; EIA–MIA

Q12 A soft, silty fabric containing a sparse amount (7%) of iron oxides, 0.25–2.25 mm, well-rounded in very fine sandy matrix with occasional rounded medium-sized grains; EIA–MIA

QG1 A soft, soapy fabric containing a moderate amount of quartz (?glauconitic), medium to coarse-grained, well rounded to sub-rounded; moderate (10%) grog, 0.5–2 mm, sub-rounded and sparse (7%) iron oxides, up to 2 mm, rounded; EIA–MIA

QF1 A soft, sandy fabric containing a sparse (7%) amount of calcined and detrital flint, 0.25–5 mm, angular, poorly sorted, in matrix of fine-grained glauconite, well rounded and well sorted; EIA–MIA

V1 A soft, silty fabric containing a moderate amount (10%) of leached inclusions, presumably calcareous, 0.25–0.5 mm, sub-rounded, moderately sorted; sparse (3%) quartz, medium to very coarse, rounded, in a silty or very fine sandy clay matrix; MBA–LBA

VF1 A soft, slightly soapy fabric containing common (25%) voids, probably from organic inclusions, 0.25–2 mm; sparse (7%) uncalcined flint, 0.25–4 mm, angular; EIA–MIA

VQ1 A soft, rough fabric containing a moderate amount (15%) of voids, from organic inclusions, 0.5 mm, well sorted; sparse (7%) quartz, up to 0.75 mm, well rounded, well sorted; sparse (3%) flint, 0.75–2.5 mm, angular; EIA–MIA

VG1 A soft, slightly soapy fabric containing common (20%) voids, probably from organic inclusions, up to 3.5 mm, poorly sorted; moderate (10%) grog, 0.75–1.5 mm, moderately sorted, angular; sparse (5%) uncalcined flint, 0.25–1.25 mm, angular; EIA–MIA.

Appendix 2. Bronze Age and Iron Age pottery forms

Bronze Age forms

R10 slightly flared, concave rim, rounded on top, probably from a shouldered jar, but broken at the neck (McNee 2012, LBA form type J9); LBA-EIA

R11 slightly flared, concave rim with internal bevel, profile unknown; LBA

R12 **s**lightly flared, concave rim, appears to be flattened on top (McNee 2012, LBA form type J9); LBA

R13 upright, slightly concave rim, externally expanded, may be irregularly pinched on the interior (McNee 2012, LBA form type J9); LBA

R14 slack or neutral-profiled vessel with flat-topped rim and rusticated exterior around the shoulder area (McNee 2012, LBA form type J4); LBA–EIA

R15 rim fragment with finger impressions on top, too small to ascertain vessel form; MBA–LBA

R16 flat-topped, squared rim, Bucket Urn; abraded but appears to have been decorated around the upper exterior (McNee 2012, MBA form type J1); MBA

R17 flat-topped rim from neutral profile vessel, similar to R16 but may be more tub-like in shape and therefore of possible MBA/LBA transitional date (McNee 2012, MBA–LBA form J1)

Iron Age forms

R2 rounded, flared rim from shouldered jar (McNee 2012, form J9)

Appendix 3. Catalogue of illustrated pottery

Early Bronze Age

5990. Collared Urn with two rows of twisted cord impressions on rim interior surface, context 20205, grave 20204

Early Iron Age

Pit 50899, context 50848

1. Small, shouldered vessel with simple upright rim, decorated with diagonal stab marks around the shoulder and rim exterior, R10, I1, ON 907, PRN 40
2. Globular vessel with shoulder cordon and plain base, rim missing, Q1, ON 909, PRN 1
3. Plain, flat base, Q3, ON 906, PRN 3
4. Flaring rim from coarseware shouldered jar, R2, Q3, PRN 12
5. Slightly flared rim from jar or bowl, R3, Q3, PRN 13
6. Flared rim from fineware shouldered jar or bowl, R4, Q2, PRN 19

Pit 50949, context 50950

7. Weakly shouldered coarseware jar with upright, flat-topped rim, R5, VF1, PRN 25
8. Body sherd from carinated bowl, decorated at the shoulder with incised horizontal line and diagonal incised lines above, creating chevrons, FV1, PRN 36
9. Carinated bowl with slight groove below rim, R9, Q1, PRN 38

Late Iron Age/Romano-British

(all grog-tempered form types are after Thompson 1982)

1. Bead-rimmed storage jar; flint-tempered fabric; 1st century BC, vessel 1, context 18127, 18125
2. Weakly shouldered vessel with flat-topped, upright rim, probable rustication around shoulder area; coarse, flint and grog-tempered fabric; 1st century BC, vessel 2, context 18127, pit 18125
3. Everted rim jar; grog-tempered; 1st century BC, vessel 3, context 18127, pit 18125

Slot 50529, ditch 51208, 1st century AD

4. Straight-walled platter (G1-11); grog-tempered; context 50531
5. Platter with rounded wall (G1-10); grog-tempered; context 50531
6. Round-bodied jar with beaded rim (C1-2); grog-tempered; context 50531
7. Storage jar (C6-1); grog-tempered; with neck cordon and diagonally-slashed shoulder cordon; context 50531
8. Storage jar (C6-1); grog-tempered; two neck cordons and one shoulder cordon with diagonal line decoration; neck dipped in resin/birch tar; context 50532
9. Body sherd; grog-tempered; wide corrugated vessel wall, moulded on interior; context 50532
10. Round-bodied jar everted rim (B1-3); grog-tempered; cordon at base of neck; context 50532.
11. Necked jar with everted rim (B1-1); grog-tempered; context 50532
12. Necked jar with everted rim (B1-1); grog-tempered; context 50532
13. Round-bodied jar with beaded rim (C1-2); grog-tempered; tooled, horizontal groove around shoulder, horizontal and diagonal scoring below, context 50532

14. Round-bodied jar with beaded rim (C1-2); grog-tempered; tooled, horizontal groove around shoulder, diagonal scoring below, context 50532
15. Butt-beaker (G5-6); grog-tempered; horizontal cordon at shoulder, context 50532
16. Butt-beaker (G5-6); grog-tempered; horizontal cordon at shoulder, context 50532
17. Plain, carinated cup (E1-4); grog-tempered; context 50532
18. Necked jar with everted rim (B1-1); grog-tempered; cordon at base of neck; context 50544
19. Round-bodied jar with beaded rim (C1-2); grog-tempered; tooled, horizontal groove around shoulder, horizontal scoring below, context 50544
20. Pulled bead rim jar with offset neck; grog-tempered; context 50544
21. Plain, wide-mouthed cup with everted rim (E3-1); grog-tempered; context 50544
22. Plain, wide-mouthed cup with everted rim (E3-1); grog-tempered; context 50544
23. Straight-walled platter (G1-11); grog-tempered; context 50544
24. Necked jar with everted rim (B1-1); grog-tempered; cordon at base of neck; context 50546
25. Round-bodied jar with beaded rim (C1-2); grog-tempered; curved combing below shoulder groove; context 50546
26. Butt-beaker with offset neck (G5-5); grog-tempered; cordon at shoulder; context 50546

Slot 50277, ditch 51208, 1st century AD

27. Necked jar with everted rim (B1-2); grog-tempered; context 50245
28. Round-bodied jar with beaded rim (C1-2); grog-tempered; two shallow tooled grooves above shoulder; context 50245
29. Wide-mouthed, carinated cup (E1-2); grog-tempered; two cordons; context 50245

Context 50378, slot 50376, ditch 50597, 1st century AD

30. Necked jar with everted rim (B1-1); grog-tempered
31. Necked jar with everted rim (B1-1); grog-tempered; resin on exterior rim and neck
32. Necked jar with everted rim (B1-1); grog-tempered; probable resin on upper interior, outer rim and neck
33. Round-bodied jar with beaded rim (C1-2); grog-tempered; horizontal tooled groove on shoulder, horizontal wiping/scoring below
34. Round-bodied jar with beaded rim (C1-2); grog-tempered; horizontal tooled groove on shoulder, diagonal scoring below
35. Round-bodied jar with beaded rim (C1-2); grog-tempered; possible resin on neck; horizontal tooled groove on shoulder, vertical/diagonal scoring/wiping below
36. Squat, plain everted rim cup (E3-4); grog-tempered; horizontal wiping on lower exterior
37. Squat, plain everted rim cup (E3-4); grog-tempered
38. Cup base (E3-4); grog-tempered
39. Simple, carinated cup (E1-1); grog-tempered; cordon around upper body
40. Plain, carinated cup (E1-4); grog-tempered; tooled groove above carination; plant impression on external wall; ON 890
41. Small, narrow-mouthed, everted rim cup (E3-5); grog-tempered; cordon at base of neck and shoulder

42. Simple, carinated cup (E1-1); grog-tempered; cordon around upper body
43. Platter, copy of CAM 12 (G1-7); grog-tempered
44. Butt-beaker (G5-1); grog-tempered
45. Butt-beaker (G5-6); grog-tempered; two horizontal grooves on upper body
46. Plain, conical lid (L6); grog-tempered

Other features

47. Corrugated jar rim (B2-2); grog-tempered; context 50483, slot 50481, ditch 50598
48. Rounded jar with bead rim (C1-2); grog-tempered; horizontal shoulder groove; context 50483, slot 50481, ditch 50598
49. Rounded jar with bead rim (C1-2); grog-tempered; horizontal shoulder groove; context 50483, slot 50481, ditch 50598
50. Plain, hemispherical cup; grog-tempered; context 50483, slot 50481, ditch 50598
51. Plain, carinated cup; grog-tempered; context 15191, slot 15189, ditch 15378
52. Tall-necked, narrow-mouthed jar (B3-8); cordon at base of neck and groove above shoulder; ON 850, context 50233, slot 50232, ditch 50587

Middle Romano-British (2nd century AD)

53. S-profile bowl (Monaghan 1987, 4A); fine greyware; context 50795, pit 50801
54. Lid-seated neckless jar; greyware; context 50795, pit 50801
55. Plain, carinated cup; greyware; context 50795, pit 50801
56. Flagon with flanged rim; oxidised ware; context 50794, pit 50801
57. Reed-rimmed neckless jar; greyware; context 50796, pit 50801

Late Romano-British (4th century AD)

58. Upright-necked jar with externally thickened triangular rim; flint-tempered with a sandy matrix; context 50565, ditch 50563
59. Everted rim jar; grog-tempered; context 50564, ditch 50563
60. Upright-necked jar; grog-tempered; context 50564, ditch 50563
61. Slightly everted rim jar; greyware; context 50564, ditch 50563
62. Strainer (Lyne and Jefferies 1979, late class 5C); greyware; context 50564, ditch 50563
63. Deep, straight-sided dish with plain rim; grog-tempered; context 50564, ditch 50563
64. Bead-rimmed bowl (Young 1977, C45); Oxfordshire colour-coated ware; context 50564, ditch 50563
65. Rope-rimmed storage jar; grog-tempered; context 50494, pit 50492

Appendix 4. Catalogue of worked stone objects

#1 Upper rotary quern fragment (Figure *1). Possible Folkestone Beds, medium-grained well-sorted loosely cemented glauconitic and feldspathic sandstone with pink feldspar. Flat grinding surface with steeply sloped conical hopper, narrow rim and part of sloping side. The circumference does not survive, but the rim measures 250mm diameter. Measures 115mm thick x ?350-400mm diameter. Weighs 2074g. Context 50532, fill of ditch 51208. Area 3e. mid 1st century AD (2nd quarter)

#2 Rotary quern fragments. Lava. A total of 286 fragments almost certainly from the same quern but now degraded beyond reconstruction. Five were retained for analysis of which three have a grooved surface. One is an edge fragment showing that this was of disc type with a flat grooved circumference joining a flat face. Measures approximately 450mm diameter x >60mm thick. Weighs 16251g. Context 40129, fill of pit 40128. Area 7. 2nd century AD +

#3 Probable millstone fragment, upper stone. Millstone Grit, coarse-grained poorly-sorted grey gritty stone. No centre or edges survives but looks like a millstone with its flat faces. One face roughly worked, the other is pecked. It has similar appearance to and may be part of the same millstone as 40167 below but they do not adjoin. Measures 110mm thick. Weighs 2490g. Context 40121, fill of posthole 40120 in structure 41122. Area 7. Roman

#4 Upper millstone fragment (Figure *). Millstone Grit, coarse-grained poorly-sorted grey gritty stone. Central portion with part of large eye and circle around this eye on the grinding surface. The eye itself is slightly damaged but the ring around it has an approximate diameter of 350mm, suggesting the eye is a bit smaller at about 300mm. With an eye this size, the stone can only have been a millstone. The grinding surface is pecked and the other surface tooled/coarsely pecked. Measures 104mm thick x indeterminate diameter. Weighs 2631g. Context 40167, fill of pit 40156 in structure 40122. Area 7. Roman

#5 Probable millstone fragment. Millstone Grit, very coarse-grained and very poorly-sorted gritty stone containing regular quartz pebbles with occasional quartzite pebbles. Small fragment lacking original edges or circumference. Possibly part of the millstone from context 40439 but does not adjoin. Pecked grinding surface (flat) and worked other face (also flat). Measures 105mm thick. Weighs 527g. Context 40331, fill of pit 40307. Area 7. 2nd century AD +

#6 Millstone fragment. Millstone Grit, very coarse-grained and very poorly-sorted gritty stone containing regular quartz pebbles with occasional quartzite pebbles and odd bit of muscovite. Disc type with flat faces. Circumference does not survive but the large irregular eye of 80-210mm diameter and the flat faces suggest it is from a millstone. The grinding surface is pecked and the other surface is roughly worked. Measures 105mm thick. Weighs 2075g. Context 40349, fill of pit 40339. Area 7. Roman

#7 Upper millstone fragment. Millstone Grit, coarse-grained poorly-sorted feldspathic sandstone with frequent pink feldspar and occasional muscovite mica. Two adjoining fragments and third fragment that does not join but is similar in appearance. Disc type with flat faces and straight sides, pecked all over. There is a hole on one edge, which cuts through to the current grinding face. Measures 750mm diameter x 33mm thick. Weighs 983g. Context 40240, fill of ditch 40239, enclosure group 41106. Area 7. 2nd century AD +

#8 Probable millstone fragment. Millstone Grit, medium to coarse-grained poorly-sorted with occasional quartz pebble and rock fragments (grey slate?). Less than 5% of the circumference survives but this portion suggests a diameter of between 650mm and 800mm diameter. The surviving portion is 170mm radius (340mm diameter) but there is no sign of the eye. It is a flat disc type with slightly concave worn grinding surface with no sign of original working except for a single circular groove around the circumference. The top is tooled and the edges are straight and lean in slightly and are worked. Weighs 1883g. Context 40056, fill of ditch 41106. Area 7. 2nd century AD +

#9 Probable millstone fragment. Millstone Grit, medium to coarse-grained poorly-sorted with occasional quartz pebble and rock fragments (grey slate?). Two fragments which do not join either each other or the larger fragment from the same context, but these two appear to be from the same stone. Measures approx 800mm diameter x 55mm thick. Weighs 811g. Context 40056, fill of ditch 41106. Area 7. 2nd century AD +

#10 Upper millstone fragment. Possible Millstone Grit, medium-grained moderately-sorted feldspathic sandstone with gritty inclusions. Slightly tapered to centre. Pecked grinding surface with some rotational wear. Other face is also slightly concave and worn smooth. Stone appears to have been reused. Straight vertical and pecked edges. Possible part of rynd slot with circular channel around what might be the eye – not enough survives to determine size of this. Also possible square hole on one broken edge. This may have been a fitting for something or the stone may have been reused. Measures approximately 630mm diameter x 68mm thick. Weighs 5658g. Context 13504, fill of ditch 13503. Area 5. Roman

#11 Lower millstone fragment (Figure *). Lodsworth Greensand. Two adjoining fragments. There is a slight lip around the fully perforated socket of 80mm diameter – roughly cylindrical. It is slightly tapered towards the edge. The grinding surface is pecked, the base is very roughly tooled and the edges do not survive. Measures >640mm diameter x 72mm max thickness. Weighs 4458g. SF 857. Context 50364, fill of ditch 50866. Area 3e. Late Roman (4th century)

#12 Saddle quern or processing slab (Figure *). Possible Folkestone Beds Greensand, medium-grained well-sorted, slightly polished, brown sandstone with frequent black glauconite. Both faces are heavily concave and worn smooth but one surviving edge is worn in the same way. Other edges are all broken. Measures >112 x 142 x 54mm thick. Weighs 897g. Context 30012, fill of ditch 30202. Area 6. Undated but 3 sherds of LIA?ER pot suggest Roman

#13 Whetstone (Figure *). Fine grained well sorted pure quartz sandstone. Rectangular flat whetstone with rectangular cross section and sharp arrises. All faces and edges, except one broken one, have been extensively used and are flat and slightly concave. Measures 84 x 57 x 27mm max thickness. Weighs 219g. SF 32. Context 18001, subsoil.

#14 Hammerstone. Flint. Cobble with patchy percussion damage all round it. Could be a hammerstone or a ballista ball/missile. Measures 120 x 100 x 100mm. Weighs 1732g. Context 16003, alluvial layer.

Appendix 5. Coin catalogue

Context	18243	Object	35		
Metal	Potin	Denomination	coin		
Diameter	17	Weight	0.91	Reverse axis	9
Issuer	Unknown Iron Age	Issue date	c. 80 – 50 BC		
Obverse condition	Slightly worn	Reverse condition	Slightly worn		
Obverse	Stylised bust of Apollo left	Reverse	Stylised charging Celtic bull r		
Mint	Unknown	Officina:			
Notes	some serious damage to edge of flan, but otherwise in excellent condition	References	Van Arsdell 131-01 with bull charging r		
Reece Periods:	1 – to AD 41	Casey Period:	pre AD 43		

Context	40100	Object	60		
Metal	Silver	Denomination	Denarius		
Diameter	17	Weight	2.43	Reverse axis	6
Issuer	Domitian	Issue date	AD 85-86		
Obverse condition	Slightly worn	Reverse condition	Slightly worn		
Obverse	IMP CAES DOMIT AVG GERM P M CENS P P P, TR P V,laureate head right	Reverse	IMP XI COS XI Minerva advancing right, with spear and shield.		
Mint	Rome	Officina:			
Notes	Some edge damage	References	RIC II, Domitian, 73		
Reece Periods:	4 – AD 69 – 96	Casey Period:	4 – AD 81 – 96		

Context	30019	Object	41		
Metal	Cu Alloy	Denomination	As/Dupondius		
Diameter	26	Weight	9.22	Reverse axis	0
Issuer	Unknown	Issue date	C1 – C2 AD		
Obverse condition	Corroded	Reverse condition	Corroded		
Obverse	Illegible	Reverse	Illegible		
Mint	Unknown	Officina:			
Notes	Very badly corroded As/Dupondius	References			
Reece Periods:		Casey Period:			

Context	30036	Object	51		
Metal	Cu Alloy	Denomination	Sestertius		
Diameter	31	Weight	10.80	Reverse axis	0
Issuer	Hadrian	Issue date	AD 117 – 138		
Obverse condition	Corroded	Reverse condition	Corroded		
Obverse	Bust r,	Reverse	Illegible		
Mint	Rome	Officina:			
Notes	Badly corroded. Bust is recognisably Hadrian	References			
Reece Periods:	6 – AD 117 – 138	Casey Period:	6 – AD 117 – 138		

Appendix 6. Core data from Area 4N

count	No of platforms	direction	flakes	blades	bladelets	platform preparation	cortical back	reason	abrasion	context	
1	2	bipolar	1	1	0	1	1	inclusions	0	16002	
1	2	bipolar	1	1	1	1	0	edge angle regression	0	16002	
1	2	bipolar	0	1	1	1	0	hinge fractures	0	16002	
1	2	bipolar	1	1	1	1	1	inclusions	0	16002	
1	2	bipolar	0	1	1	0	1	edge angle regression	1	16002	
1	2	bipolar 90	0	1	1	1	1	edge angle regression	1	16002	
1	2	degrees	1	0	0	0	0	exhausted	0	16002	
1	4	multi	1	0	0	0	1	exhausted	0	16002	
1	1	unipolar	0	1	0	1	1	exhausted	1	16002	
1	1	unipolar	1	1	1	1	1	hinge fractures	1	16002	
1	4	multi	1	1	0	0	1	exhausted	0	16002	
1	1	unipolar 90	1	1	1	1	1	inclusions	1	16002	
1	2	degrees 90	1	0	0	1	0	exhausted	0	16002	
1	2	degrees	1	0	1	1	1	inclusions	1	16002	
1	1	unipolar	1	1	1	1	1	exhausted	0	16002	
1	2	bipolar	0	1	0	1	1	inclusions	1	16003	bullhead
1	4	multi	1	1	1	1	1	inclusions	1	16003	
1	2	bipolar	1	0	0	1	1	exhausted	1	16003	
1	2	bipolar	0	1	0	1	1	inclusions	1	16003	
1	2	bipolar	0	0	0	1	1	edge angle regression	1	16003	
1	1	unipolar	1	0	0	1	0	inclusions	0	16003	
1	1	unipolar	1	0	0	1	0	edge angle regression	0	16003	
1	3	multi	0	1	1	1	1	edge angle regression	1	16003	
1	1	unipolar	0	1	0	0	1	exhausted	0	16003	

1	1	unipolar	0	0	1	1	0	edge angle regression	1	16003	
1	1	unipolar 90	0	1	0	1	1	inclusions	1	16003	
1	2	degrees	1	1	1	0	1	edge angle regression	1	16003	
1	2	bipolar	1	1	0	1	1	edge angle regression	0	16003	
1	2	bipolar	0	0	1	1	1	exhausted	1	16003	
1	1	unipolar	0	1	1	0	1	exhausted	1	16003	
1	1	unipolar	1	1	1	0	1	exhausted	0	16003	
1	1	unipolar 90	1	1	1	0	0	edge angle regression	0	16003	
1	2	degrees	1	0	1	0	0	inclusions	0	16003	
1	2	bipolar	0	1	1	1	1	exhausted	1	16003	
1	1	unipolar	1	0	0	1	0	exhausted	0	16003	
1	1	unipolar 90	0	1	1	1	0	edge angle regression	1	16003	
1	2	degrees	1	1	0	1	1	edge angle regression	0	16003	
1	1	unipolar	0	1	1	1	1	edge angle regression	0	16003	
1	2	bipolar	0	1	0	1	1	exhausted	0	16003	
1	3	multi 90	1	1	0	0	0	exhausted	1	16003	
1	2	degrees	0	1	1	0	1	exhausted	1	16003	
1	2	bipolar	1	0	0	1	1	edge angle regression	0	16003	
1	3	multi	0	1	1	1	0	edge angle regression	0	16003	
1	2	bipolar 90	1	1	0	1	1	edge angle regression	0	16003	bullhead
1	2	degrees	1	1	0	0	0	edge angle regression	0	16003	
1	1	unipolar	1	1	0	0	1	inclusions	0	16003	
1	2	bipolar	0	0	1	1	0	exhausted	1	16003	
1	2	bipolar 90	0	1	1	1	1	edge angle regression	1	16003	bullhead
1	2	degrees	0	1	1	1	1	exhausted	1	16003	

1	1	unipolar	1	1	0	1	1	inclusions	0	16003
1	2	bipolar	0	1	0	0	0	exhausted	0	16003
1	1	unipolar	1	1	0	1	1	inclusions	0	16003
1	1	unipolar	1	1	1	1	1	edge angle regression	1	16003
1	1	unipolar	0	1	1	1	0	exhausted	1	16003
1	2	bipolar	0	0	1	1	0	edge angle regression	0	16003
1	1	unipolar	1	1	0	1	1	edge angle regression	0	16003
1	2	bipolar	1	1	1	1	1	edge angle regression	0	16003
1	2	bipolar	1	0	1	1	0	edge angle regression	0	16003
1	2	90 degrees	1	1	0	0	1	inclusions	0	16003

Appendix 7. Area 4N debitage data

context	butt type	object	stage	abrasion	count
16002	flat	blade	secondary	1	1
16002	flat	blade	secondary	1	1
16002	flat	blade	secondary	1	1
16002	flat	blade	secondary	1	1
16002	linear	blade	secondary	1	1
16002	punctiform	blade	secondary	1	1
16002	flat	blade	tertiary	1	1
16002	flat	blade	tertiary	1	1
16002	flat	blade	tertiary	1	1
16002	flat	blade	tertiary	1	1
16002	linear	blade	tertiary	1	1
16002	linear	blade	tertiary	1	1
16002	linear	blade	tertiary	1	1
16002	punctiform	blade	tertiary	1	1
16002	punctiform	blade	tertiary	1	1
16002	punctiform	blade	tertiary	1	1
16002	punctiform	blade	tertiary	1	1
16002	punctiform	blade	tertiary	1	1
16002	punctiform	blade	tertiary	1	1
16002	punctiform	flake	tertiary	1	1
16002	flat	scraper	tertiary	1	1
16002	flat	blade	secondary	0	1
16002	flat	blade	secondary	0	1
16002	dihedral	blade	tertiary	0	1
16002	flat	blade	tertiary	0	1
16002	flat	blade	tertiary	0	1
16002	flat	blade	tertiary	0	1
16002	flat	blade	tertiary	0	1
16002	flat	blade	tertiary	0	1
16002	flat	blade	tertiary	0	1
16002	flat	blade	tertiary	0	1
16002	linear	blade	tertiary	0	1
16002	linear	blade	tertiary	0	1
16002	linear	blade	tertiary	0	1
16002	punctiform	blade	tertiary	0	1
16002	punctiform	blade	tertiary	0	1
16002	cortical	flake	primary	0	1
16002	cortical	flake	primary	0	1
16002	flat	flake	primary	0	1
16002	linear	flake	primary	0	1
16002	cortical	flake	secondary	0	1
16002	cortical	flake	secondary	0	1
16002	cortical	flake	secondary	0	1

16002	cortical	flake	secondary	0	1
16002	cortical	flake	secondary	0	1
16002	cortical	flake	secondary	0	1
16002	cortical	flake	secondary	0	1
16002	cortical	flake	secondary	0	1
16002	dihedral	flake	secondary	0	1
16002	dihedral	flake	secondary	0	1
16002	dihedral	flake	secondary	0	1
16002	dihedral	flake	secondary	0	1
16002	dihedral	flake	secondary	0	1
16002	facetted	flake	secondary	0	1
16002	facetted	flake	secondary	0	1
16002	facetted	flake	secondary	0	1
16002	flat	flake	secondary	0	1
16002	flat	flake	secondary	0	1
16002	flat	flake	secondary	0	1
16002	flat	flake	secondary	0	1
16002	flat	flake	secondary	0	1
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16002	flat	flake	secondary	0	1
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16002	punctiform	flake	secondary	0	1
16002	punctiform	flake	secondary	0	1
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16002	dihedral	flake	tertiary	0	1
16002	facetted	flake	tertiary	0	1
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16002	punctiform	flake	tertiary	0	1
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16002	punctiform	flake	tertiary	0	1
16002	winged	flake	tertiary	0	1
16002	winged	flake	tertiary	0	1
16002	winged	flake	tertiary	0	1
16002	winged	flake	tertiary	0	1
16002	flat	scraper	tertiary	0	1
16003	flat	blade	secondary	1	1
16003	flat	blade	secondary	1	1
16003	linear	blade	secondary	1	1
16003	punctiform	blade	secondary	1	1

16003	punctiform	blade	secondary	1	1
16003	punctiform	blade	secondary	1	1
16003	dihedral	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
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16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	flat	blade	tertiary	1	1
16003	linear	blade	tertiary	1	1
16003	linear	blade	tertiary	1	1
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16003	linear	blade	tertiary	1	1
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16003	punctiform	blade	tertiary	1	1
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16003	punctiform	blade	tertiary	1	1
16003	punctiform	blade	tertiary	1	1
16003	punctiform	blade	tertiary	1	1
16003	winged	blade	tertiary	1	1
16003	flat	flake	secondary	1	1
16003	dihedral	flake	tertiary	1	1
16003	dihedral	flake	tertiary	1	1
16003	dihedral	flake	tertiary	1	1
16003	dihedral	flake	tertiary	1	1
16003	flat	flake	tertiary	1	1
16003	flat	flake	tertiary	1	1
16003	flat	flake	tertiary	1	1
16003	flat	flake	tertiary	1	1
16003	flat	flake	tertiary	1	1
16003	flat	flake	tertiary	1	1

16003	flat	flake	tertiary	1	1
16003	flat	flake	tertiary	1	1
16003	winged	flake	tertiary	1	1
16003	dihedral	blade	secondary	0	1
16003	dihedral	blade	secondary	0	1
16003	flat	blade	secondary	0	1
16003	flat	blade	secondary	0	1
16003	flat	blade	secondary	0	1
16003	flat	blade	secondary	0	1
16003	linear	blade	secondary	0	1
16003	punctiform	blade	secondary	0	1
16003	punctiform	blade	secondary	0	1
16003	punctiform	blade	secondary	0	1
16003	punctiform	blade	secondary	0	1
16003	cortical	blade	tertiary	0	1
16003	cortical	blade	tertiary	0	1
16003	dihedral	blade	tertiary	0	1
16003	dihedral	blade	tertiary	0	1
16003	dihedral	blade	tertiary	0	1
16003	dihedral	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
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16003	flat	blade	tertiary	0	1
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16003	flat	blade	tertiary	0	1
16003	flat	blade	tertiary	0	1
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16003	linear	blade	tertiary	0	1
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16003	linear	blade	tertiary	0	1
16003	linear	blade	tertiary	0	1
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16003	punctiform	blade	tertiary	0	1
16003	punctiform	blade	tertiary	0	1
16003	cortical	flake	primary	0	1
16003	cortical	flake	primary	0	1
16003	cortical	flake	primary	0	1
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16003	facetted	flake	secondary	0	1
16003	facetted	flake	secondary	0	1
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16003	linear	flake	tertiary	0	1
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16003	punctiform	flake	tertiary	0	1
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16003	punctiform	flake	tertiary	0	1
16003	winged	flake	tertiary	0	1
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16003	winged	flake	tertiary	0	1
16003	winged	flake	tertiary	0	1
16003	winged	flake	tertiary	0	1
16003	flat	scraper	secondary	0	1
16003	flat	scraper	tertiary	0	1

Table 1 Quantification (number and weight) of pottery from all areas, by broad phase

	BA		*IA*		*LIA/RB*		*Post-Roman*		*Prehistoric, unspecified*		*Uncertain*		*Total*	
	No.	*Wgt (g)*	*No.*	*Wgt (g)*	*No.*	*Wgt (g)*	*No.*	*Wgt (g)*	*No.*	*Wgt (g)*	*No.*	*Wgt (g)*	*No.*	*Wgt (g)*
Area 1	12	85	651	5067	1483	10654	-	-	1	1	1	3	2148	15810
Area 2	5	65	10	59	24	132	13	94	-	-	5	13	57	363
Area 3E	48	1292	25	149	3764	53058	116	1304	3	15	-	-	3956	55818
Area 3W	-	-	327	3571	102	994	14	118	11	56	-	-	454	4739
Area 4	17	41	30	243	355	1713	1	4	-	-	-	-	403	2001
Area 4S	382	3366	2	16	-	-	-	-	17	49	-	-	401	3431
Area 5	-	-	2	14	1449	15286	2	12	-	-	-	-	1453	15312
Area 6	-	-	204	1164	918	6485	-	-	3	4	-	-	1125	7653
Area 7	18	193	41	272	1034	10558	-	-	21	94	-	-	1114	11117
Area 9	-	-	3	46	305	3126	3	12	-	-	-	-	311	3184
Area 10 evaluation	-	-	-	-	10	32	13	43	10	14	-	-	33	89
Area 10	648	2856	-	-	32	75	16	66	119	349	1	2	816	3348
Area 11	6	33	77	590	1939	14537	9	37	66	275	14	43	2111	15496
Unstratified	-	-	7	138	45	437	-	-	-	-	-	-	52	575
Total	1136	7931	1379	11329	11460	117087	187	1690	251	857	21	61	14434	138936

Table 2 Quantification of pottery from feature types

Feature type	*No*	*% of no.*	*Wgt (g)*	*% of wgt*	*MSW*
Ditch	6041	49.0	69632	56.4	11.5
Pit	3465	28.1	32034	26.0	9.2
Cremation burial (urned)	760	6.2	5348	4.3	7.0
Posthole	676	5.5	6821	5.5	10.1
Gully	427	3.5	3313	2.7	7.8
Vessel	175	1.4	225	0.2	1.3
Colluvium	120	1.0	1085	0.9	9.0
Subsoil	116	0.9	2233	1.8	19.3
Tree throw	110	0.9	465	0.4	4.2
Alluvial layer	66	0.5	643	0.5	9.7
?Beamslot	54	0.4	233	0.2	4.3
Layer	54	0.4	341	0.3	6.3
cremation burial (uncertain type)	53	0.4	189	0.2	3.6
cremation burial (unurned)	50	0.4	41	6.3	0.8
Unclassified features	38	0.3	90	0.1	2.4
Oven	36	0.3	224	0.2	6.2
Shallow depression	32	0.3	293	0.2	9.2
Ring gully	16	0.1	71	0.1	4.4
Pit/hearth	8	0.1	56	0.0	7.0
Unstratified	7	0.1	23	0.0	3.3
Field drain	4	0.0	13	0.0	3.3
Palaeochannel	4	0.0	13	0.0	3.3
?trackway	4	0.0	11	0.0	2.8
Channel	3	0.0	12	0.0	4.0
Stakehole	2	0.0	5	0.0	2.5
Artefact spread	1	0.0	24	0.0	24.0
Curvilinear gully	1	0.0	2	0.0	2.0
Total	12323		123340		

Table 3 Quantification of Middle to Late Bronze Age pottery, by fabric and form

Fabric	*No.*	*Wgt (g)*	*Identified forms*
Flint-tempered wares			
F1	59	202	R16 (x1)
F10	6	63	
F2	219	1262	R10 (x7); R11 (x1); R12 (1x); R13 (x2)
F3	132	558	
F4	54	162	R15 (x1)
F5	42	222	R17 (x1)
F6	21	62	
F7	51	1241	
F8	60	128	
F9	12	18	
F99	2	8	
Flint and grog-tempered			
FG1	20	254	R12 (x1); R14 (x1)
FG2	12	52	
FG3	61	225	
FG4	17	77	
FG99	44	63	
Grog-tempered			
G99	12	39	
Sandy wares			
Q10	21	27	
Q8	4	14	
Q9	1	10	
QF1	2	13	
?Organic-tempered			
V1	3	75	
Total	855	4725	

Table 4 Summary of undiagnostic prehistoric pottery, by area, fabric, number and weight

Area	*Fabric*	*No.*	*Wgt (g)*
Area 1	Flint-tempered	1	1
Area 3	Flint-tempered	14	71
Area 6	Flint-tempered	3	4
Area 7	Flint-tempered	10	62
Area 7	Flint and grog-tempered	5	22
Area 7	Sand and grog-tempered	6	10
Eval. Trenches adj. to Area 4S	Flint-tempered	6	16
Eval. Trenches adj. to Area 4S	Flint and grog-tempered	5	22
Eval. Trenches adj. to Area 4S	Grog-tempered	4	1
Eval. Trenches adj. to Area 4S	Sandy ware	1	7
Unstratified	Flint-tempered	1	5
Total		56	221

Table 5 Early to Middle Iron Age pottery, quantification by area and feature

Area	*Feature*	*No.*	*Wgt (g)*	*Forms present (one example unless specified)*	*Date range*
Area 1	Ditch 18632	49	239	R20, R21	M-LIA
	Ditch 18697	35	330	R18, R19	LBA/EIA
	Ditch 18166	18	151	R22 x 2	MIA
	Ring gully 18681 (slot 18421)	8	93	R25, R29	E-MIA
	Ditch 18667	1	26	R26	E-MIA
	Subtotal Area 1	*111*	*839*		
Area 2	Pit 51077/roundhouse 51176	6	43	R27, R28	E-LIA
	Ditch 51177	2	12	R3	E-MIA
	Subtotal Area 2	*8*	*55*	R22	
Area 3E	Ditch 50864	12	86		E-MIA
	Subtotal Area 3E	*12*	*86*	*R25*	
Area 3W	Pit 50899	165	1842	R2, R3 x 2, R4, R10	EIA
	Pit 50949	87	834	R5, R6 x 3, R7, R8, R9	EIA
	Pit 50986	39	433	R23, R24	E-MIA
	Pit 50976, pit group 51196	8	101		E-MIA
	Pit 50985, pit group 51196	3	55		E-MIA
	Subtotal Area 3W	*302*	*3265*		
Area 7	Posthole 40011	7	65		E-MIA
	Subtotal Area 7	*7*	*65*		
Total		440	4310		

Table 6 Quantification of Early to Middle Iron Age pottery, by fabric (number and weight)

Fabric	*No.*	*Wgt (g)*
Flint-tempered		
F12	3	51
F13	18	141
F14	12	86
F99	4	3
Flint and grog-tempered		
FG2	2	12
FG4	11	68
FG99	3	24
Flint and organic-tempered		
FV1	1	16
Grog-tempered		
G1	14	130
G2	8	33
G3	6	31
Iron-gritted		
I1	5	202
Sandy wares		
Q1	69	535
Q2	3	24
Q3	92	1151
Q4	8	147
Q5	9	45
Q6	11	25
Q7	35	269
Q9	6	31
Q11	1	26
Q12	16	69
Quartz mixtures		
QG1	16	178
Organic mixtures		
VF1	71	874
VG1	7	45
VQ1	9	94

Total	440	4310

Table 7 Quantification of Late Iron Age and Roman pottery, by fabric (number and weight)

Fabric	*No.*	*Wgt (g)*
Imported finewares		
Samian	72	761
Cologne colour-coated ware	2	6
Other import (probably from Argonne region)	1	1
Imported coarsewares		
Dressel 20 amphora	71	3441
North Gaulish whiteware	9	210
Mayen ware	2	51
Rock-tempered ware	6	157
Unsourced coarseware	1	12
British finewares		
New Forest colour coat	2	9
Oxfordshire coloured-coated ware	82	690
Fine greyware	65	95
Unassigned colour coats	6	9
Oxidised wares		
Overwey/Tilford	7	64
Fine oxidised ware	31	70
Oxidised ware	393	1203
Whiteware	64	397
Other wares		
Grog-tempered ware	8883	94325
Late Roman grog-tempered ware	88	1732
East Kent fine grog-tempered	48	334
fine greyware	295	1024
Greyware	451	3604
flint and grog-tempered ware	143	1175
Flint-tempered	447	4784
Sandy ware	220	1086
Glauconitic sandy ware	6	51
SE Dorset Black Burnished ware	13	91
Oxfordshire whiteware	44	1514
Unassigned mortaria	7	190
Briquetage	1	1
Total	11460	117087

Table 8 Quantification of pottery from Area 3E, by feature type

Feature type	*No.*	*% of no.*	*Wgt (g)*	*% of wgt*	*MSW (g)*
Ditches and gullies	2923	77.7	42810	80.7	14.6
Pits	689	18.3	8928	16.8	13.0
Postholes	69	1.8	622	1.2	9.0
Ovens	35	0.9	158	0.3	4.5
Tree-throw hole	3	0.1	40	0.1	13.3
Colluvium	45	1.2	500	0.9	11.1
Total	3764		53058		14.1

Table 9 Cylindrical loomweights from context 16022

ON	*Weight (g)*	*Height (mm)*	*Diameter (mm)*	*Perforation diameter (mm)*	*Comments*
17	1684	135	110-115	20	damage to one side but almost complete
18	1416		125	20	fragmentary, only the diameter was reconstructed
19	3193	145	135	20-25	complete
20	2429	130	124	20	largely intact but fragmented (41 pieces) on processing
21	2460	120	121	22	complete though heavily cracked
22	2844	140	126	20	complete
23	1651	130	115-120	20	the top is damaged
24	2955	140	125-130	20-25	largely complete.
25	1233		114		fragmentary, only the diameter was reconstructed

Table 10 The composition of the flint assemblage

Type	**Number**	**%**
Cores	*460*	***6.91***
Bladelet	49	0.74
Blade	50	0.75
Flake	238	3.57
Fragments	123	1.85
Debitage	*5847*	***88.00***
Bladelets	74	0.82
Blades	226	3.56
Flakes	4814	72.49
Chips	492	7.47
Irregular	196	2.95
Crested	4	0.06
Rejuvenation flakes	41	0.65
Tool debitage	*11*	***0.13***
Axe thinning flakes	5	0.07
Axe sharpening flakes	5	0.03
Microburins	1	0.03
Tools	*324*	***4.93***
Microliths	36	0.54
Scrapers	70	1.05
Arrowheads	11	0.17
Denticulates	10	0.15
Piercers	10	0.15
Core tools	23	0.42
Microdenticulates	1	0.01
Knives	10	0.15
Truncations	8	0.12
Notched	4	0.06
Burins	1	0.01
Miscellaneous retouched	140	2.10
Other	*2*	***0.03***
Hammerstones	2	0.03
Total	**6644**	**100.00**

Table 11 The breakdown of the assemblage by area

Area	**No. of pieces**	**%**
1	57	0.86
2	73	1.10
3E	288	4.33
3W	204	3.07
4	3786	56.99
5	5	0.07
6	183	2.75
7	104	1.57
8	812	12.22
9	381	5.73
10	27	0.41
11	293	4.41
Phase 1 evaluation trenches	393	5.92
Phase 2 evaluation trenches	21	0.32
B6-B8	2	0.03
B4-B8	7	0.10
Unstratified	8	0.12
Total	**6644**	**100**

Table 12 Microliths

Type	**Number**	**Percentage**
A types (obliquely blunted)	*3*	*8.8*
A2a	2	5.88
A2c	1	2.9
B types (straight backed)	*6*	*17.6*
B1	1	2.9
B2	3	8.8
B3	1	2.9
B4	1	2.9
C types (obliquely bi-truncated)	*3*	*8.8*
C1b	3	8.8
D types (geometric)	*10*	*23.5*
Triangles D1ai	1	2.9
D1biii	1	2.9
Crescents D2ai	3	8.8
Sub-triangular D5	3	8.8
Unclassed geometric	2	
Rods	*10*	*29.4*
Unclassified	*4*	*11.7*
Total	**36**	**100**

Table 13 Microlith metrical data

Type	Context	Length (mm)	Width (mm)	Comments
A2b	16002	18	13.5	broken
A1c	16002	15	7	
C1b	16002	15	6	
C1b	TP265/1	31	5	
C1b	30001	31	11	
A2a	16111	18	6	
A2a	16111	27	7	
A2c	16002			fragmentary
A2c	16002	22	10	burnt
		Average length	Average width	
	A + C	22.125	9.36	
	A	20	10.875	
	C	25.67	7.33	

Table 14 Core tools

CONTEXT	OBJECT	TYPE	RAW MATERIAL	FEATURES
TP6/SE/1		Tranchet	Flint	
TP69/A3/2	29	Toes, shaped butt, tranchet removal	Brown cherty flint	Very small. An adze or miniature axe?
16003	11	Toes, tranchet	Brown cherty flint	Very small
16003	15	Adze. Toes, tranchet	Good brown flint	Broken (flexion break, no butt)
16003	16	Toes, tranchet removal, mashing	Brown cherty flint	flexion break
16003	26	Pick?	Brown cherty flint	Small pick, no tranchet removal
16003	709	Tranchet	Brown cherty flint	Very small, apparently unused
18001	29	Toes, tranchet removal	Good cherty flint	Burnt butt
18001	30	Pick?	Brown cherty flint	Flexion break/pick end or butt end?
18001	31	Tranchet	Brown cherty flint	Very rough
18001	36	Adze	Brown cherty flint	
18351	37	Tranchet	Dark flint	Frost damage, flexion break (no butt)
40963		Toes	Brown cherty flint	Flatter but damaged
50002	854	Adze? Edge damage	Brown cherty Flint	Very heavy
50003	A3	Toes, tranchet	Brown cherty flint	Tranchet at both ends
50003	858	Pick?	Brown cherty flint	Unfinished, bifacial removals at one end to point
50003	860	Tranchet	Grey cherty flint	Rough
50003	866	Short toes, tranchet	Brown cherty flint	Very rough. Toes extremely short indicating that resharpening probably rendered tool useless.
50003	869	Uncertain	Brown cherty flint	Broken and perhaps burnt at one end
50003	881	Uncertain	Brown cherty flint	Blade end burnt, butt crude
50003	883	Short toes, tranchet	Brown cherty flint	Two-thirds cortical. Blade end only worked, tranchet and short toes on opposite face
50017		Tranchet	Brown cherty flint	
50017	437	Pick	Brown cherty flint	

Table 15 Summary of the human bone

Cut	*Context*	*Area*	*Date*	*Deposit type*	*Bone weight (g)*	*Age/sex*	*Pathology and pyre goods*
15049	15048	5	MIA	un. Burial + rpd	109.5	adult 25–45 yr	osteophytes – T/L body
15139	15138 *	5	LIA/ERB	un. Burial + rpd	396.8	adult 21–30 yr	blue/green spot staining – skull vault, MtC
16120	16121	4S	LIA/RB	bioturbation = 16127	71.7	= 16127	-
	16127**	4S	LIA/RB	un. Burial + rpd	810.2	adult 30–40 yr ?female	osteophytes – T/L body; enthesophytes – alcaneum; mv – wormian bone
	16128	4S	LIA/RB	bioturbated interface	29.4	= 16127	-
16136	16137	4S	?	?rpd	7.1	subadult/adult >12 yr	-
16142	16143	4S	?LIA/ERB	R	9.5	subadult/adult >12 yr	blue/green spot staining – rib; 0.8 g ?animal bone
16164	16165	4S	MIA	?un. burial + rpd/R	129.4	subadult/adult >15 yr	-
18176	18178	1	?LIA/ERB	urned burial	165.3	adult >18 yr	blue/green spot staining – C; 6.5 g ?animal bone
18214	18216	1	LIA/ERB	urned burial	618.5	adult 25–45 yr ??female	osteoarthritis – proximal femur; blue/green spot

							staining – humerus; 3 g ?animal bone;
20204	20205** incl. 20207	Tr 202	EBA	urned burial + rpd	633.0	adult 21–35 yr female	osteophytes – axis; enthesophytes – calcaneum; mv – wormian bones. ?animal bone
30003	30005 incl. 30006	6	LIA/ERB	urned burial	537.4	adult 27–35 yr ??female	osteophytes – patella. Blue/green spot staining – humerus, tibia, mandible
40185	40186	7	ERB	urned burial + rpd	559.2	adult 25–35 yr ??female	-
50160	50161	9D	L. Meso.	Un. Burial + rpd	371.8	adult 21–35 yr	increased vascularity exocranial vault
50854	50855[$]	3W	?	crd incl. rpd	5.0	subadult/adult > 12 yr	-
50921	50922	3W	L. Meso.	?un. burial	206.8	adult 25–40 yr ??female	-

KEY: un. – unurned; rpd – redeposited pyre debris; crd – cremation-related deposit; * – largely undisturbed; ** – undisturbed; BA – Bronze Age; M/LIA – Middle/Late Iron Age; RB – Romano-British; Meso. – Mesolithic; $ – 50% excavation

Table 16 Levels of bone fragmentation by period

Period	*Mean fragmentation level (sieve fraction containing majority of fragments by weight)*	*Maximum fragment size*
Late Mesolithic	5 mm: 51–57% (unurned)	31–35 mm
Early Bronze Age	10 mm: 53% (urned)	64 mm
Middle Iron Age	5 mm: 49–58% (unurned)	28–38 mm
Late Iron Age/early Romano-British	10 mm: (two cases) 56–79% (higher = urned) 5 mm & 10 mm: 45% (urned) 5 mm: (two cases) 47–52% (unurned)	27–68 mm (either end range urned) mean 41 mm
Early Romano-British	10 mm: 72% (urned)	52 mm

Table 17 Number of small skeletal elements recovered by period

Period	*Number of graves*	*Number of small elements*
Late Mesolithic	2	7–25
Early Bronze Age	1	26
Middle Iron Age	2	0–3
Late Iron Age/early Romano-British	5	4–25 (mean 11)
Early Romano-British	1	3

Table 18 Charred plant remains from Mesolithic and late prehistoric features

	Period (phase)	Meso	Lpreh
	Area	9	3E
	Group	-	50657
	Feature type	Grave	Ditch
	Feature/slot	50160	50389
	Context	50161	50416
	Sample	1119	1126
	Volume processed soil (l)	30	12
	Volume flot (ml)	225	60
Cereal grains			
Triticum sp(p).	wheat	-	1
cf. *Triticum* sp(p).	?wheat	-	1
Hordeum vulgare L.	barley, hulled twisted	-	3
H. vulgare L.	barley, hulled straight	-	2
H. vulgare L.	barley, hulled indet.	-	8
H. vulgare L.	barley, indet.	-	6
cf. *H. vulgare*	?barley	-	6
Cerealia	indet. cereal (estimate)	-	16
Cereal chaff			
Triticum sp(p).	wheat glume bases	-	5
Triticum sp(p).	wheat rachis fragments	-	1
Other plant/weed seeds			
Corylus avellana L.	hazel nut shell fragments	49/0.7g	-
Rumex sp(p).	dock	9	1
Vicia/Lathyrus sp(p).	vetch/tare/vetchling (<2mm)	-	1
cf. *G. aparine*	?cleaver	1	-
cf. *Bromus* sp(p).	?brome	-	1
indeterminate	charcoal	+++++	+++++
	total nos of items	59	52
	density of items (per litre of processed soil)	*2*	*4.3*

Key: frequency: + = 1–10; ++ = 11–50; +++ = 51–150; ++++ = 151–250; +++++ = 250+ items

Table 19 Charred plant remains from Late Iron Age/early Romano-British features

	Area	1	3E	4S						5		6	9		
	Group	-	50529	-	-	-	16280	16281	16280	15323	-	-	-	-	-
	Feature	Pit	Ditch	Pit	Pit	Gully	Beam sl	Posth	Beam sl	Ditch	Oven	Grave	Hearth	Hearth	Hearth
	Feature/slot	18172	51208	16086	16084	16206	16231	16078	16167	15208	15137	30124	50124	50132	50114
	Context	18173	50681	16085	16083	16207	16230	16077	16166	15206	15182	30123	50125	50133	50115
	Sample	808	1140	612	622	665	667	644	651	555	544	913	1117	1118	1112
	Volume processed soil (l)	19	20	25	10	40	10	1	10	32	15	39	12	20	15
	Volume flot (ml)	130	850	135	550	885	80	30	100	100	55	900	50	60	40
Cereal grains															
Triticum cf. *dicoccum*	?emmer wheat	1	-	1	-	-	-	-	-	-	-	-	-	-	-
T. cf. *spelta*	?spelt wheat	-	1	-	-	-	-	-	-	-	-	-	-	-	-
T. dicoccum/spelta	emmer/spelt wheat	3	2	2	1	-	-	1	-	-	-	3	-	-	-
T. cf. *dicoccum/spelta*	?emmer/spelt wheat	-	-	1	1	1	-	3	1	1	1	2	1	1	1
T. aestivum type	free-threshing wheat	-	-	-	-	-	-	1	1	-	-	-	1	-	-
T. cf. *aestivum* type	?free-threshing wheat	-	-	-	1	-	-	1	1	-	-	-	-	-	-
Triticum sp(p).	wheat	4	-	2	1	1	-	7	1	-	1	1	1	-	1
cf. *Triticum* sp(p).	?wheat	4	1	2	1	-	1	3	-	1	2	4	-	1	-
Hordeum vulgare L.	barley, hulled twisted	-	2	-	-	-	-	-	-	-	-	1	-	-	-
H. vulgare L.	barley, hulled indet.	-	3	-	-	1	-	-	-	4	-	-	-	-	-
Hordeum vulgare L.	barley, indet, twisted	-	-	-	-	1	-	-	-	-	-	-	-	-	-
H. vulgare L.	barley, indet.	-	2	3	2	5	1	3	-	6	4	2	1	-	1
cf. *H. vulgare*	?barley	1	1	-	5	3	-	2	-	4	-	2	1	-	1
Avena sp(p).	oat	1	2	-	1	-	-	-	-	-	-	-	-	-	-
cf. *Avena* sp(p).	?oat	2	-	-	1	-	-	-	-	-	1	1	-	3	-

	Area	1	3E	4S						5		6	9		
	Group	-	50529	-	-	-	16280	16281	16280	15323	-	-	-	-	-
	Feature	Pit	Ditch	Pit	Pit	Gully	Beam sl	Posth	Beam sl	Ditch	Oven	Grave	Hearth	Hearth	Hearth
	Feature/slot	18172	51208	16086	16084	16206	16231	16078	16167	15208	15137	30124	50124	50132	50114
	Context	18173	50681	16085	16083	16207	16230	16077	16166	15206	15182	30123	50125	50133	50115
	Sample	808	1140	612	622	665	667	644	651	555	544	913	1117	1118	1112
	Volume processed soil (l)	19	20	25	10	40	10	1	10	32	15	39	12	20	15
	Volume flot (ml)	130	850	135	550	885	80	30	100	100	55	900	50	60	40
Cerealia	indet. cereal (estimate)	32	24	77	57	17	17	46	12	51	36	29	12	16	25
Cereal chaff															
Triticum dicoccum Schubl.	Emmer wheat spikelet fork	-	-	1	-	1	-	-	-	-	-	1	1	-	-
T. dicoccum Schubl.	Emmer wheat glume bases	2	1	2	1	-	1	-	-	1	-	-	-	1	-
T. spelta L.	spelt spikelet forks	-	-	-	-	-	-	-	-	-	1	-	1	-	-
T. spelta L.	spelt glume bases	8	3	-	8	-	-	2	3	-	-	1	-	1	-
T. spelta L.	spelt rachis fragments	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Triticum sp(p).	wheat glume bases	24	7	16	13	2	5	1	3	8	6	1	25	120	7
Triticum sp(p).	wheat spikelet forks/bases	14	2	4	1	1	-	1	1	-	1	-	8	34	2
Triticum sp(p).	wheat rachis fragments	7	-	3	-	1	-	-	-	1	-	-	3	25	4
Hordeum vulgare L.	barley rachis	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Avena sp(p).	oat awn fragments	36	-	1	5	-	-	-	-	1	1	1	2	3	1
Other plant/weed seeds															
Corylus avellana L.	hazel nut shell fragments	-	-	1	3	-	1	-	-	-	-	-	-	1	-
Chenopodium sp(p).	goosefoots etc.	1	-	-	-	-	-	-	-	-	9	-	-	-	-
Persicaria cf. *maculosa*	?redshank	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Persicaria sp(p).	knotweed	1	-	-	-	-	-	-	-	5	2	-	-	-	-
Polygonum aviculare L.	knotgrass	-	-	-	-	-	-	-	-	-	1	-	-	-	-

	Area	1	3E	4S						5		6	9		
	Group	-	50529	-	-	-	16280	16281	16280	15323	-	-	-	-	-
	Feature	Pit	Ditch	Pit	Pit	Gully	Beam sl	Posth	Beam sl	Ditch	Oven	Grave	Hearth	Hearth	Hearth
	Feature/slot	18172	51208	16086	16084	16206	16231	16078	16167	15208	15137	30124	50124	50132	50114
	Context	18173	50681	16085	16083	16207	16230	16077	16166	15206	15182	30123	50125	50133	50115
	Sample	808	1140	612	622	665	667	644	651	555	544	913	1117	1118	1112
	Volume processed soil (l)	19	20	25	10	40	10	1	10	32	15	39	12	20	15
	Volume flot (ml)	130	850	135	550	885	80	30	100	100	55	900	50	60	40
Rumex acetosella	sheep's sorrel	-	-	-	-	-	-	-	-	-	3	-	-	-	-
Rumex sp(p).	dock	3	6	-	-	-	-	-	-	1	11	-	-	3	-
Polygonaceae indet.		-	-	-	-	-	-	-	-	-	1	-	-	-	-
Malva sp.	mallow	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Brassica sp.	cabbage etc.	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Prunus spinosa L.	blackthorn	-	-	-	-	-	-	-	-	-	2	-	-	-	-
cf. *Vicia faba*	?broad bean	-	-	-	-	-	-	-	-	-	-	2	-	-	-
Vicia spp.	Vetch(<2mm)	-	-	-	-	-	-	-	-	-	4	-	-	-	-
Vicia/Lathyrus/Pisum sp(p).	vetch/tare/vetchling/pea (>2mm)	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Vicia/Lathyrus/Pisum spp.	Vetch/tare/vetchling/pea (<2mm)	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Vicia/Lathyrus sp(p).	vetch/tare/vetchling (<2mm)	1	1	1	-	-	-	-	-	2	51	-	1	-	1
Medicago/Trifolium sp(p).	medick/clover	-	2	-	-	-	-	-	-	-	1	-	-	-	-
Fabaceae indet.	pea family (fragments >2mm)	-	-	-	-	-	-	-	-	-	-	10	-	-	-
Fabaceae indet.	pea family (small fragments <2mm)	-	-	-	-	-	-	-	-	-	23	-	5	-	-
Fabaceae indet.	small rounded legumes	-	-	-	-	-	-	-	-	-	-	1	-	-	3
Plantago lanceolata L.	ribwort plantain	-	2	-	-	-	-	-	-	-	1	-	-	-	-
cf. *P. lanceolata*	?ribwort plantain	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Euphrasia/Odontites sp(p).	eyebrights/bartsias	-	-	-	-	-	-	-	-	-	2	-	-	-	-

	Area	1	3E	4S						5		6	9		
	Group	-	50529	-	-	-	16280	16281	16280	15323	-	-	-	-	-
	Feature	Pit	Ditch	Pit	Pit	Gully	Beam sl	Posth	Beam sl	Ditch	Oven	Grave	Hearth	Hearth	Hearth
	Feature/slot	18172	51208	16086	16084	16206	16231	16078	16167	15208	15137	30124	50124	50132	50114
	Context	18173	50681	16085	16083	16207	16230	16077	16166	15206	15182	30123	50125	50133	50115
	Sample	808	1140	612	622	665	667	644	651	555	544	913	1117	1118	1112
	Volume processed soil (l)	19	20	25	10	40	10	1	10	32	15	39	12	20	15
	Volume flot (ml)	130	850	135	550	885	80	30	100	100	55	900	50	60	40
Sherardia arvensis L.	field madder	-	1	-	-	-	-	-	-	1	5	-	-	-	-
cf. *G. aparine*	?cleaver	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Galium spp.	Bedstraws	-	-	-	-	-	-	-	-	-	2	-	-	-	-
Tripleurospermum inodorum (L.) Sch. Bip.	Scentless mayweed	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Festuca/Lolium sp(p).	fescue/rye-grass	-	2	-	-	-	-	-	-	-	-	-	1	-	-
cf. *Poa* sp.	?meadow-grass	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Avena/Bromus sp(p).	oat/brome	-	1	2	1	-	-	-	-	-	-	1	1	1	1
Bromus sp(p).	brome	-	1	-	-	-	-	-	-	-	-	-	-	-	-
cf. *Bromus* sp(p).	?brome	-	1	-	-	-	-	-	1	-	-	2	-	-	-
Poaceae indet.	grasses (large seeds)	3	-	-	1	1	-	-	-	-	-	-	-	-	-
Poaceae indet.	grasses (small seeds)	-	-	-	-	-	-	-	1	-	-	-	1	-	-
Poaceae/Cerealia indet.	grass/cereal culm nodes	2	-	-	-	-	-	-	-	-	-	-	-	-	-
indeterminate	thin ribbed round hollow stems	-	1	1	1	-	-	-	1	-	-	-	-	-	-
indeterminate	bud fragments	-	-	-	5	-	-	-	-	-	-	3	-	-	-
indeterminate	charcoal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	total nos of items	154	70	120	112	36	26	71	26	87	177	68	67	210	49
	density of items (per litre of processed soil)	*8.1*	*3.5*	*4.8*	*11.2*	*0.9*	*2.6*	*71*	*2.6*	*2.7*	*11.8*	*1.7*	*5.6*	*10.5*	*3.3*

Key: frequency: + = 1–10; ++ = 11–50; +++ = 51–150; ++++ = 151–250; +++++ = 250+ items

Table 20 Charred plant remains from Romano-British and medieval features

	Period (phase)	Romano-British												Med
	Area	3E		7										3E
	Group	-	-	Structure 41122						-	41113	-	-	50875
	Feature	Pit	Pit	Oven	Oven	Oven	Posth	Posth	Posth	Feature	Ditch	Pit	Pit	Ditch
	Feature number	50646	50648	40124	40973	40983	40995	41009	40156	41019	40929	40812	40960	50728
	Context number	50647	50649	40125	40974	40985	40997	41010	40157	41021	40932	40813	40964	50730
	Sample number	1138	1137	1009	1042	1043	1044	1052	1011	1048	1053	1062	1057	1146
	Volume processed soil (litres)	20	20	10	10	10	20	1	8	10	5	15	1	20
	Volume flot (ml)	375	90	1100	425	130	200	10	35	150	60	50	10	100
Cereal grains														
Triticum cf. *dicoccum*	?emmer wheat	-	-	1	-	-	-	-	-	-	-	-	-	-
T. spelta L.	spelt wheat spikelets	-	-	-	-	-	7	-	-	-	6	-	-	-
T. spelta L.	spelt wheat	-	1	1	-	-	3	1	-	-	3	-	-	-
T. cf. *spelta*	?spelt wheat	-	-	7	1	1	27	-	-	-	-	-	-	-
T. cf. *spelta*	?spelt wheat germinated grain	-	-	-	-	-	-	-	-	-	3	-	-	-
T. dicoccum/spelta	emmer/spelt wheat spikelet	-	-	-	-	-	1	-	-	-	-	-	-	-
T. dicoccum/spelta	emmer/spelt wheat	5	-	5	-	-	11	-	1	5	7	-	-	-
T. dicoccum/spelta	emmer/spelt wheat germinated grain	-	-	12	-	-	33	1	-	-	1	-	-	-
T. cf. *dicoccum/spelta*	?emmer/spelt wheat	4	2	4	3	-	37	-	-	6	3	-	-	-
T. aestivum type	free-threshing wheat	-	1	-	-	-	1	-	-	3	-	-	-	-
T. cf. *aestivum* type	?free-threshing wheat	6	-	-	-	-	-	1	-	6	-	-	-	-
Triticum sp(p).	wheat	10	2	23	2	-	43	2	2	28	4	1	-	-
cf. *Triticum* sp(p).	?wheat	8	-	48	4	1	76	2	1	8	8	-	-	2
Hordeum vulgare L.	barley, hulled indet.	-	1	-	-	-	-	-	-	-	-	-	-	-

	Period (phase)			Romano-British										Med
	Area	3E		7										3E
	Group	-	-	Structure 41122						-	41113	-	-	50875
	Feature	Pit	Pit	Oven	Oven	Oven	Posth	Posth	Posth	Feature	Ditch	Pit	Pit	Ditch
	Feature number	50646	50648	40124	40973	40983	40995	41009	40156	41019	40929	40812	40960	50728
	Context number	50647	50649	40125	40974	40985	40997	41010	40157	41021	40932	40813	40964	50730
	Sample number	1138	1137	1009	1042	1043	1044	1052	1011	1048	1053	1062	1057	1146
	Volume processed soil (litres)	20	20	10	10	10	20	1	8	10	5	15	1	20
	Volume flot (ml)	375	90	1100	425	130	200	10	35	150	60	50	10	100
H. vulgare L.	barley, indet.	3	-	-	-	-	-	-	-	4	-	-	-	-
cf. *H. vulgare*	?barley	2	-	-	-	-	-	-	-	-	-	-	-	-
Avena sp(p).	oat floret fragments	-	1	-	-	-	4	-	-	-	4	-	-	-
Avena sp(p).	oat	-	2	2	1	-	3	1	-	2	1	-	-	-
cf. *Avena* sp(p).	?oat	2	1	3	2	-	5	-	-	3	3	1	-	2
Cerealia	indet. cereal (estimate)	87	20	240	23	19	226	14	42	122	48	7	1	23
Cerealia	indet cereal loose coleoptiles	-	-	36	-	-	-	18	-	-	-	-	-	-
Cereal chaff														
Triticum dicoccum Schubl.	Emmer wheat spikelet fork	-	-	-	-	-	1	-	-	-	-	-	-	-
T. dicoccum Schubl.	Emmer wheat glume bases	1	5	2	1	-	-	2	-	-	-	-	-	-
T. spelta L.	spelt spikelet forks	1	11	17	5	-	13	2	-	6	5	-	-	-
T. spelta L.	spelt glume bases	16	71	245	58	2	30	41	7	57	16	1	-	-
T. spelta L.	spelt rachis fragments	2	1	31	6	-	5	3	1	12	2	-	-	-
Triticum sp(p).	wheat glume bases	96	173	153	102	11	48	72	14	81	13	2	1	-
Triticum sp(p).	wheat spikelet forks/bases	28	94	51	13	3	44	2	4	35	8	-	-	-
Triticum sp(p).	wheat rachis fragments	6	29	26	5	1	14	31	1	34	3	-	1	-
Avena sp(p).	oat awn fragments	5	4	10	1	3	4	5	-	1	2	-	-	-

	Period (phase)			Romano-British										Med
	Area	3E		7										3E
	Group	-	-	Structure 41122						-	41113	-	-	50875
	Feature	Pit	Pit	Oven	Oven	Oven	Posth	Posth	Posth	Feature	Ditch	Pit	Pit	Ditch
	Feature number	50646	50648	40124	40973	40983	40995	41009	40156	41019	40929	40812	40960	50728
	Context number	50647	50649	40125	40974	40985	40997	41010	40157	41021	40932	40813	40964	50730
	Sample number	1138	1137	1009	1042	1043	1044	1052	1011	1048	1053	1062	1057	1146
	Volume processed soil (litres)	20	20	10	10	10	20	1	8	10	5	15	1	20
	Volume flot (ml)	375	90	1100	425	130	200	10	35	150	60	50	10	100
Other plant/weed seeds														
Ranunculus acris/repens/bulbosus	buttercups	1	-	-	-	-	-	-	-	-	-	-	-	1
R. sardous Crantz.	Hairy buttercup	-	-	-	-	-	-	-	-	-	-	1	-	-
Corylus avellana L.	hazel nut shell fragments	-	-	2	1	-	-	-	-	-	-	-	-	3
Chenopodium sp(p).	goosefoots etc.	-	-	-	-	-	1	-	-	-	-	2	-	-
Atriplex spp.	Orache	-	-	-	-	-	-	5	-	-	-	-	-	-
Fallopia convuluvulus (L.) A Love	black bindweed	-	-	-	-	-	-	-	-	-	-	1	-	-
cf. *F. convuluvulus*	?black bindweed	-	-	-	-	-	-	1	-	-	-	-	-	-
Rumex acetosella	sheep's sorrel	-	2	-	1	-	-	3	-	-	-	-	-	-
Rumex sp(p).	dock	10	28	20	6	2	-	8	2	11	1	25	-	5
Malva sp.	mallow	-	-	-	-	-	-	-	-	1	-	-	-	-
cf. *Vicia faba*	?broad bean	-	-	-	-	-	-	-	-	-	-	2	-	2
Vicia/Lathyrus/Pisum sp(p).	vetch/tare/vetchling/pea (>2mm)	-	-	-	-	-	-	-	-	-	-	2	-	-
Vicia/Lathyrus sp.	vetch/tare/vetchling (>2mm)	-	-	-	-	1	-	-	-	-	-	-	-	-
Vicia/Lathyrus sp(p).	vetch/tare/vetchling (<2mm)	6	3	1	-	-	-	-	-	-	1	1	-	8
Medicago/Trifolium sp(p).	medick/clover	-	1	-	-	-	-	-	-	-	-	-	-	-
Fabaceae indet.	pea family (fragments >2mm)	-	1	-	-	-	-	-	-	-	-	-	-	-

	Period (phase)	Romano-British												Med
	Area	3E		7										3E
	Group	-	-	Structure 41122						-	41113	-	-	50875
	Feature	Pit	Pit	Oven	Oven	Oven	Posth	Posth	Posth	Feature	Ditch	Pit	Pit	Ditch
	Feature number	50646	50648	40124	40973	40983	40995	41009	40156	41019	40929	40812	40960	50728
	Context number	50647	50649	40125	40974	40985	40997	41010	40157	41021	40932	40813	40964	50730
	Sample number	1138	1137	1009	1042	1043	1044	1052	1011	1048	1053	1062	1057	1146
	Volume processed soil (litres)	20	20	10	10	10	20	1	8	10	5	15	1	20
	Volume flot (ml)	375	90	1100	425	130	200	10	35	150	60	50	10	100
Fabaceae indet.	pea family (small fragments <2mm)	-	1	-	-	-	-	-	-	-	-	1	-	-
Fabaceae indet.	small rounded legumes	1	-	-	-	-	-	-	-	-	-	-	-	-
Linum cf *usitatissimum*	?flax	-	-	-	-	-	-	-	-	1	-	-	-	-
Plantago lanceolata L.	ribwort plantain	-	-	1	-	-	-	-	-	-	-	2	-	-
Euphrasia/Odontites sp(p).	eyebrights/bartsias	-	1	-	-	-	-	-	-	-	-	-	-	-
Rhinanthus minor L.	yellow rattle	-	-	-	-	-	-	-	-	-	-	1	-	-
Galium aparine L.	cleaver	-	-	-	-	-	-	-	-	-	-	1	-	-
Tripleurospermum inodorum (L.) Sch. Bip.	Scentless mayweed	-	-	-	-	-	1	1	-	-	-	-	-	-
Asteraceae indet.		-	-	1	-	-	-	-	-	-	-	-	-	-
Eleocharis palustris/uniglumis	spike-rush	-	-	-	-	-	-	-	1	-	-	3	-	-
Carex sp.	sedge	-	-	-	-	-	-	-	-	1	-	-	-	-
Cyperaceae indet.	sedges etc.	-	-	-	-	-	-	-	-	-	-	3	-	-
Festuca/Lolium sp(p).	fescue/rye-grass	-	-	-	-	1	-	-	-	-	-	-	-	-
cf. *Poa* sp.	?meadow-grass	-	-	-	-	-	-	1	-	-	-	-	-	-
Arrhenatherum elatius (L.) P. Beauv. Ex J & C Presl	onion couch grass tubers	-	-	-	-	1	-	-	-	-	-	-	-	-
Avena fatua L.	wild oat floret fragment	-	-	1	-	-	2	-	-	-	-	-	-	-

	Period (phase)	Romano-British												Med
	Area	3E		7										3E
	Group	-	-	Structure 41122						-	41113	-	-	50875
	Feature	Pit	Pit	Oven	Oven	Oven	Posth	Posth	Posth	Feature	Ditch	Pit	Pit	Ditch
	Feature number	50646	50648	40124	40973	40983	40995	41009	40156	41019	40929	40812	40960	50728
	Context number	50647	50649	40125	40974	40985	40997	41010	40157	41021	40932	40813	40964	50730
	Sample number	1138	1137	1009	1042	1043	1044	1052	1011	1048	1053	1062	1057	1146
	Volume processed soil (litres)	20	20	10	10	10	20	1	8	10	5	15	1	20
	Volume flot (ml)	375	90	1100	425	130	200	10	35	150	60	50	10	100
Avena/Bromus sp(p).	oat/brome	1	-	22	1	-	5	3	-	1	1	2	-	5
Bromus sp(p).	brome	-	1	34	3	-	2	7	-	1	1	-	-	6
cf. *Bromus* sp(p).	?brome	-	-	66	7	1	3	25	1	1	-	1	-	5
Poaceae indet.	grasses (large seeds)	-	-	7	-	-	5	11	2	-	-	-	-	-
Poaceae indet.	grasses (small seeds)	-	1	-	1	1	-	-	-	1	-	1	-	-
Poaceae/Cerealia indet.	grass/cereal culm nodes	-	-	1	-	-	-	-	-	-	-	2	-	-
indeterminate	thin ribbed round hollow stems	-	1	-	-	-	-	-	-	-	-	6	-	-
indeterminate	thorns	-	-	-	-	-	-	-	-	-	-	2	-	-
indeterminate	bud fragments	-	-	1	-	-	-	-	-	-	-		-	-
indeterminate	charcoal	+++++	+++++	+++++	+++++	+++++	+++++	++	+++++	+++++	+++++	+++++	+++	+++++
	total nos of items	301	459	247	1074	655	79	263	48	71	431	144	3	62
	density of items (per litre of processed soil)	*15.1*	*23*	*24.7*	*107.4*	*32.8*	*9.9*	*263*	*4.8*	*4.7*	*43.1*	*28.8*	*3*	*3.1*

Key: frequency: + = 1–10; ++ = 11–50; +++ = 51–150; ++++ = 151–250; +++++ = 250+ items

Table 21 Waterlogged plant remains from Romano-British pit 40960

	Feature	*Pit*
	Feature number	*40960*
	Context	*40964*
	Sample	*1057*
	Vol processed sample (l)	*1*
	Vol flot (ml)	*10*
Ranunculus acris/repens/bulbosus	buttercups	+
Urtica dioica L.	common nettle	+
Betula spp.	Birch	+
Corylus avellana L.	hazel nut shell fragments	+
Chenopodium album gp	fat hen	+
Atriplex spp.	Orache	+
Viola spp.	Violet	+
Rubus fruticosus	blackberry	+
Prunus spinosa L.	blackthorn	+
Glechoma hederacea L.	ground-ivy	+
Juncus spp.	Rush	+
Eleocharis palustris/uniglumis	spike-rush	+
Poaceae indet.	grasses (small)	+
indeterminate	leaf abscission pads	+
indeterminate	wood	++
roots		++

Key: item frequency: + = 1–10 items; ++ = 11–50 items; +++ = > 51 items

Table 22 Insects 1 The Coleoptera

Coleoptera	*Ecological group*	*Plant host*	*Sample 1057*
Carabidae			
Clivina fossor (L.)	OD	-	1
Bembidion mannerheimi (Sahl.)	MFC	-	1
Bembidion sp.	u	-	1
Pterostichus strenuus (Panz.)	WT	-	1
Pterostichus sp.	u	-	1
Hydraenidae			
Hydraena sp.	A	-	3
Ochthebius sp.	A	-	1
Hydrophilidae			
Cercyon analis (Payk.)	FM*	-	3
Enochrus sp.	A	-	1
Silphidae			
Phosphuga atrata (L.)	ELW	-	1
Catopidae			
Choleva sp.	u	-	1
Staphylinidae			
Omalium sp.	FM	-	1
Lesteva longoelytrata (Goeze)	R	-	1
Coprophilus striatulus (F.)	FM*	-	1
Carpelimus sp.	u	-	1
Anotylus sp.	FM	-	1
Platystethus spp.	U	-	2
Stenus spp.	U	-	2
Rugilus erichsoni (Fauvel)	MFC	-	1
Lathrobium sp.	u	-	1
Tachinus spp.	FM	-	2
Aleocharinae indet.	u	-	1
Elateridae			
Athous sp.	ELW	-	1
Scirtidae			
Scirtidae indet.	u	-	2
Nitidulidae			
Meligethes sp.	u	-	1
Cryptophagidae			

Coleoptera	*Ecological group*	*Plant host*	*Sample 1057*
Cryptophagus sp.	FM~*	-	1
Atomaria spp.	FM~*	-	2
Latriididae			
Latridius spp.	FM~**	-	3
Corticaria sp.	FM*	-	1
Anobiidae			
Anobium punctatum (Deg.)	WT~*	-	1
Mordellidae			
Anaspis sp.	ELW	-	1
Scarabaeidae			
Oxyomus sylvestris (Scop.)	DUNG	-	1
Aphodius spp.	DUNG	-	2
Cerambycidae			
Tetrops praeusta (L.)	ELW	-	1
Chrysomelidae			
Altica spp.	U	-	4
Derocrepis rufipes (L.)	OD	range of Fabaceae	3
Curculionidae			
Apion spp.	OD	dock (*Rumex* spp.)/ mallow (*Malva* spp.)	3
Trachyphloeus sp.	OD	-	1
Sitona sp.	OD	-	1
Rhinoncus pericarpius (L.)	OD	dock (*Rumex* spp.)	1
Rhinoncus castor (F.)	OD	sheep's sorrel (*Rumex acetosella* (Raf.))	1
Gymnetron sp.	OD	-	1
MNI			61

Key: ~ member of the 'house fauna'; * facultative synanthrope; ** typical synanthrope; *** strong synanthrope (The key to ecological functional groups codes is listed below in Table 2. 'Host' refers to plant host of phytophagous beetles)

Table 23 Insects 2 Functional group codes and definitions

Functional group		*Code*	*Definition*
True aquatics	Aquatic	A	Beetles which spend the majority of their adult life in water. *Not included in terrestrial sum.*
Wetland and waterside taxa	Riparian	R	Hygrophilous taxa, littoral, usually in the bare waterlogged soils besides water; also associated with emergent vegetation. *Included in terrestrial sum*.
	Marsh and aquatic plants	MA	*Chrysomelidae* and *Curculionidae* species which feed exclusively on marsh and aquatic plants. *Included in terrestrial sum*.
	Marsh, fen and carr	MFC	Hygrophilous, and often eurytopic taxa, found across a variety of semi-aquatic environments, such as marsh, swamp, fen, and floodplains. *Included in terrestrial sum*.
Terrestrial: generalists	Foul material	FM	Species living on various types of foul (decaying) organic material, such as the *Staphylinidae*; often, but not exclusively synanthropic; foul material includes dung, but these taxa are not dung specialists. *Included in terrestrial sum*.
Terrestrial: open landscapes	Dung	DUNG	Taxa strongly associated with the faeces of herbivores. *Included in terrestrial sum*.
	Open and disturbed	OD	Taxa found in open and vegetated, or disturbed and relatively bare conditions, wet or dry (but not strictly 'wetlands'). *Included in terrestrial sum*.
Terrestrial: woodland associates	Edge of, or light woodland	ELW	Species which show strong preference to forest margins, forest-steppe, copses/felled trees within woodlands, open or pasture woods, pine heaths, hedgerows, single or sun exposed trees (eg, certain Elateridae); or whose larval and adult stage alternate between their obligates in open spaces and forest (eg, certain Cerambycidae). *Included in terrestrial sum*.
	Woodlands and trees	WT	Includes the Coleoptera which feed on wood in varying stages of decay, leaves, fruit, and bark and live wood, fungal feeders and predators strictly associated with woodland; except where a taxa can be defined within ELW. *Included in terrestrial sum*.
Uncoded or ubiquitous		u	Taxa to whom none of the other FGs can be applied owing to either lack of taxonomic resolution or ubiquity of taxa. *Not included in terrestrial sum.*

Table 24 Insects 3 Comparison of the relative proportions of functional groups (excluding all aquatic and uncoded taxa)

Sample	*DUNG*	*ELW*	*FM*	*MFC*	*OD*	*R*	*WT*	*House fauna*
1067	8%	10%	39%	5%	31%	3%	5%	18%

Table 25 Charcoal from earlier prehistoric cremation burials (showing fragment counts)

		Area	Area 9	Trench 202	
		Phase	Mesolithic	Early Bronze Age	
		Feature type	Cremation burial 50160	Urned cremation burial 20204	
		Context number	50161	20207 spit 1	20205 spit 4
		Sample number	1119	581	582
Quercus sp.	oak		30 (h)	3	22 (h)
Corylus avellana L.	hazel				2
Fraxinus excelsior L.	ash			21 (h)	1
Indeterminate	ring porous			6	5

h=heartwood; r=roundwood, s=sapwood

Table 26 Charcoal from Iron Age cremations and other features (showing fragment counts)

		Area	3 West	4 South			6
		Phase	EIA	MIA		LIA	M-LIA
		Feature	Hearth 50949	Cremation grave 16164		Cremation grave 16120	Pit 30092
		Context number	50950	16165 NW	16165 SW	16127 NW	16127 SE	30091 NW
		Sample number	1157	655	652	649	630	912
Quercus sp.	oak		18 (rsh)	30 (sr)	30 (sh)	30 (hs)	30 (sh)	28 (rs)
Alnus glutinosa Gaertn.	Alder		3 (r)					
Alnus/Corylus	alder/hazel							1
Prunus spinosa L.	blackthorn		4r					
Maloideae	hawthorn group		4					
Acer campestre L.	field maple		14 (r)					1
Fraxinus excelsior L.	ash		4					
Indeterminate	diffuse porous		3					

h=heartwood; r=roundwood, s=sapwood

Table 27 Charcoal from Late Iron Age and Late Iron Age/Early Roman-British features (showing fragment counts)

	Phase	LIA					LIA/ERB	
	Area	6	3 East		4 South	4 South		5
	Feature type	Linear feature	Encl ditch	Encl ditch	Drip gully	Pit	Pit	Hearth	Subrect ringditch
	Feature number	30124	50597	51208	16206	16084	16142	15196	15323
	Context number	30123	50378	50544	16207	16083	16143	15193	15206
	Sample number	913	1125	1144	665	622	638	546	555
Quercus sp.	oak	26 (rs)	26 (rsh)	29 (rsh)	19 (rh)	28 (rs)	13 (r)	29 (s)	30 (rs)
Corylus avellana L.	hazel				1r				
Populus/Salix	poplar/willow	2			(1r)				
Prunus spinosa L.	blackthorn	5r		6r					
Prunus sp.	cherry type						2r		
Maloideae	hawthorn group		3 (r)	12r			5 (r)		
Ilex aquifolium L.	holly							(1r)	
Rhamnus cathartica L.	buckthorn				1r				
Acer campestre L.	field maple	15 (r)	1	1	2	2r			
Indeterminate	diffuse porous	2		2	1r		4		
Indeterminate	ring porous				5 (r)		6		

h=heartwood; r=roundwood, s=sapwood

Table 28 Charcoal from Romano-British features (showing fragment counts)

	Area				7					3 East			5	6
	Phase			ERB		RB				RB			RB	LRB
	Feature type	Oven	Oven	Oven	Pit	Oven	Pit	Pit	Pit	Pit	Kiln		Pit	Cremation grave	Pit
	Feature number	40103	40105	40113	40973	40983	40124	40951	50630	50646	50674		15020	15139	30048
	Context number	40104	40106	40114	40974	40985	40125	40952	50631	50647	50677	50676	15021	15138 NW	30047
	Sample number	1005	1006	1008	1042	1043	1009	1041	1135	1138	1143	1142	505	537	904
Quercus sp.	oak	23 (rh)	16 (srh)	14 (r)	14 (sr)	19 (r)	30 (s)	30 (h)	30 (rsh)	6 (r)	16 (rs)	14 (hrs)	30 (hs)	30 (sr)	30 (hs)
Alnus glutinosa Gaertn.	alder										1	1			
Corylus avellana L.	hazel			1	1					1r					
Alnus/Corylus	alder/hazel			1	1r					1					
Prunus spinosa L.	blackthorn				2r										
Prunus sp.	cherry type	23r	9r	10r	2r					4r					
Maloideae	hawthorn group	4r	5r		5r					5r	1	3			
Acer campestre L.	field maple					(1)				4r	1				
Fraxinus excelsior L.	ash										11 (rs)	12 (rs)			
Indeterminate	diffuse porous			4	2 (r)					9					
Indeterminate	ring porous				3										
Indeterminate						10									

h=heartwood; r=roundwood, s=sapwood

Table 29 Charcoal from undated features (showing fragment counts)

	Phase		Undated	
	Area	1	3 West	7
	Feature type	Oven/Hearth	Cremation-related pit	Pit
	Feature number	18004	50854	41000
	Context number	18013	50855	41003
	Sample number	802	1155	1045
Quercus sp.	oak	22 (h)	5	2 (rs)
Alnus glutinosa Gaertn.	alder			16 (r)
Corylus avellana L.	hazel			14r
Alnus/Corylus	alder/hazel			7 (r)
Populus/Salix	poplar/willow		20 (r)	5 (r)
Frangula alnus Mill.	alder buckthorn			1r
Indeterminate	ring porous	8 (b)		5b
Indeterminate			5	

h=heartwood; r=roundwood, s=sapwood; b=bark

Table 30 Radiocarbon dates for selected burial deposits and waterlogged wood. Posterior density estimates derive from the model shown in Figure 7.3

Lab. Ref.	Context	Material	Radiocarbon age BP	$\delta^{13}C$	Calibrated date range	Posterior density estimate
					95% probability	
Mesolithic cremation burials						
SUERC-64210	Area 4N, cremation burial 50161	Cremated human bone	6730 ± 28	-24.6‰ (IRMS)	5560–5360 cal. BC	*5665–5610 cal. BC (77.3%) 5595–5560 cal. BC (18.1%)*
Poz-80116		Charred plant remain: single hazelnut shell fragment	6500 ± 40	-		
Poz-80222	Area 4N, cremation burial 50161 (sample 1119)	Cremated human bone: skull and long bone shaft	6650 ± 40	-	5640–5490 cal. BC	*5550–5380 cal. BC*
UBA-32261		Charred plant remain: single hazelnut shell fragment	6492 ± 36	-	5530–5370 cal. BC	*5540–5380 cal. BC*
SUERC-75539	Area 3W, cremation burial 50922	Cremated human bone: long bone	7019 ± 30	-18.7% (IRMS)	5990–5800 cal. BC	-
Iron Age/Romano-British cremation burials						
SUERC-63877	Area 5, unurned cremation burial 15048	Cremated human bone	2201 ± 29	-23.4‰ (IRMS)	370 - 170 cal. BC	365–165 cal. BC
SUERC-64209	Area 5, unurned cremation burial 16165	Cremated human bone	2173 ± 27	-18.2‰ (IRMS)	360–110 cal. BC	355–105 cal. BC
SUERC-64207	Area 5, unurned cremation burial 15138	Cremated human bone	2013 ± 29	-22.6‰ (IRMS)	100 cal. BC–cal. AD 110	95 cal. BC–80 cal. AD

SUERC-64208	Area 5, unurned cremation burial 16127	Cremated human bone	2015 ± 29	-21‰ (IRMS)	100 cal. BC–cal. AD 110	95 cal. BC–80 cal. AD
SUERC-104079	Area 11, unurned cremation burial 57154	Cremated human bone: long bone fragments	1942 ± 26	-23‰ (IRMS)	cal. AD 10–200	40 cal. BC–130 cal. AD
Waterlogged wood						
UBA-20906	17814 (17815)	Waterlogged wood: *Quercus* sp. (outer heartwood of hollowed trunk)	1512 ± 32	-29.5‰ (AMS)	cal. AD 430–560	-
UBA-32568	Area 4N 17814, 17813	Replicate date of UBA-20906	1538 ± 35	-	cal. 430–600	-
UBA-32566	Area 4N 17814, 17813 ON 387	Waterlogged wood: *Quercus* sp. (sapwood, external rings of preserved timber fragment)	1632 ± 36	-	cal. AD 260–550	-
UBA-32567	Area 4N 17814, 17812	Waterlogged wood: *Quercus* sp. (wood fragment found inside hollowed trunk)	1620 ± 36	-	cal. AD 380–550	-

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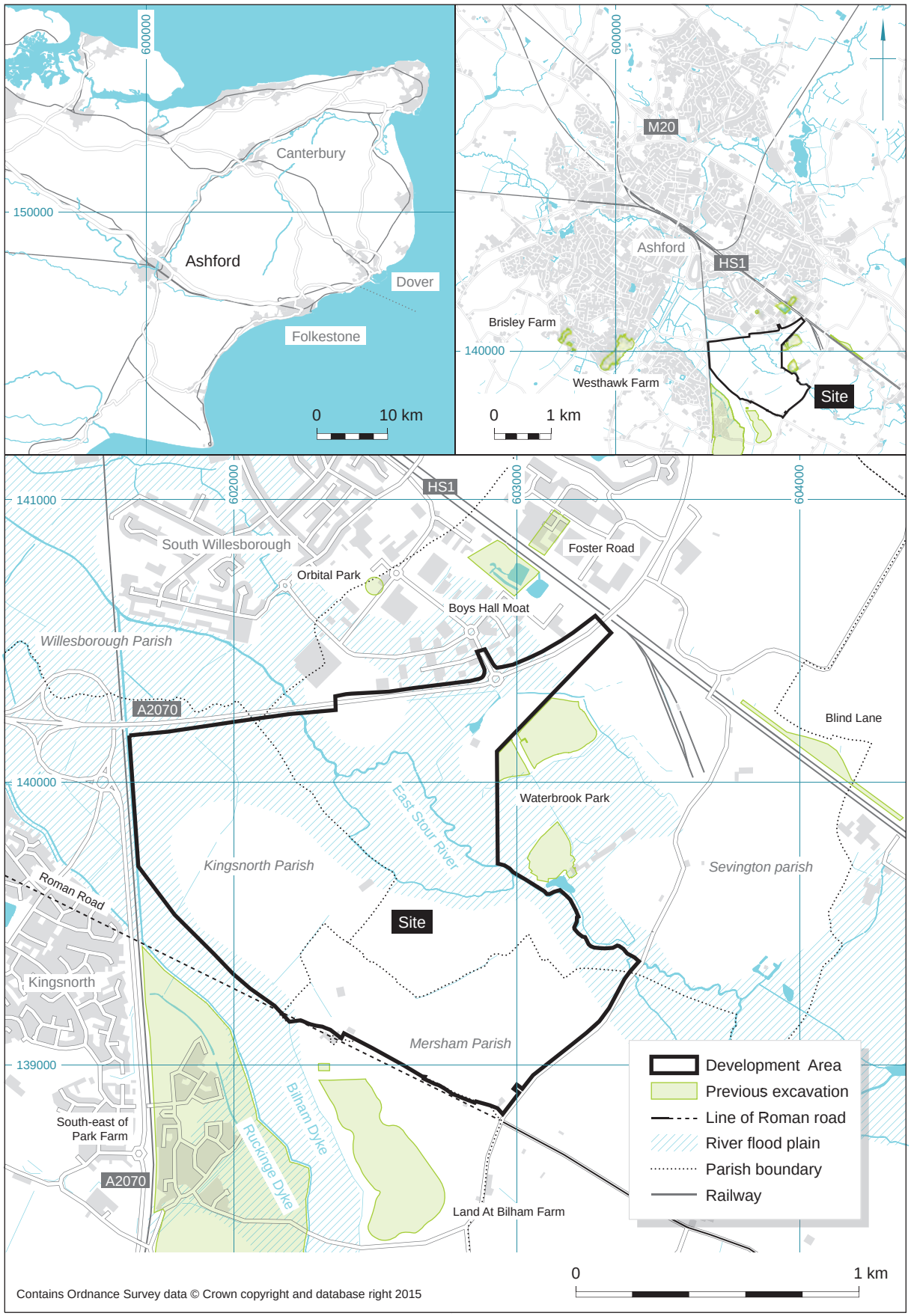


Figure 1.1 Location of the site and other Ashford sites

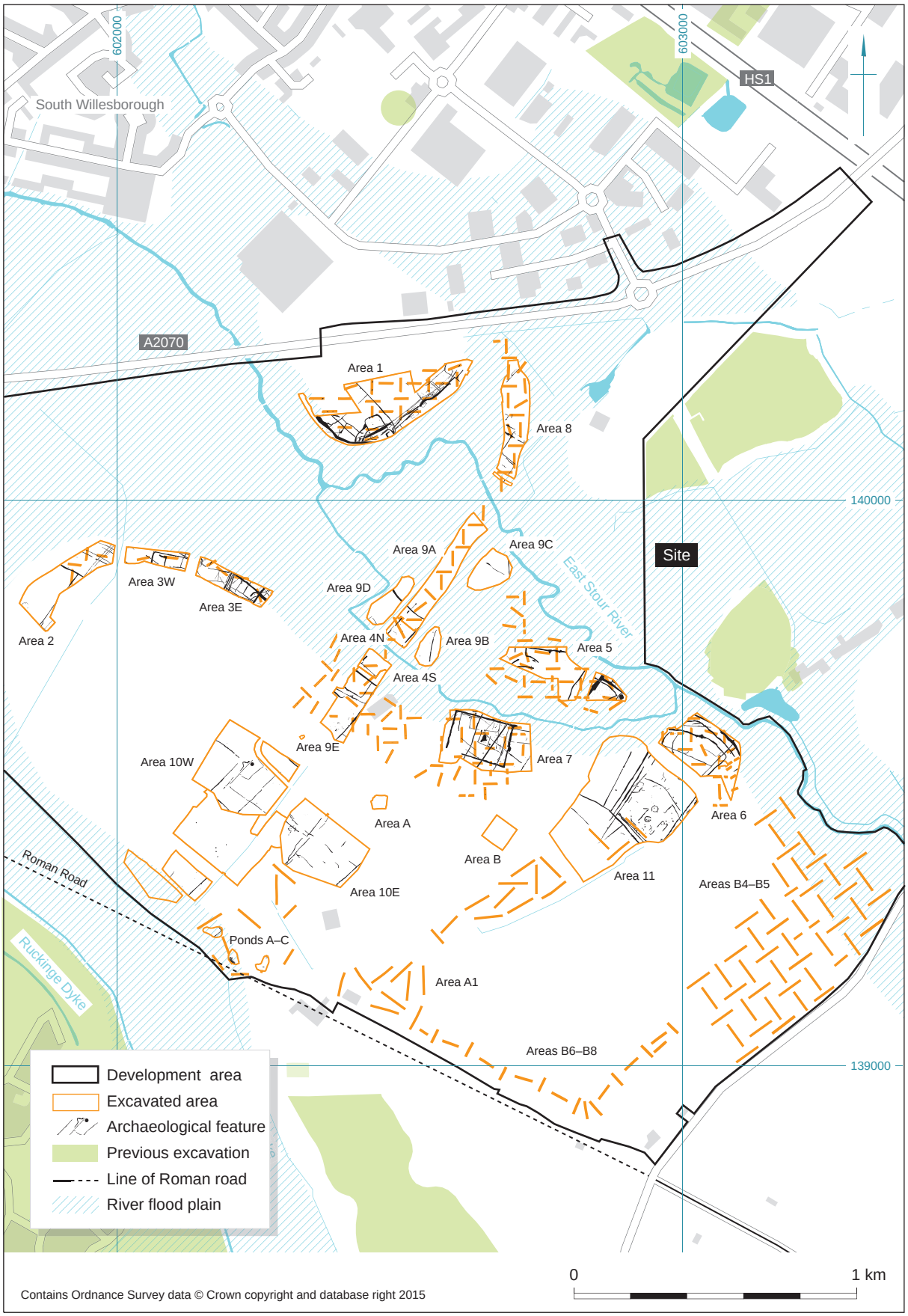


Figure1.2 Evaluation trenches and areas of excavation

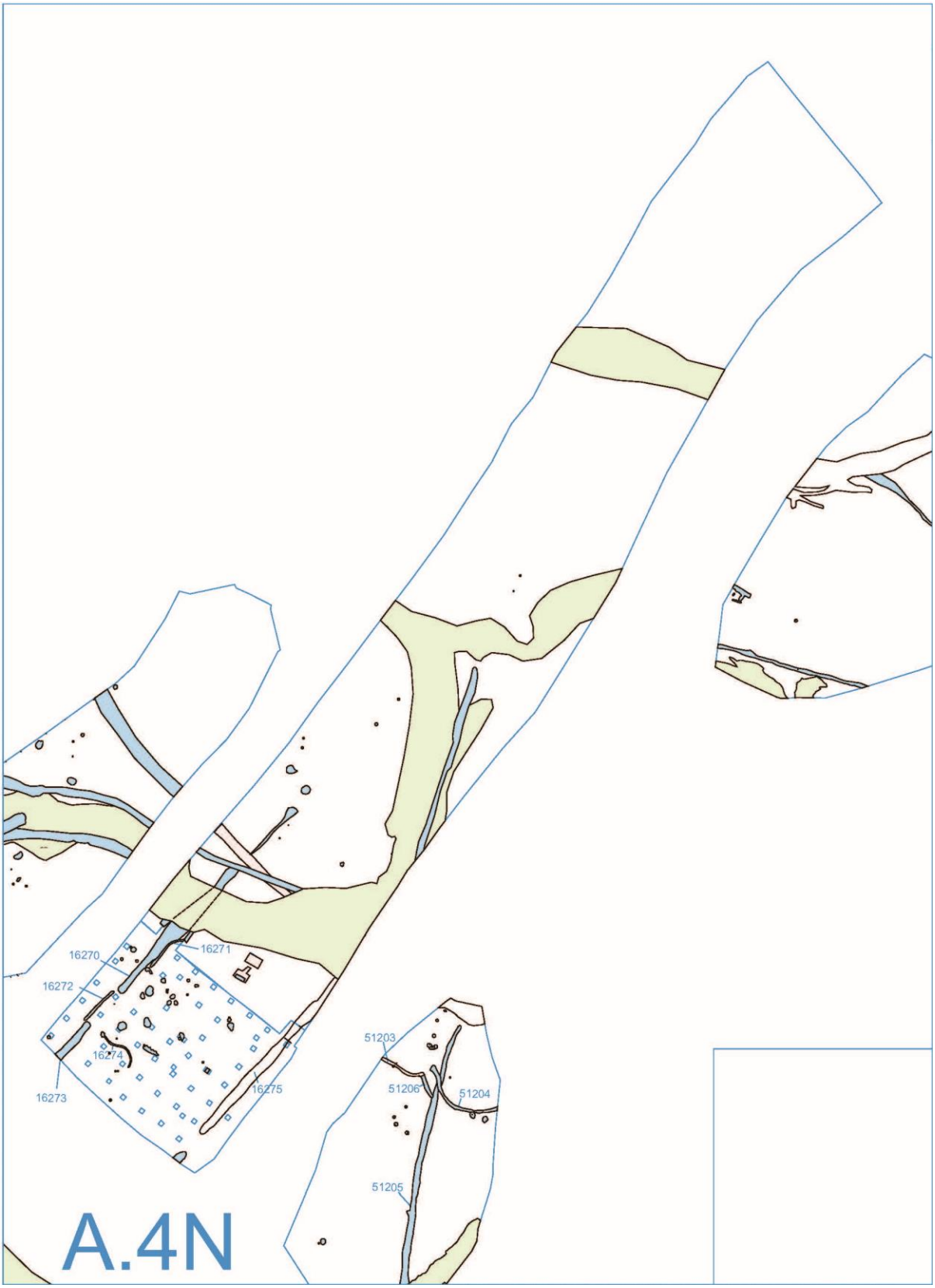


Figure 2.1 Areas 4N and 9A-D showing test pit array in Area 4N

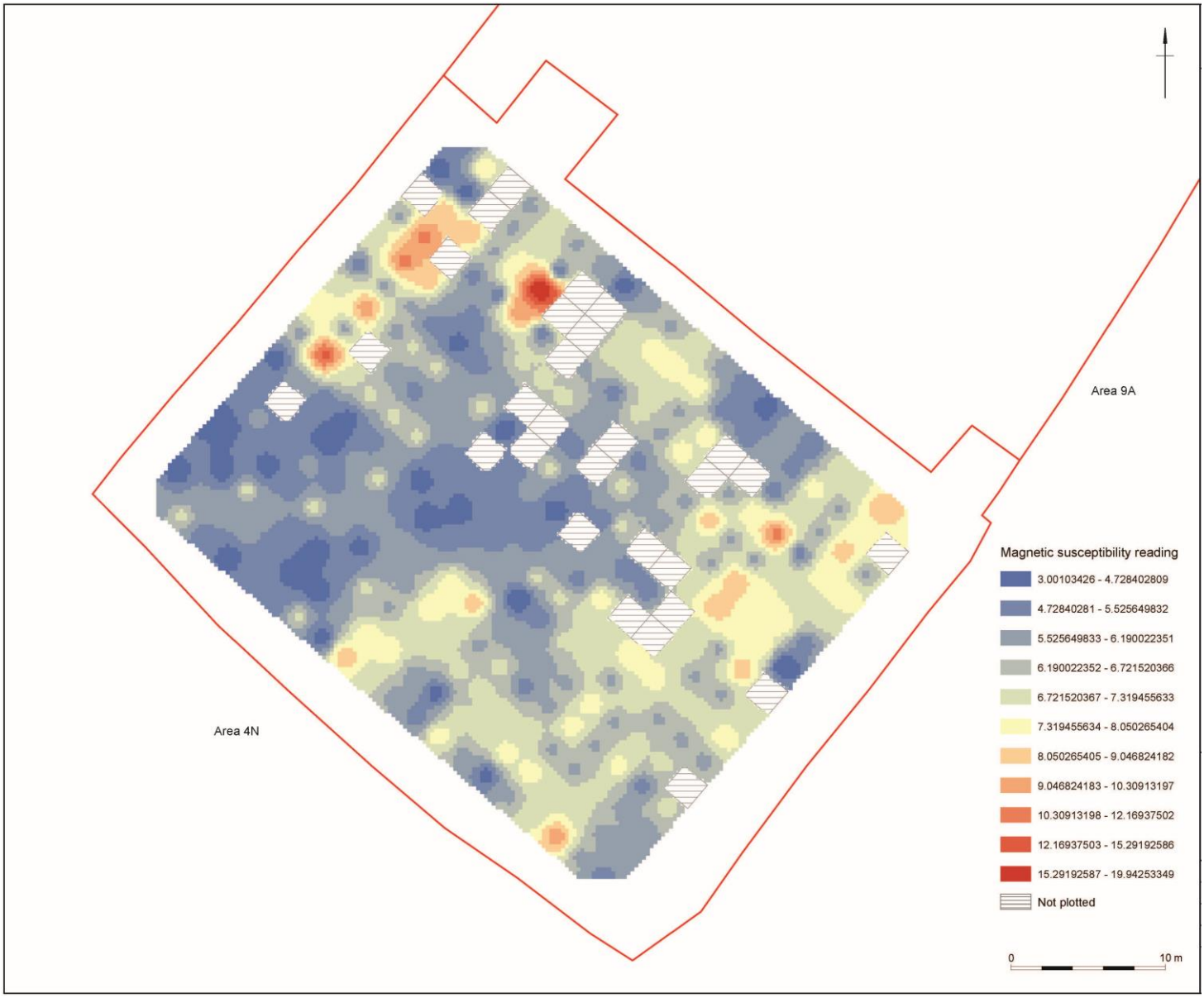


Figure 2.2 Magnetic Susceptibility results in Area 4N

Figure 2.3 Mesolithic cremation grave 51060

Figure 2.4 The bone pin from cremation grave 51060

Figure 3.1 Early Bronze Age cremation grave 20204

Figure 3.2 Bronze Age features in Areas 10W and 10E

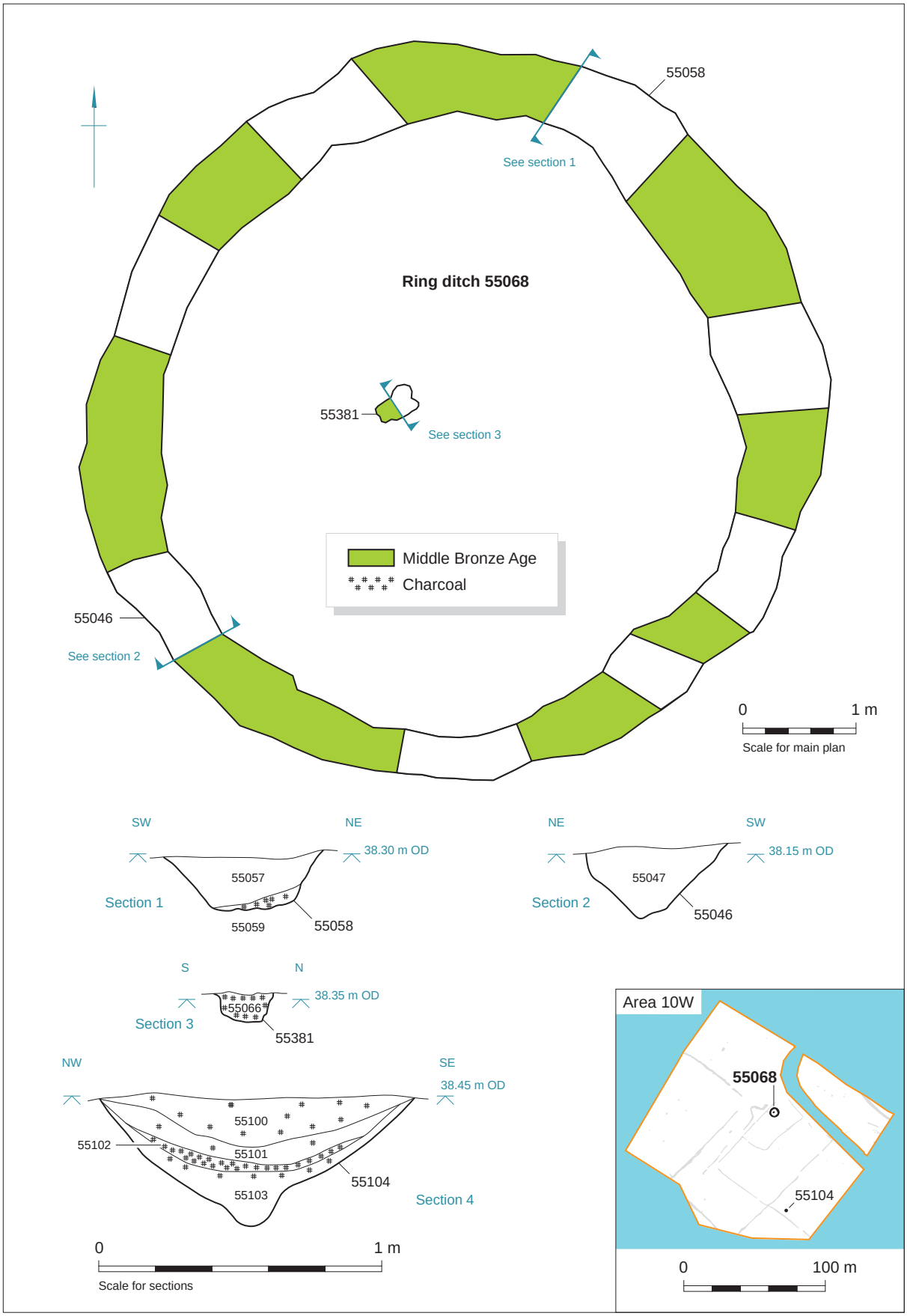


Figure 3.3 Plan and sections of ring ditch 55086 and section of pit 55104, Area 10W

Figure 3.4 Ring ditch 55086 during excavation, viewed from the north-west

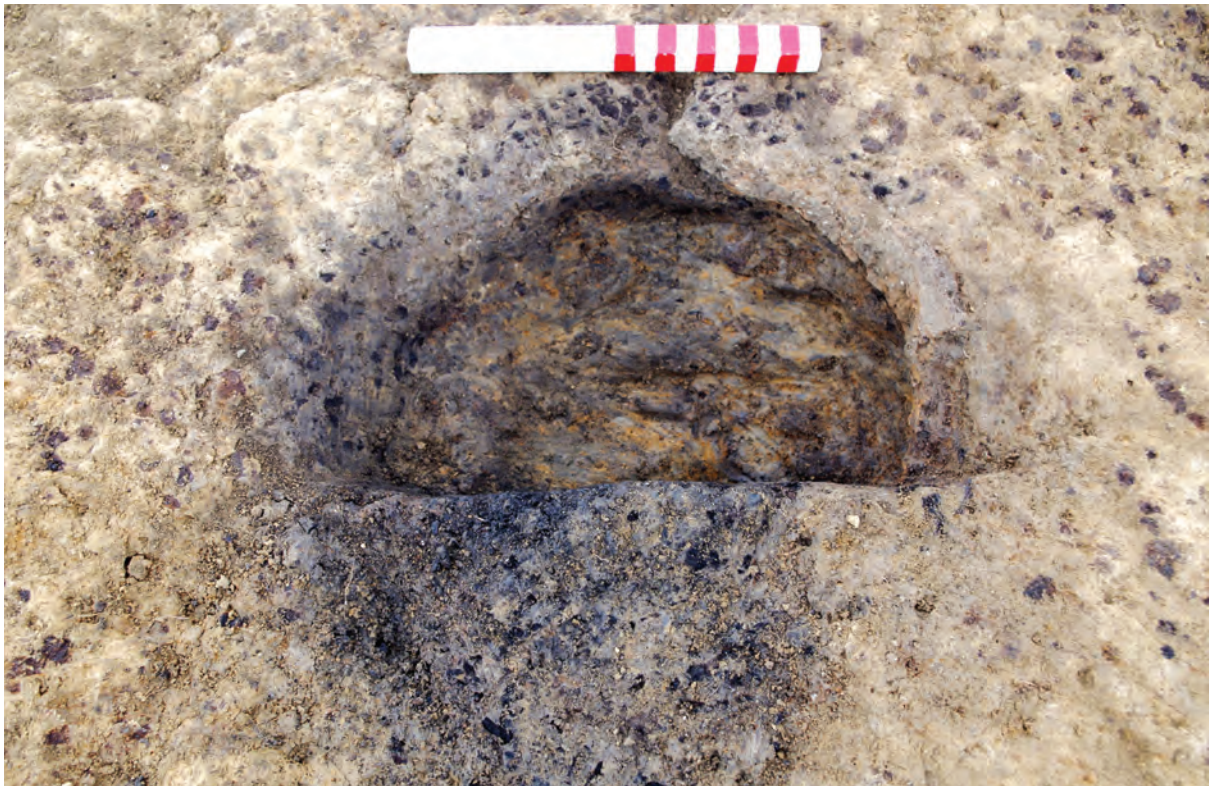


Figure 3.5 Middle Bronze Age pottery around charcoal deposit in feature 55069, viewed from the south-east

Figure 3.6 Middle Bronze Age vessel in pit 50273, Area 3E, viewed from the north-east

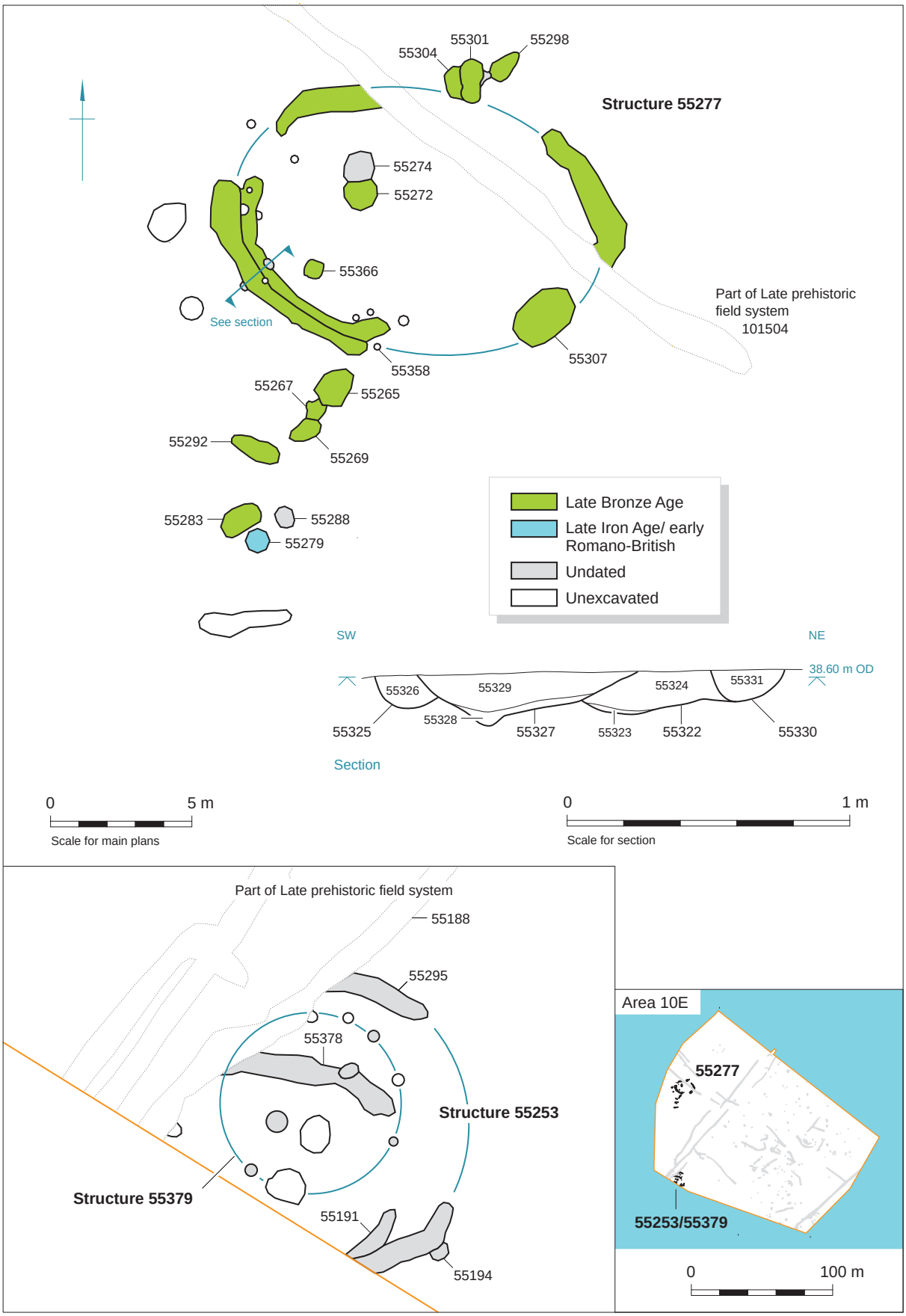


Figure 3.7 Late Bronze Age oval structure 55277 and associated features, and undated structures 55253 and 55379, Area 10E

Figure 3.8 Late Bronze Age spearhead, Area 1

Figure 3.9 Late Bronze Age loomweights in pit 16005, Area 4N, viewed from the north

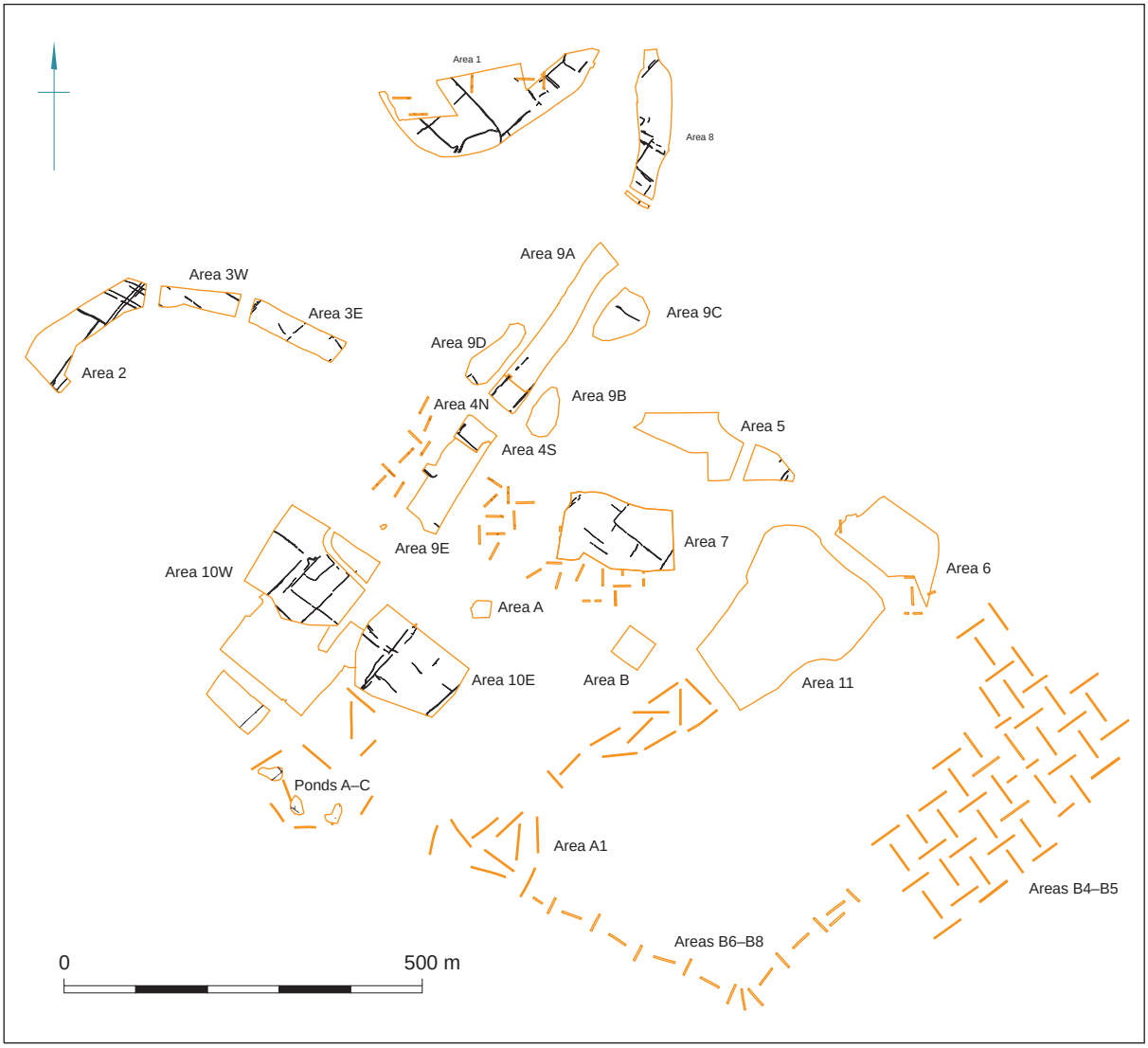


Figure 3.10 Suggested late prehistoric field system

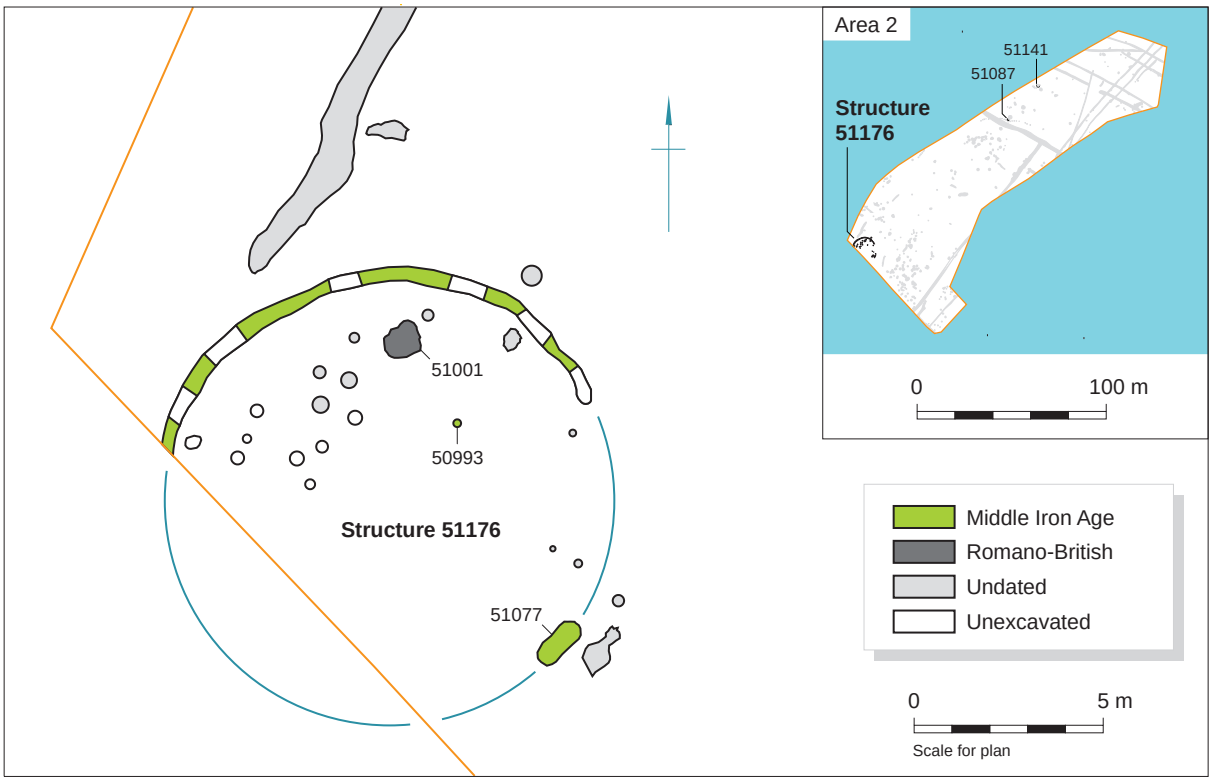


Figure 3.11 Iron Age roundhouse 51176, Area 2

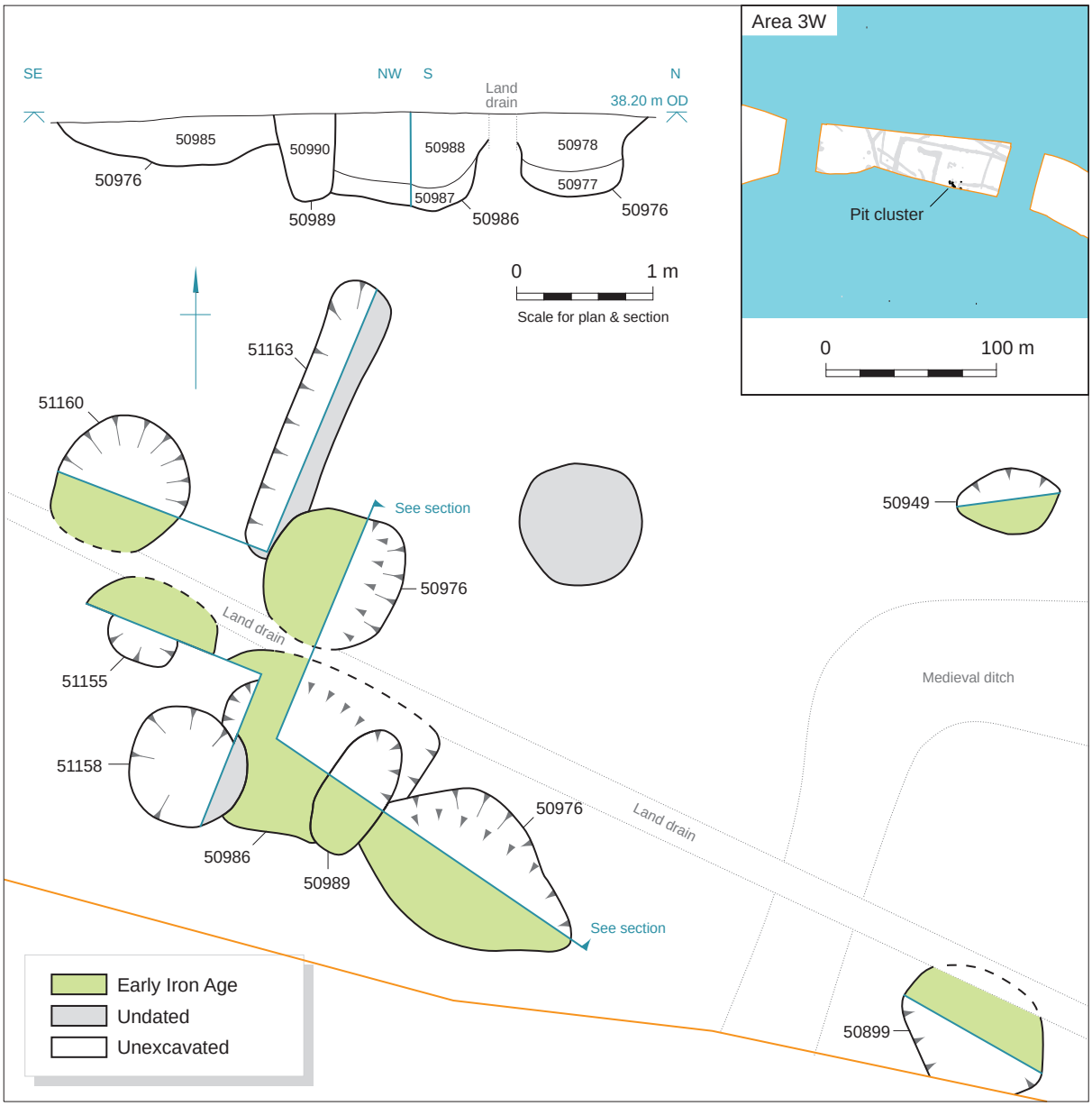


Figure 3.12 Early Iron Age pit group in Area 3W

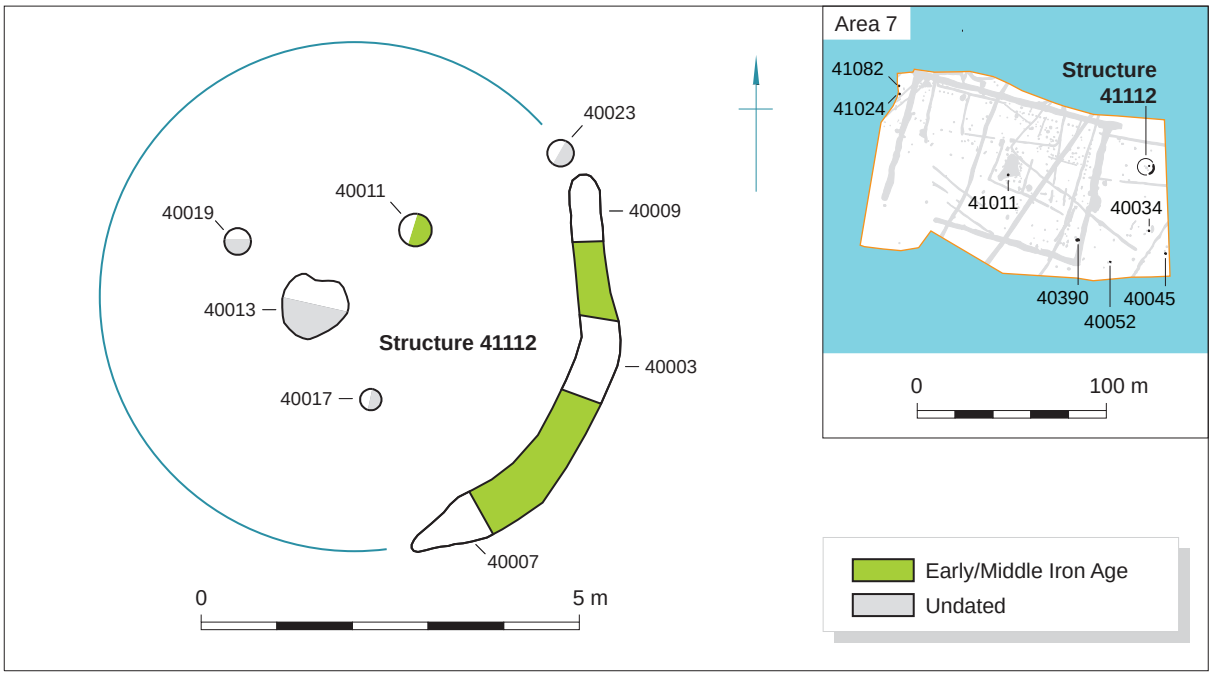


Figure 3.13 Structure 41112 and associated features, Area 7

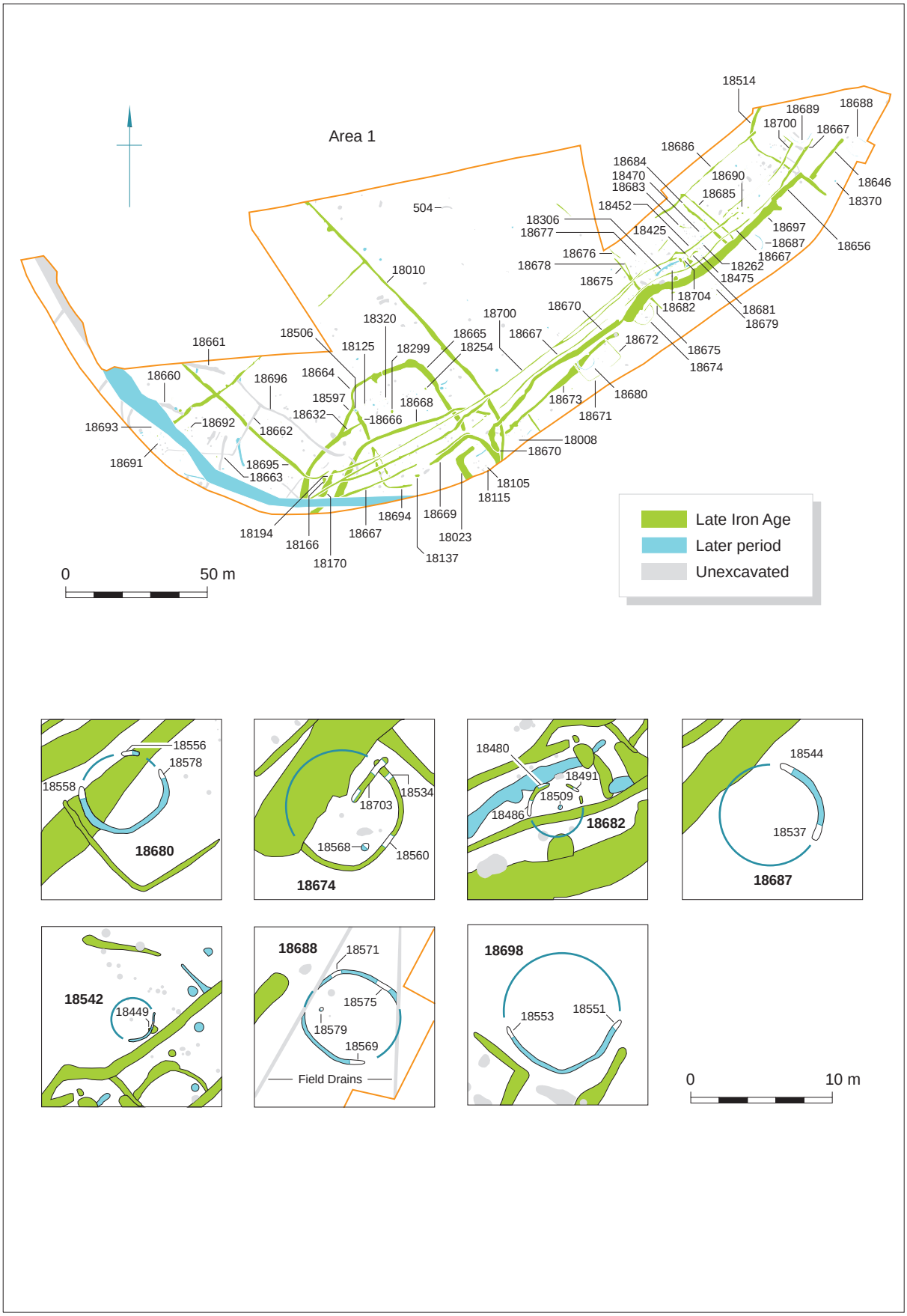


Figure 3.14 Late Iron Age features in Area 1, all phases and comparative plans of roundhouses

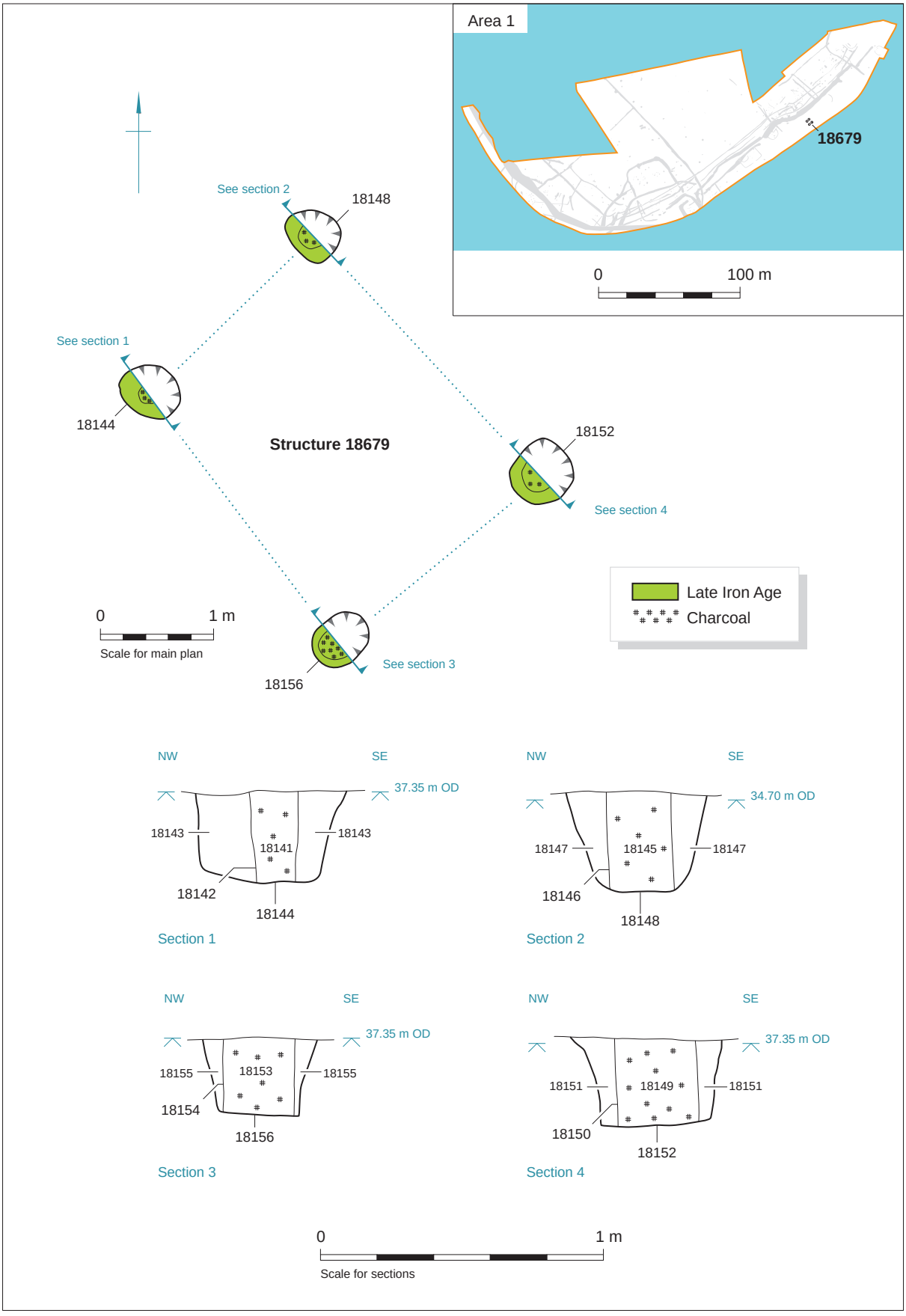


Figure 3.15 Late Iron Age four-post structure 18679, Area 1

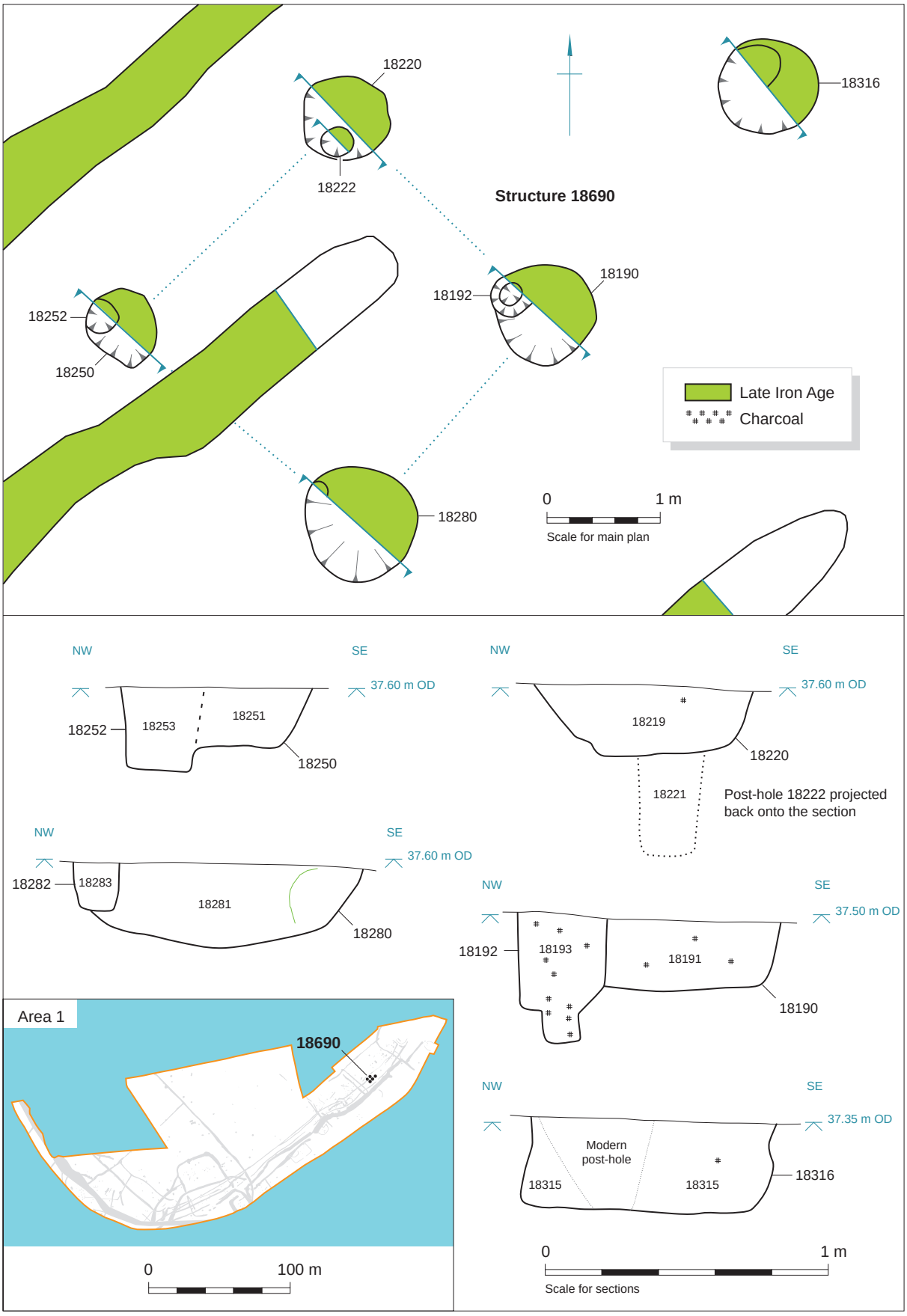


Figure 3.16 Late Iron Age four-post structure 18690, Area 1

Figure 3.17 Late Iron Age enclosures (Phase 1), field system (Phase 2) and valley enclosure and trackway (Phase 3), Area 1

Figure 3.18 Nested Late Iron Age vessels in pit 18125

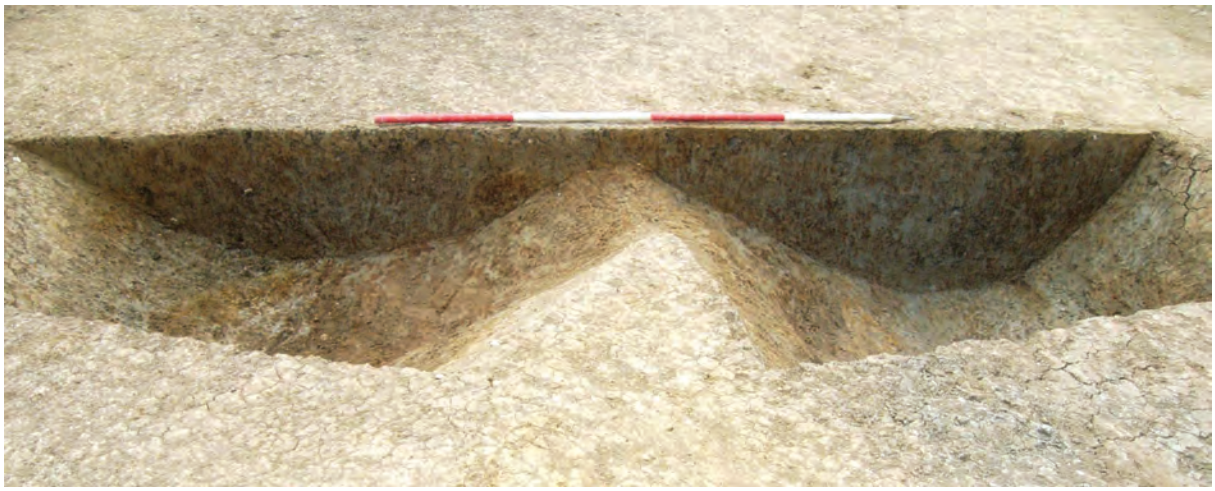


Figure 3.19 Intersection of Phase 2 enclosure ditch 18669 and Phase 3 field ditch

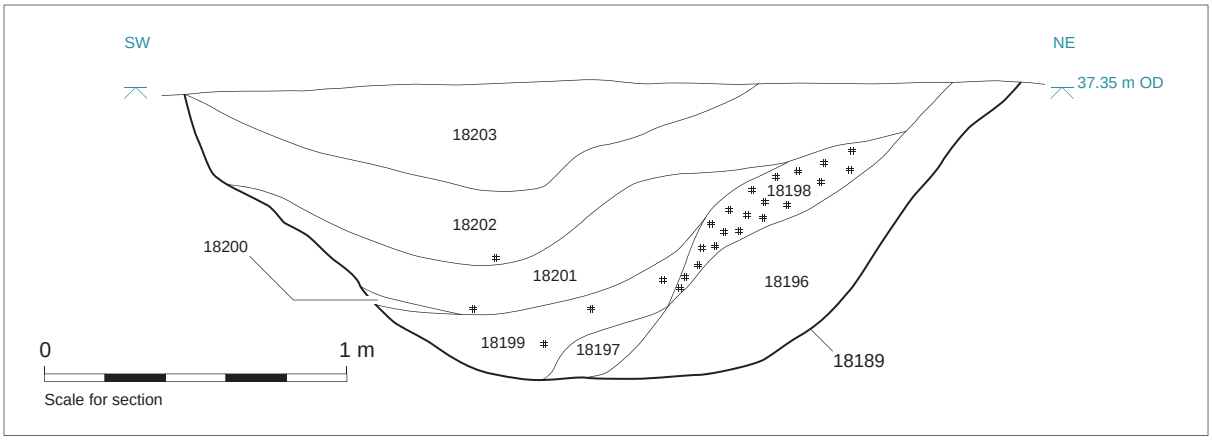


Figure 3.20 North-east facing section through valley-floor enclosure ditch 18697

Figure 3.21 Roundhouse 18680 in rectangular sub-enclosure (Phase 3), Area 1

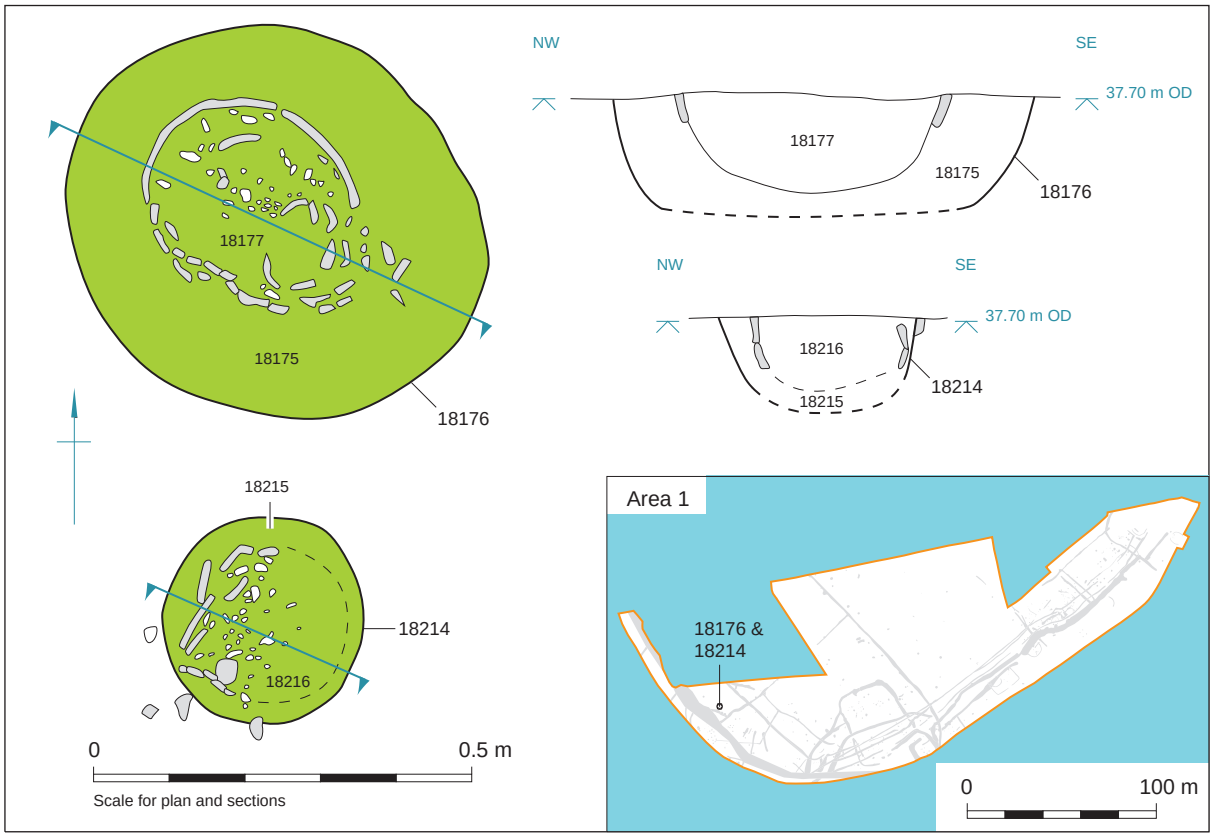


Figure 3.22 Plans and sections of Late Iron Age cremation graves 18176 and 18214, Area I

Figure 3.23 Late Iron Age cremation grave 18176, Area 1, viewed from the south-west

Figure 3.24 Area 2, all phases

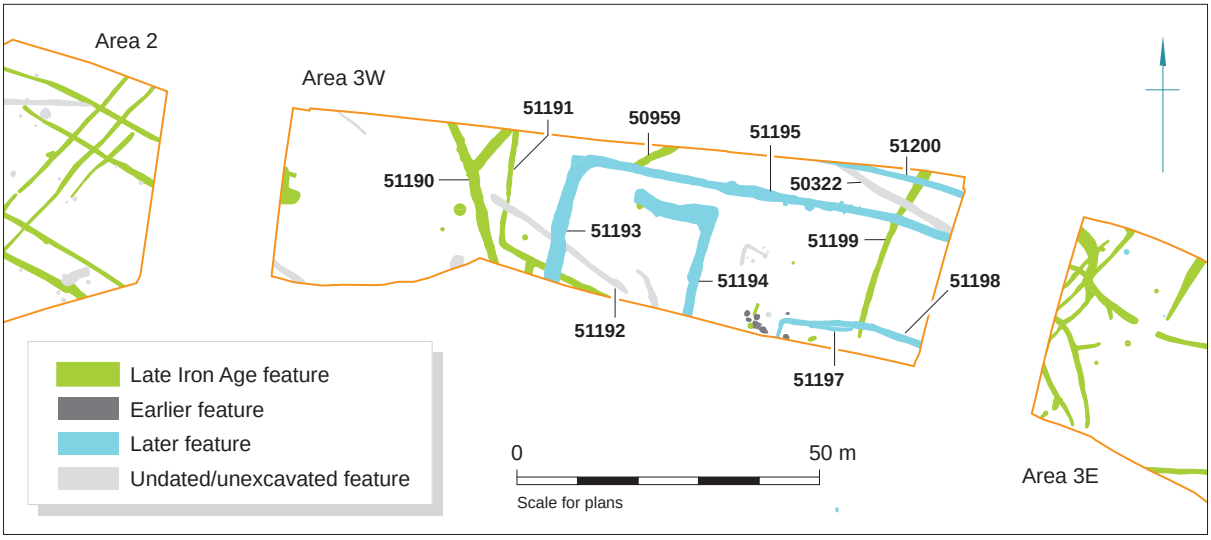


Figure 3.25 Area 3W Late Iron Age features

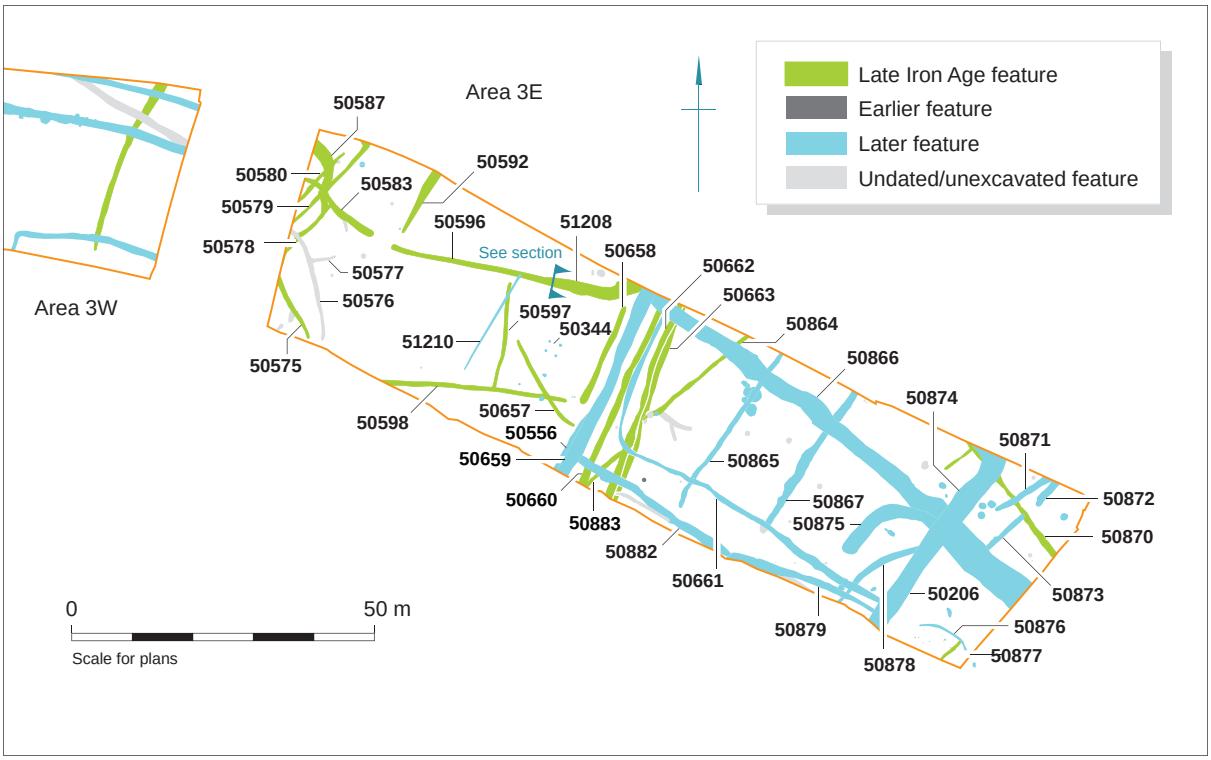


Figure 3.26 Area 3E Late Iron Age (and other prehistoric) features

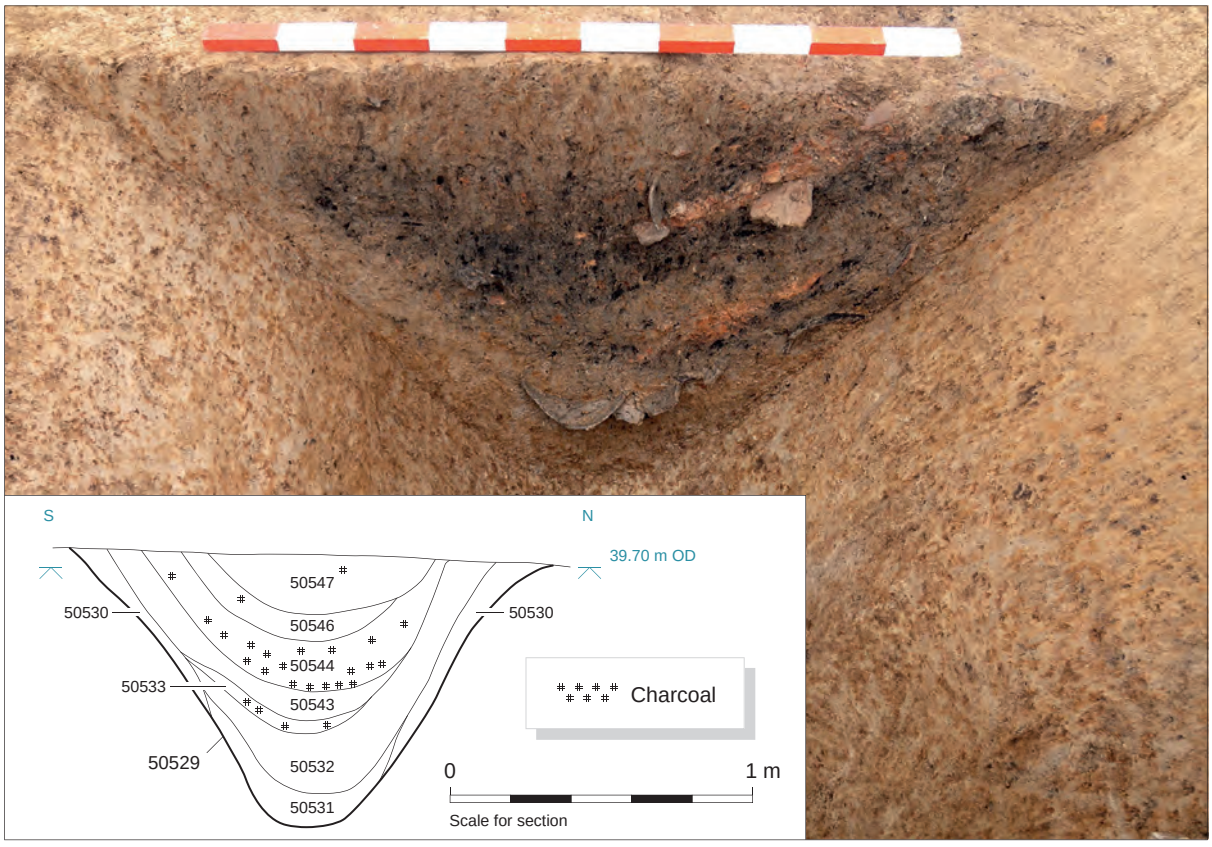


Figure 3.27 East facing section of Late Iron Age ditch 51208 (slot) 50529 and opposing section viewed from the west (photo)

Figure 3.28 Pottery deposit in Late Iron Age ditch 50597

Figure 3.29 Pottery in Late Iron Age ditch 50598

Figure 3.30 Areas 4S and 9E, all phases; and evaluation trenches

Figure 3.31 Late Iron Age cremation grave 16120, Area 4S, viewed from the south

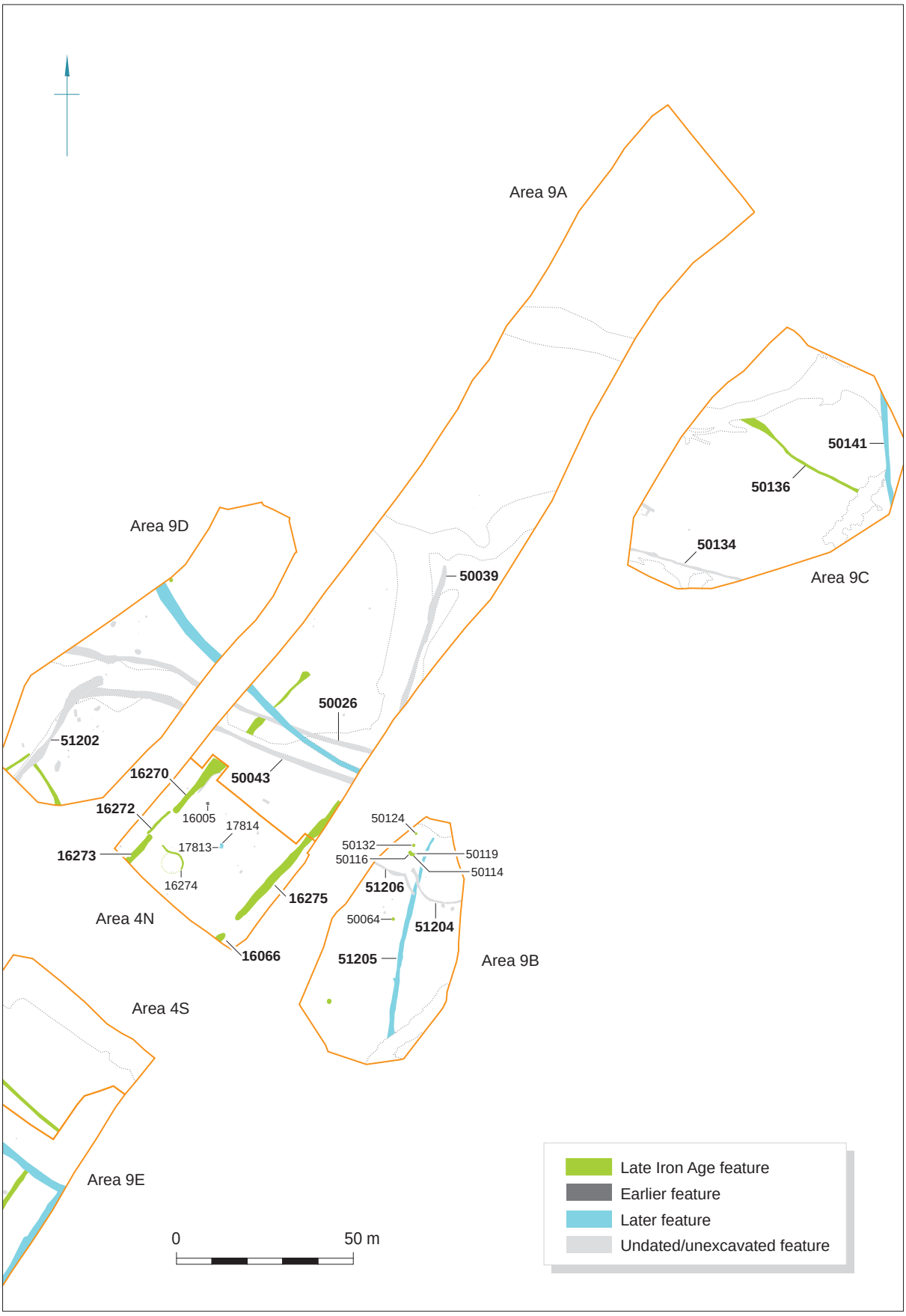


Figure 3.32 Areas 4N and 9A–D, all phases

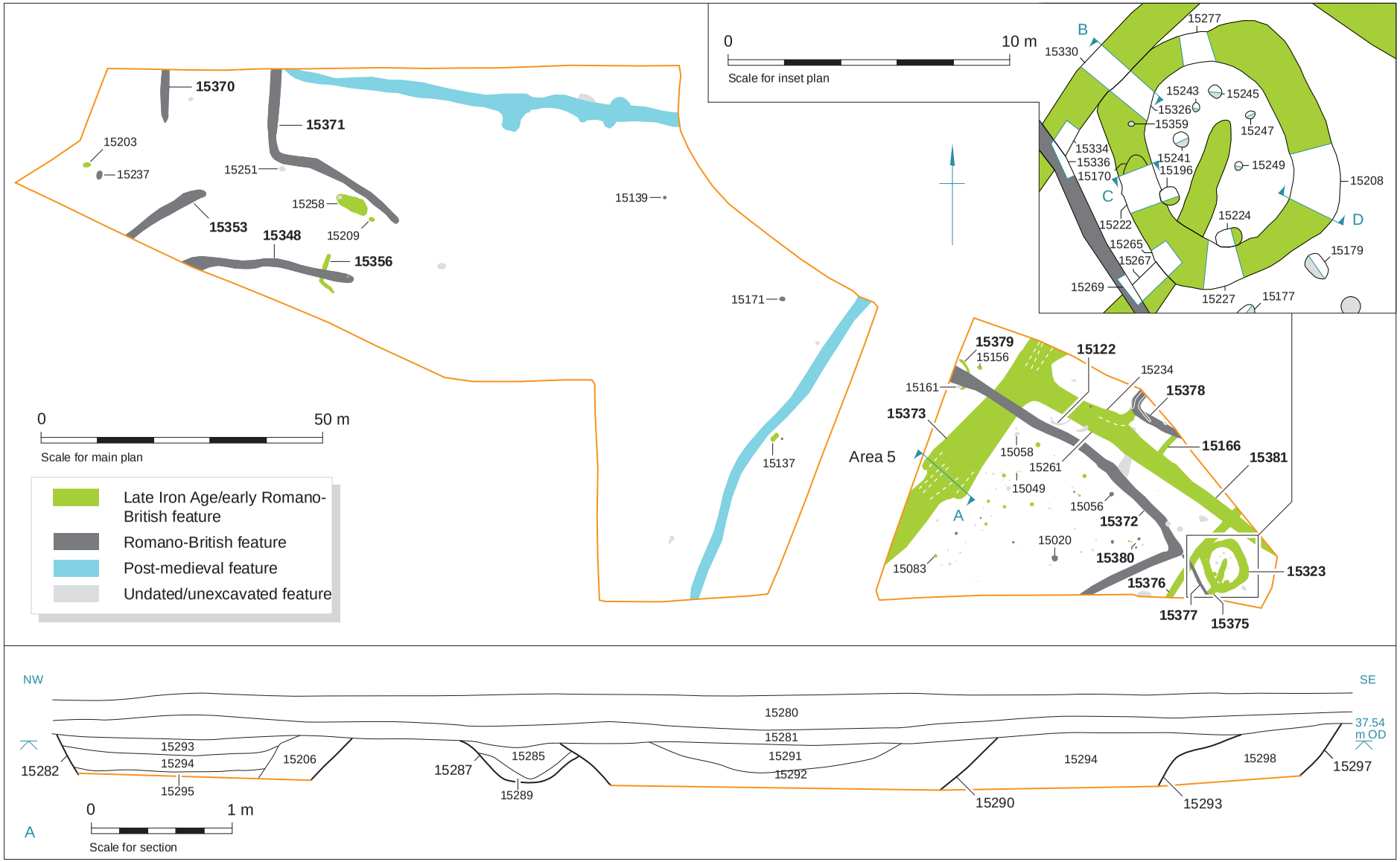


Figure 3.33 Area 5, all phases, with detail of eastern part and south-west facing section of ditch 15373

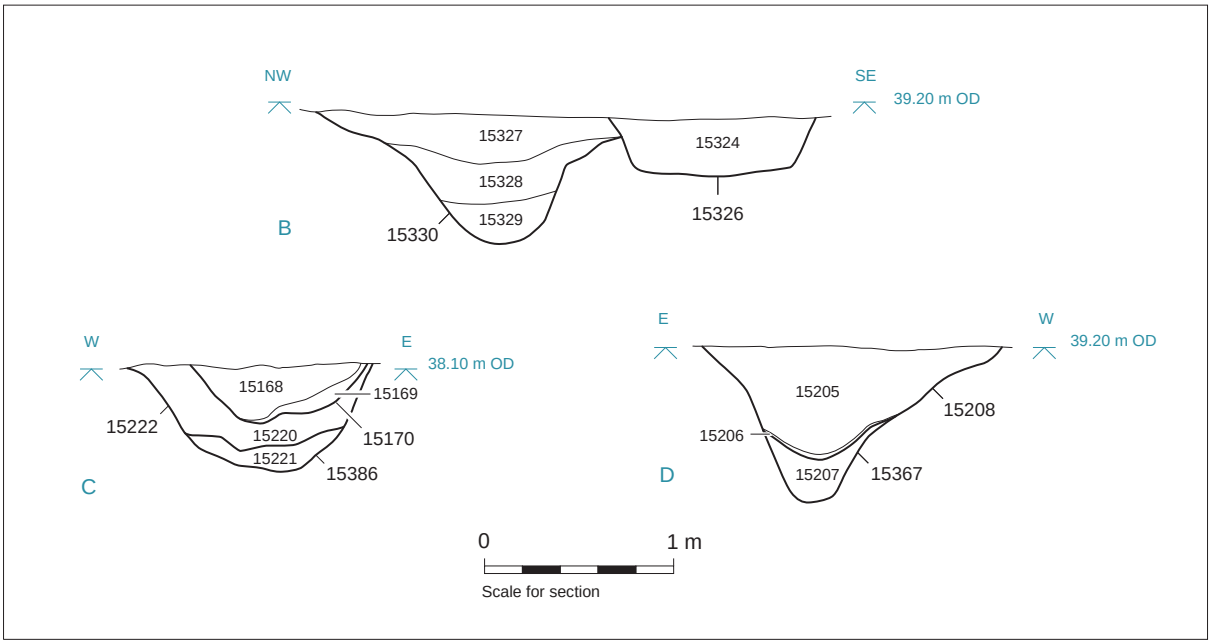


Figure 3.34 Monument 15323, Area 5, ditch sections

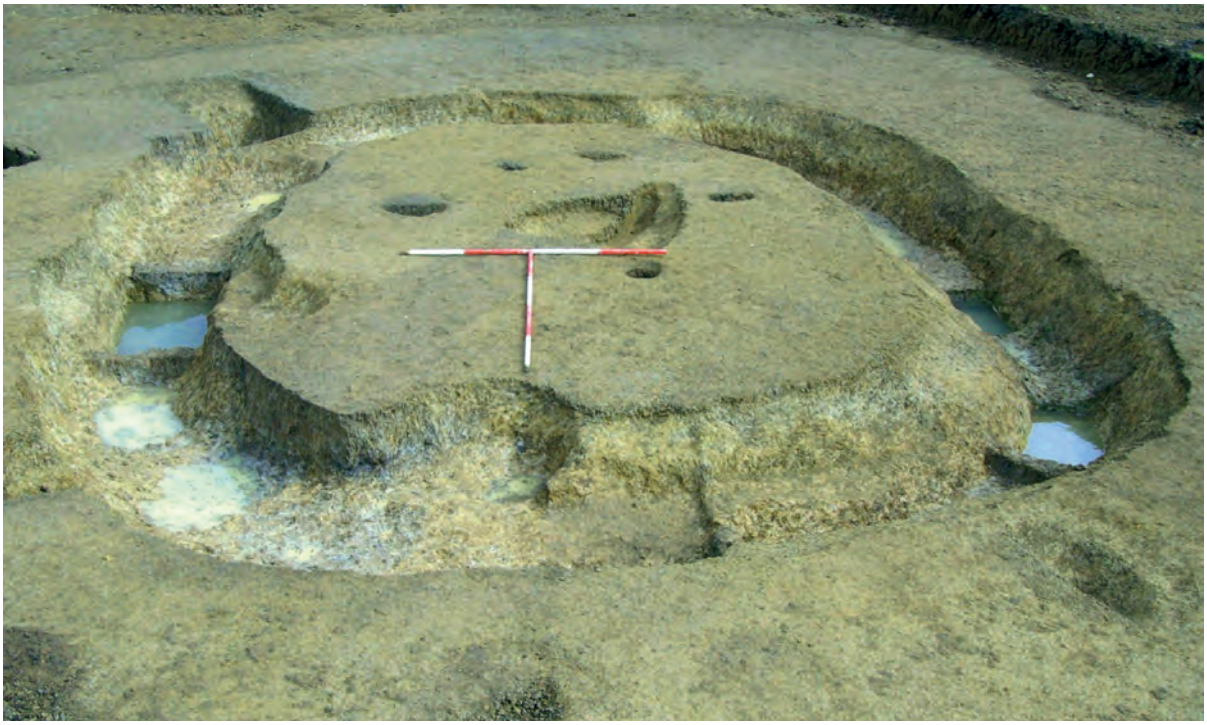


Figure 3.35 Monument 15323, Area 5, viewed from the south

Figure 3.36 Late Iron Age features, Area 6

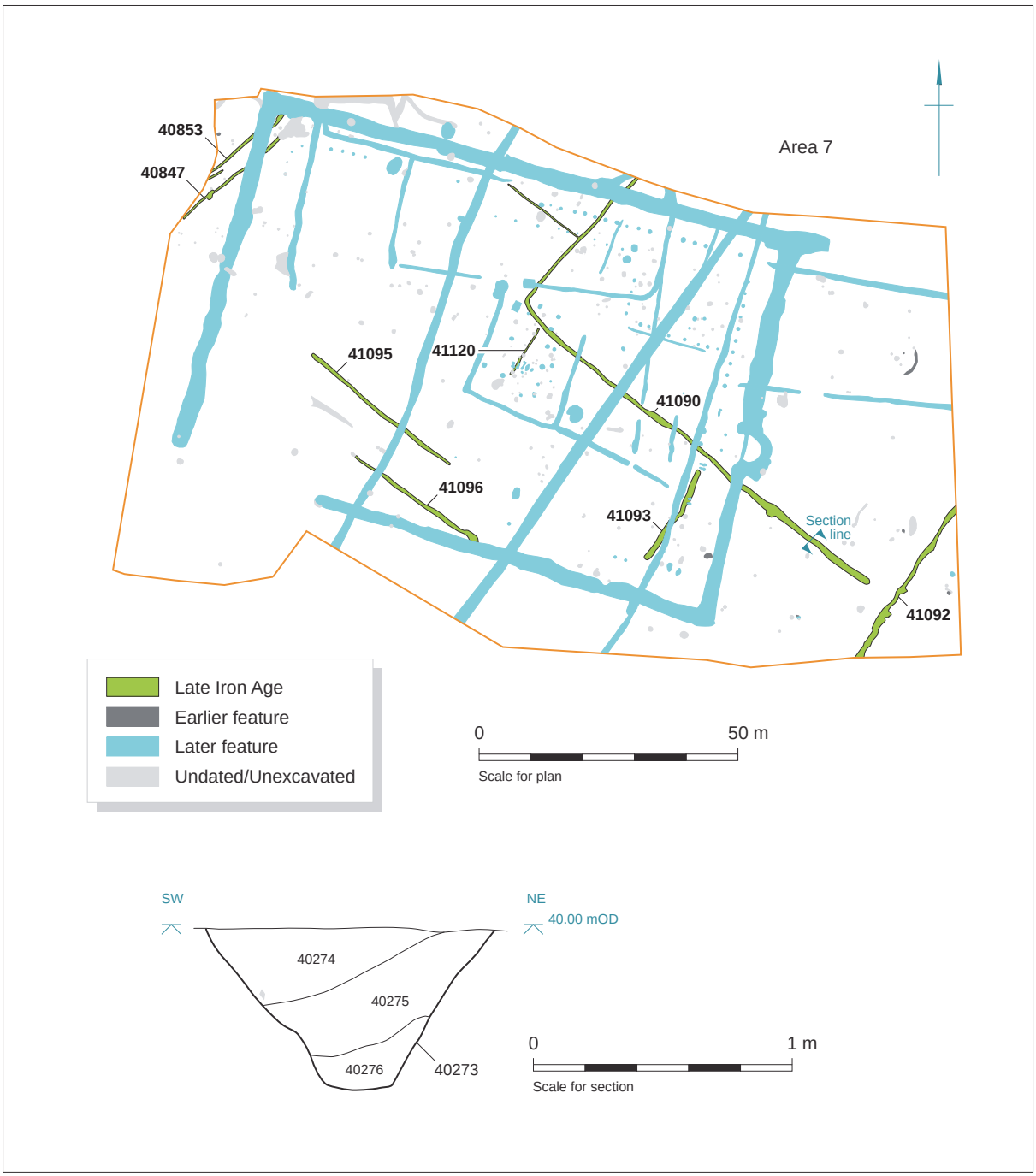


Figure 3.37 Late prehistoric field system, Area 7

Figure 3.38 Late Iron Age features (and Romano-British feature), Area 10

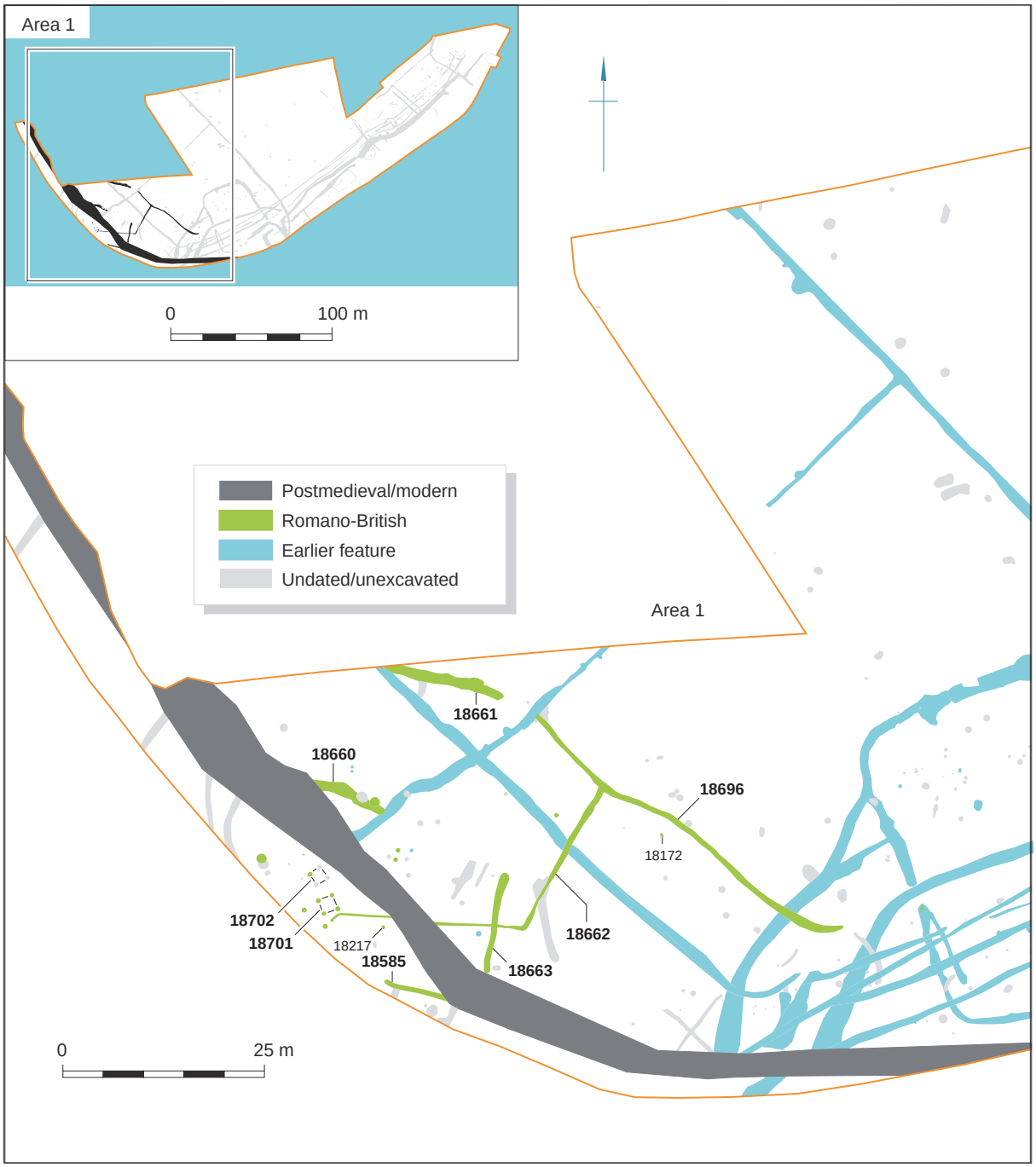


Figure 4.1 Romano-British features, Area 1

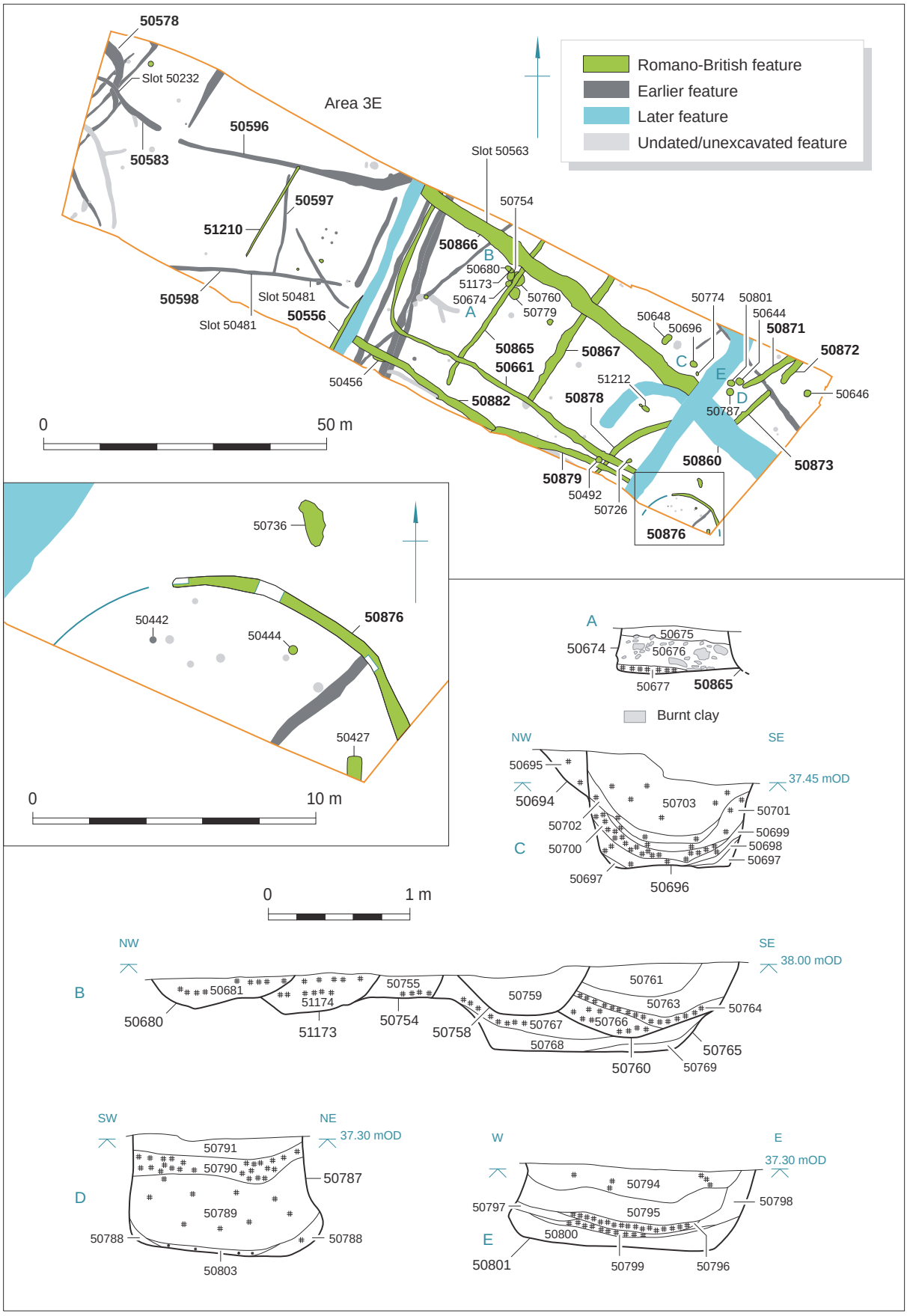


Figure 4.2 Romano-British features, Area 3E

Figure 4.3 Romano-British oven 50674, Area 3E, viewed from the south-east

Figure 4.4 Romano-British oven 51212, Area 3E, viewed from the north-

Figure 4.5 Placed vessels in Late Iron Age/early Romano-British pit 15083, Area 5, viewed from the north

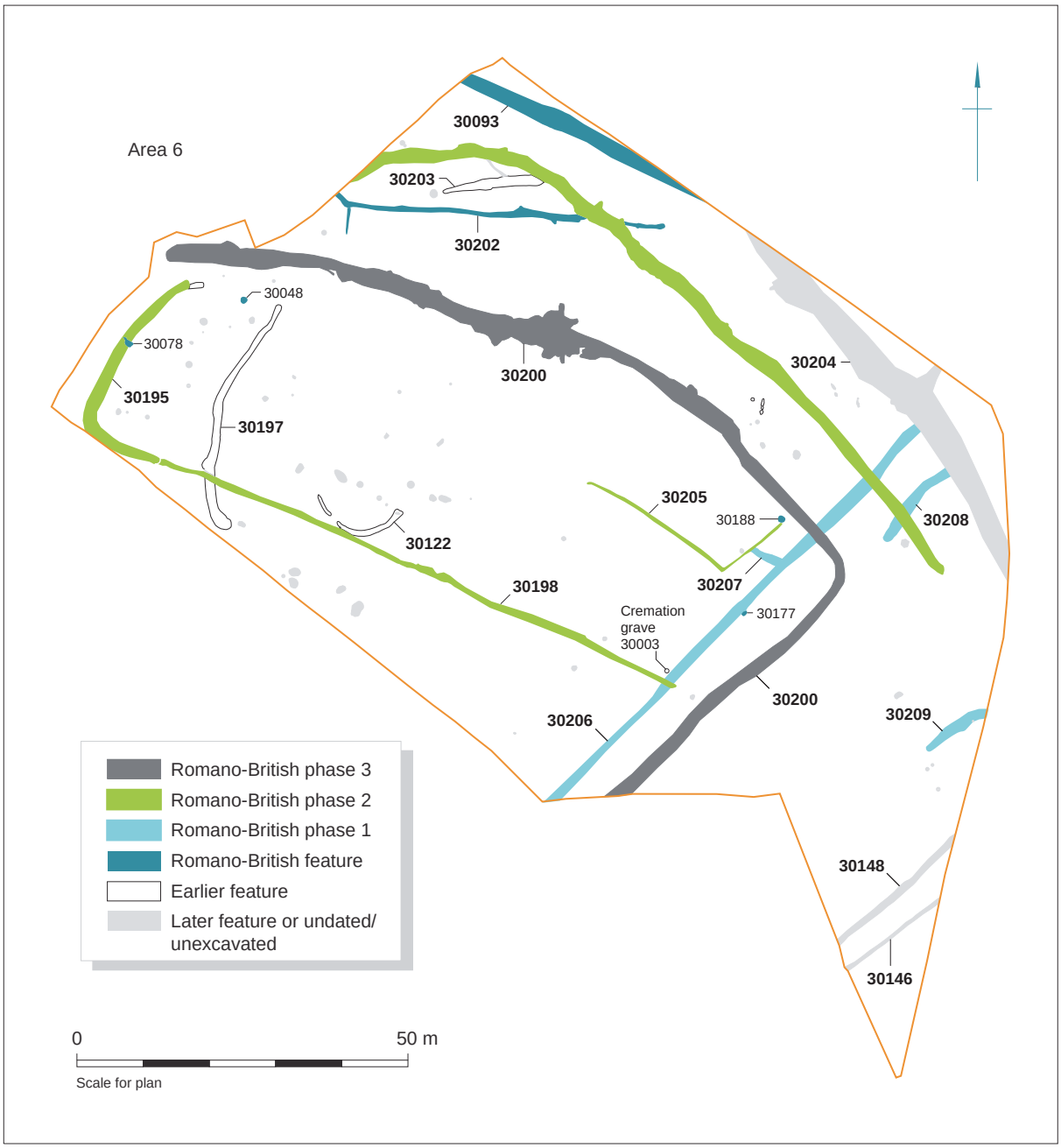


Figure 4.6 Romano-British features, Area 6

Figure 4.7 Late Iron Age/early Romano-British cremation grave 30003, Area 6, viewed from the north

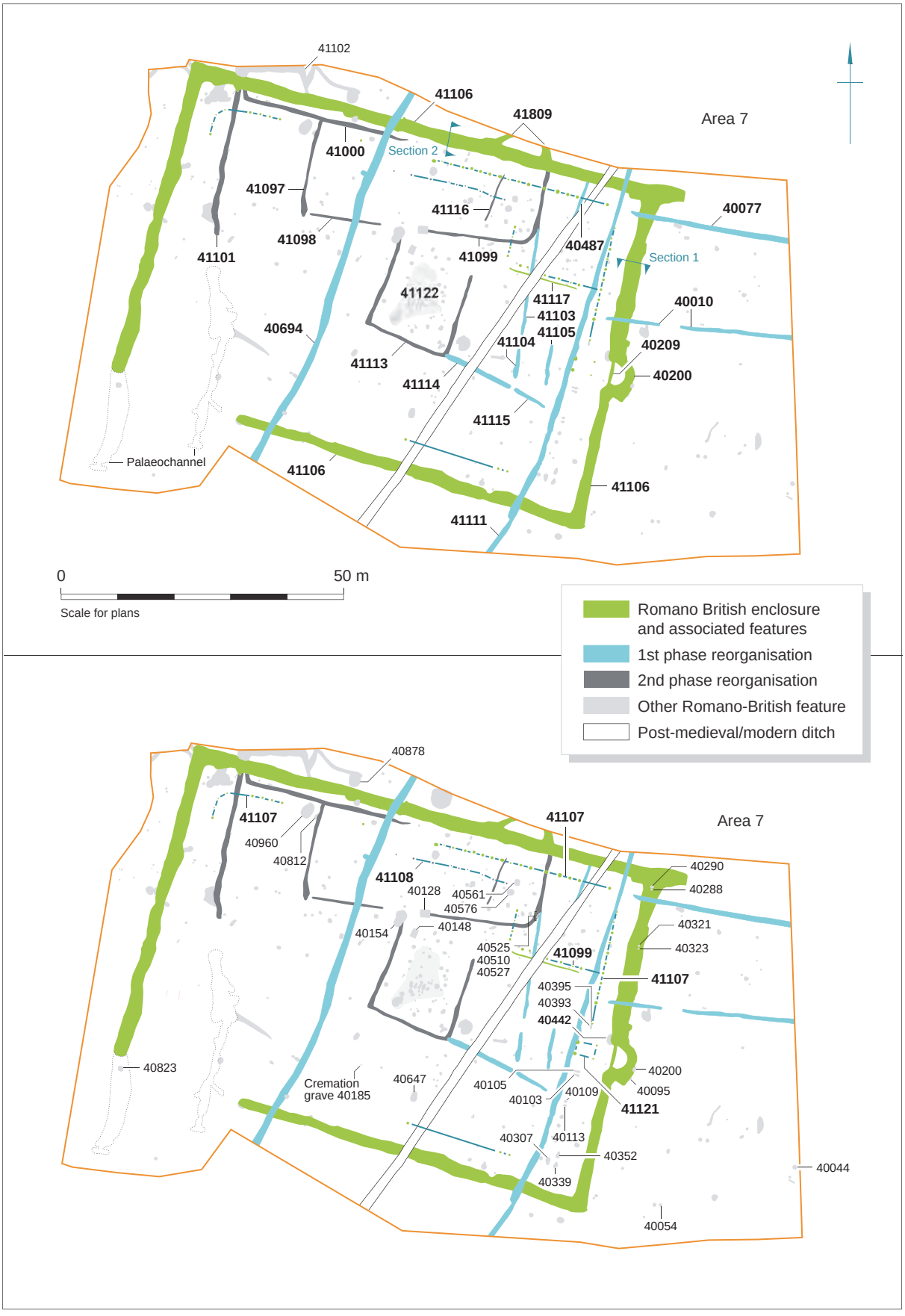


Figure 4.8 Romano-British features, Area 7. Top ditches, bottom pits and post-holes.

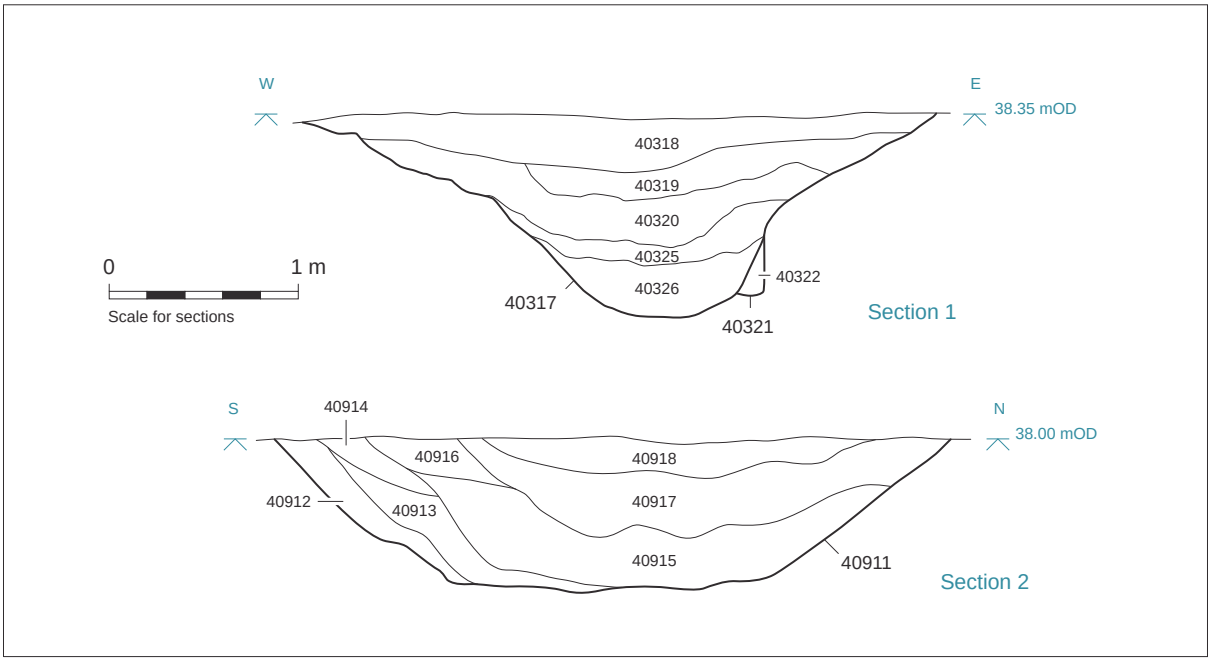


Figure 4.9 Sections of Romano-British enclosure ditch 41106.

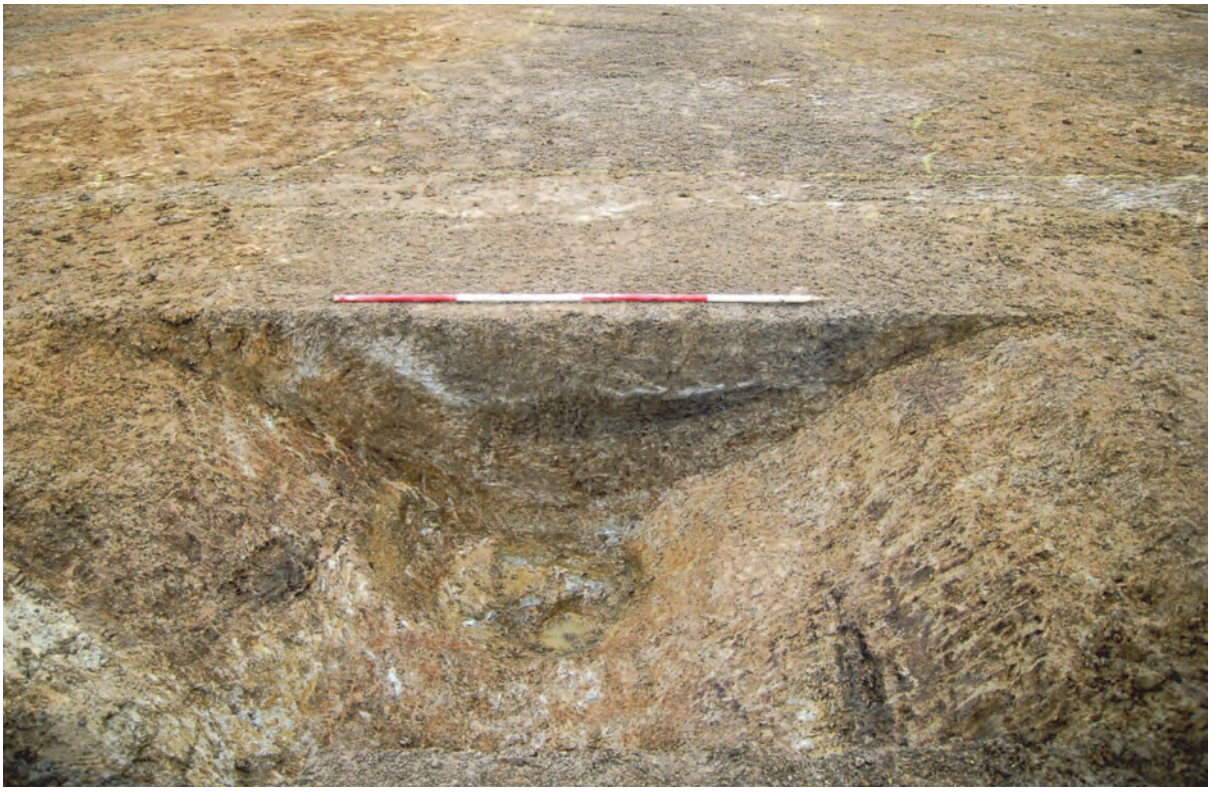


Figure 4.10 East side of the Romano-British enclosure, ditch slot 40060, viewed from the south

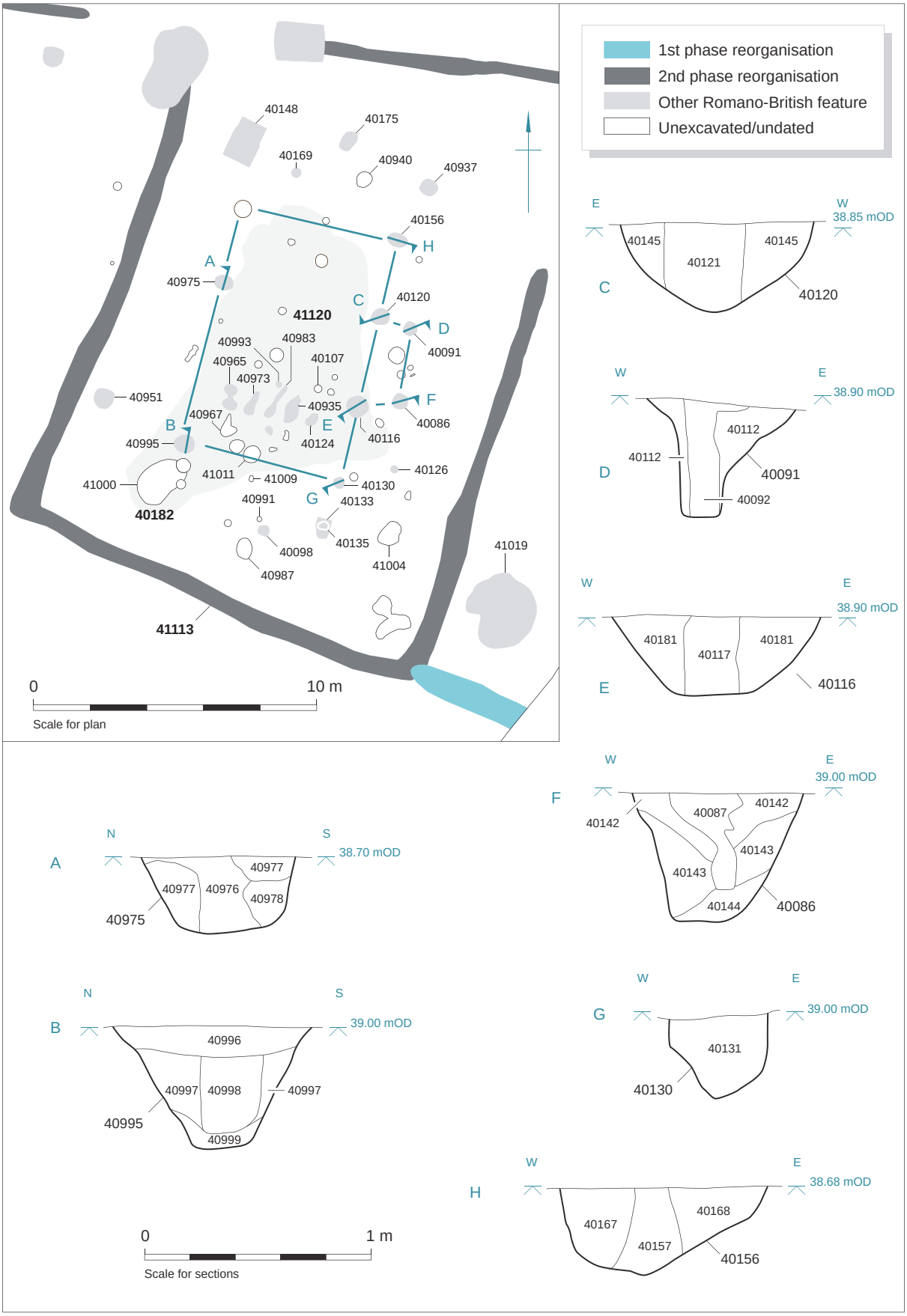


Figure 4.11 Central building in Romano-British enclosure, Area 7, with sections of post-holeso

Figure 4.12 Shallow hollow in the area of the central building, viewed from the north

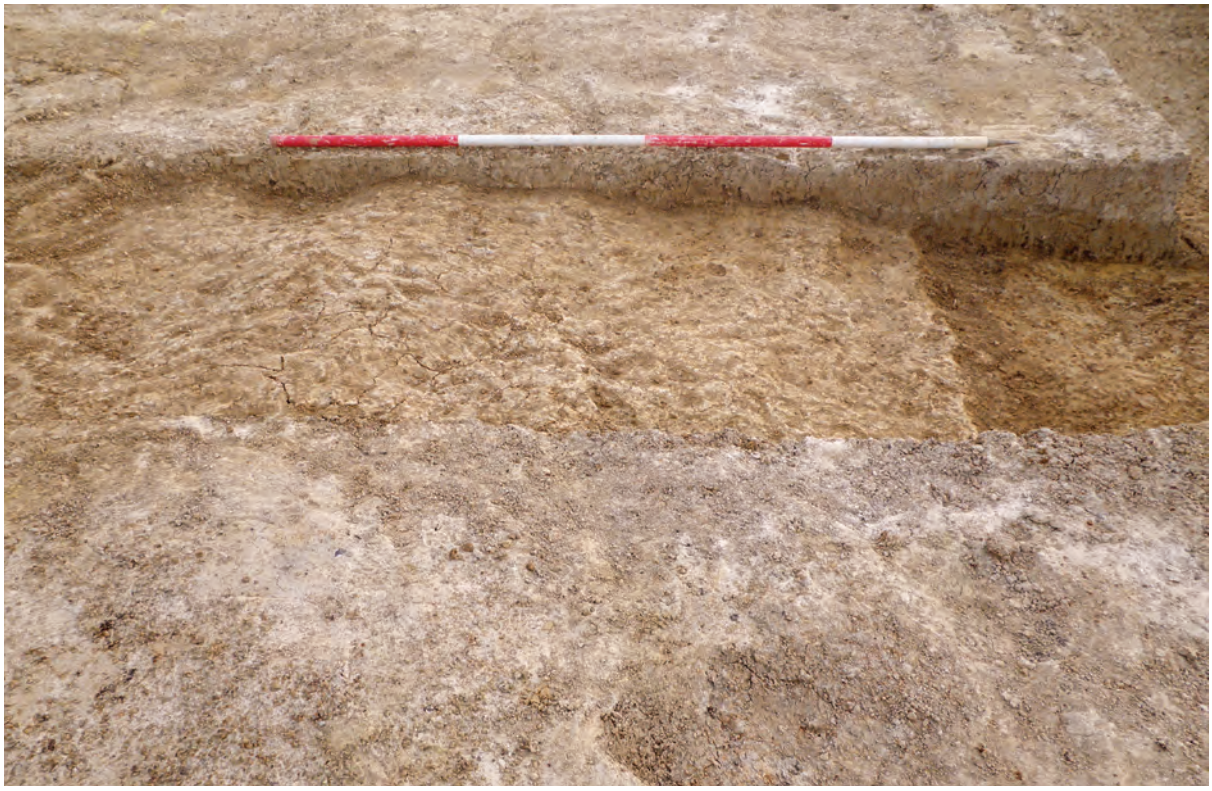


Figure 4.13 Heavily trampled ground within porch of central building, viewed from the north

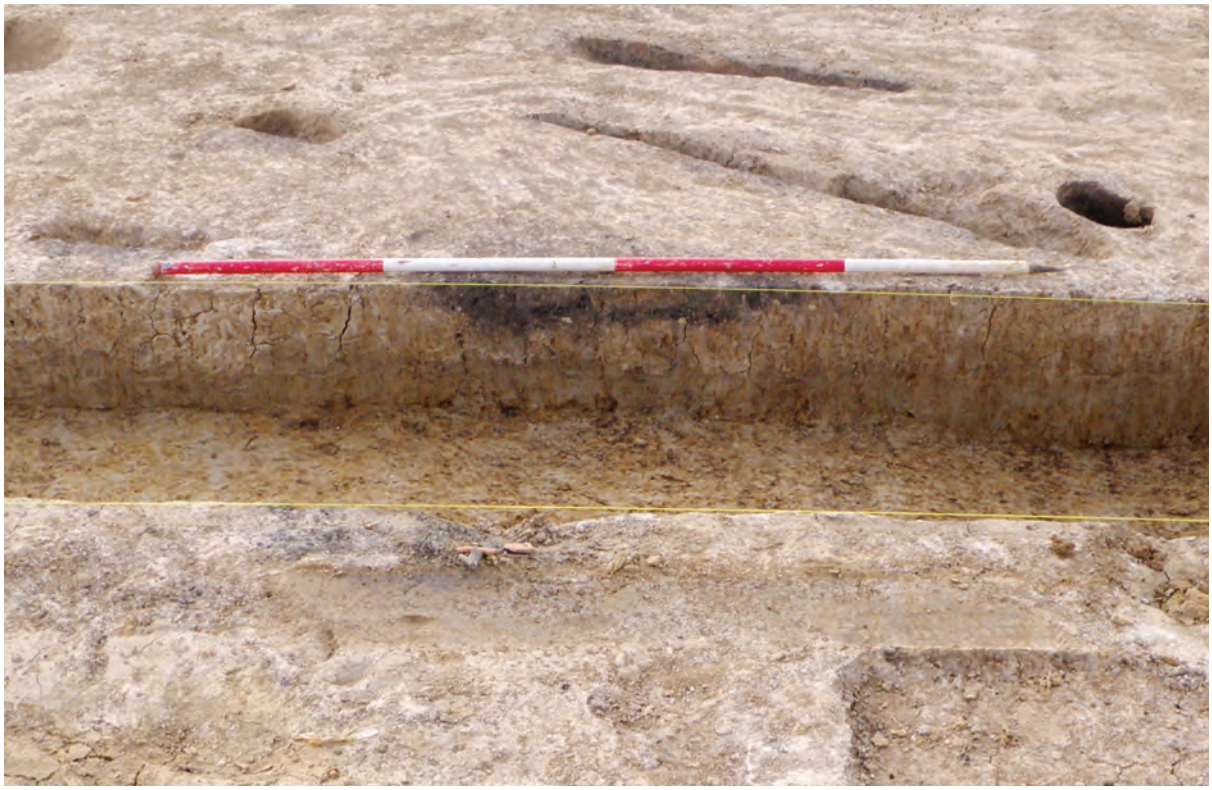


Figure 4.14 Oven in the central building, from foreground – 40124, 40935, 40983, 40973 and 40965, viewed from the east

Figure 4.15 Romano-British feature 41000, with charcoal layer in base, viewed from the south-east

Figure 4.16 Romano-British rectangular pit 40128, viewed from the north

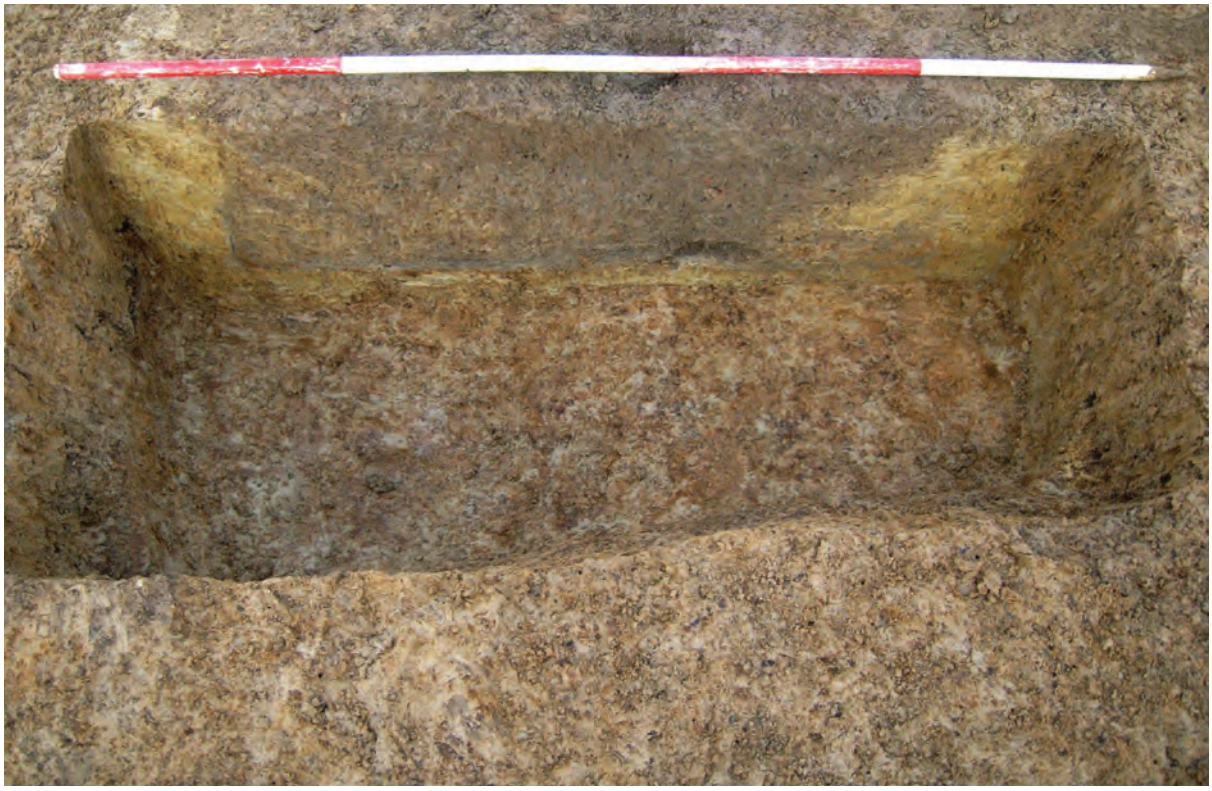


Figure 4.17 Romano-British rectangular clay-lined pit 40148, viewed from the south-east

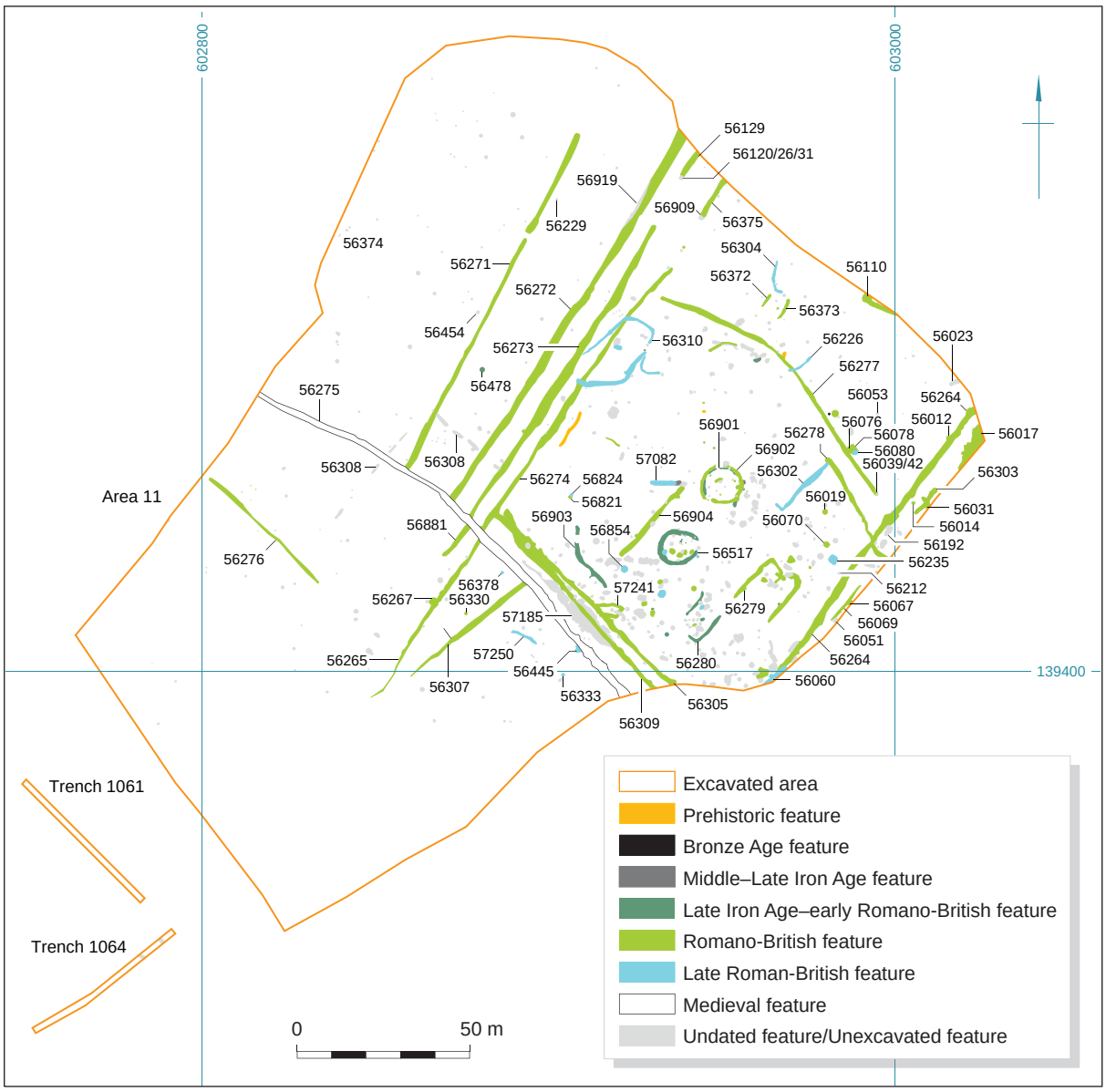


Figure 4.18 Area 11

Figure 4.19 Enclosure 56310, Area 11

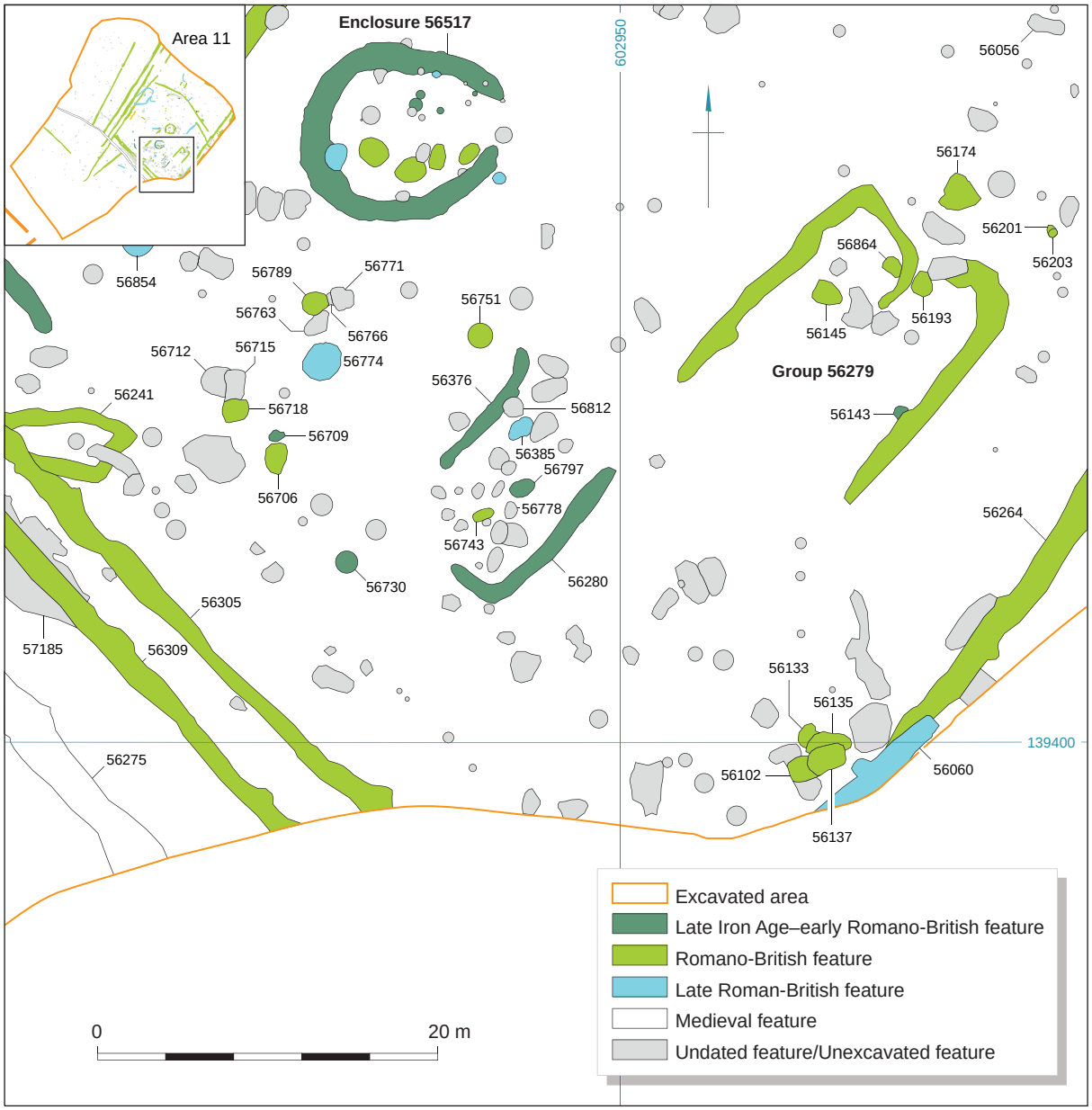


Figure 4.20 Group 56279, Area 11

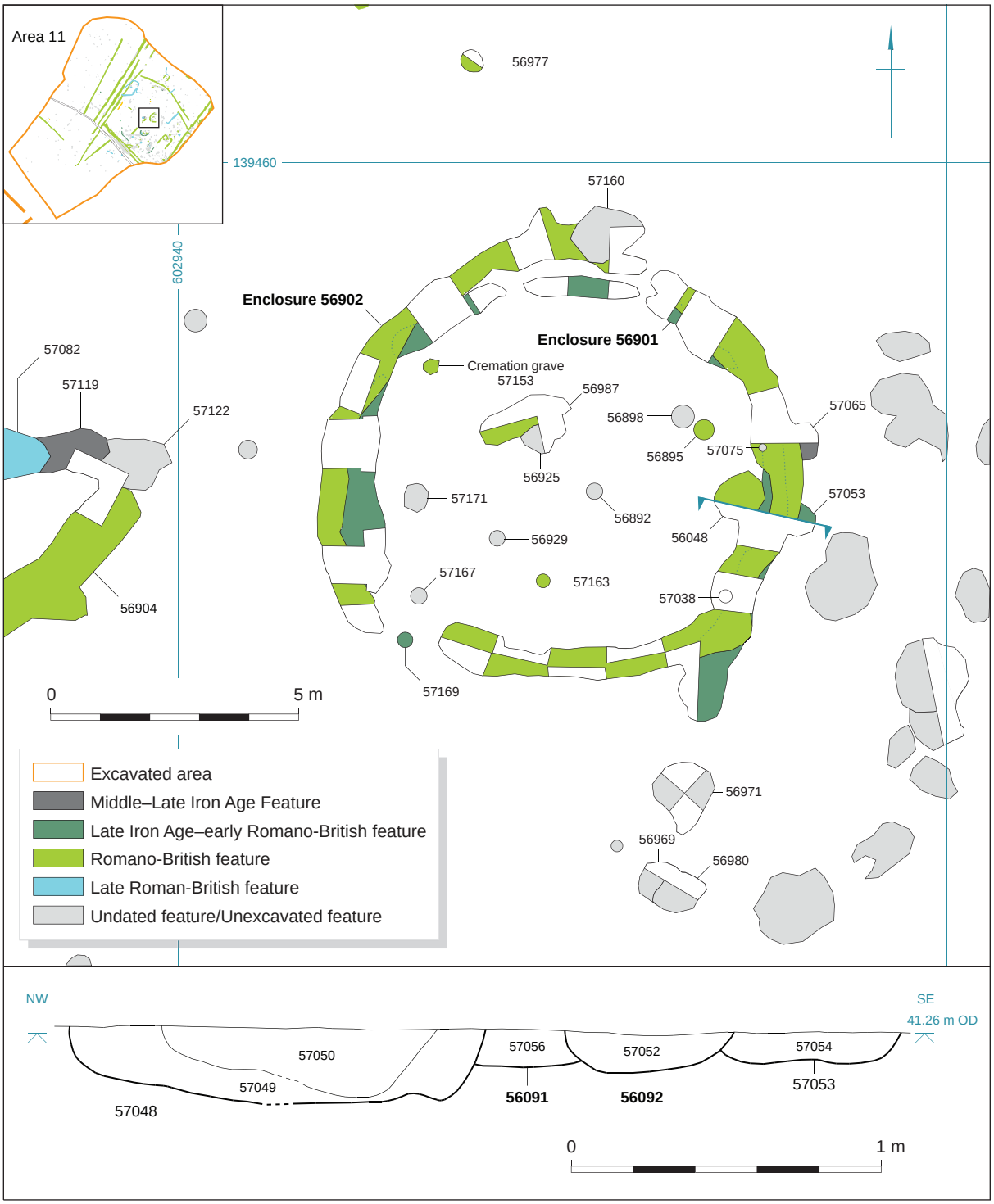


Figure 4.21 Enclosure 56901/02, Area 11

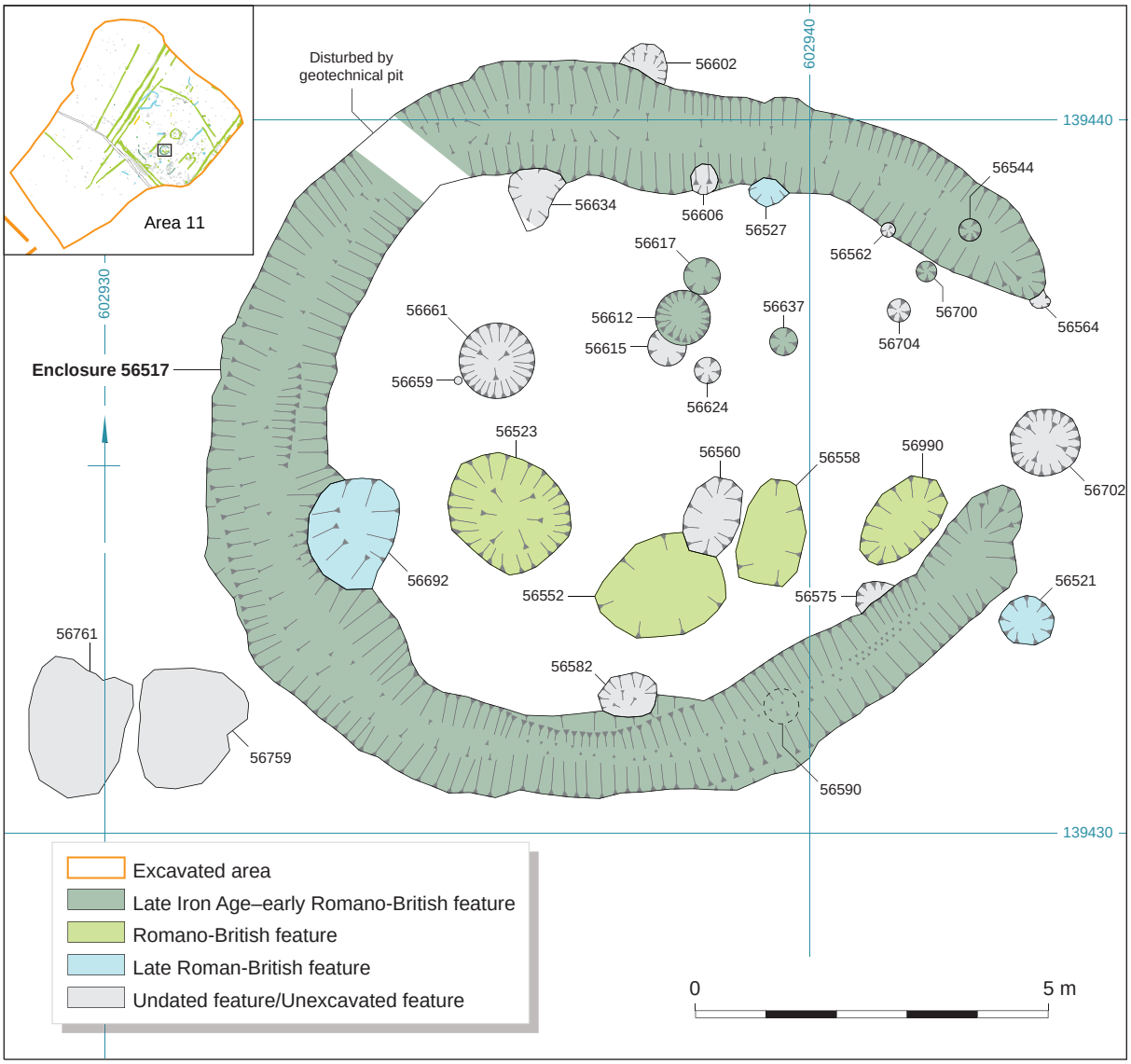


Figure 4.22 Enclosure 56517, Area 11

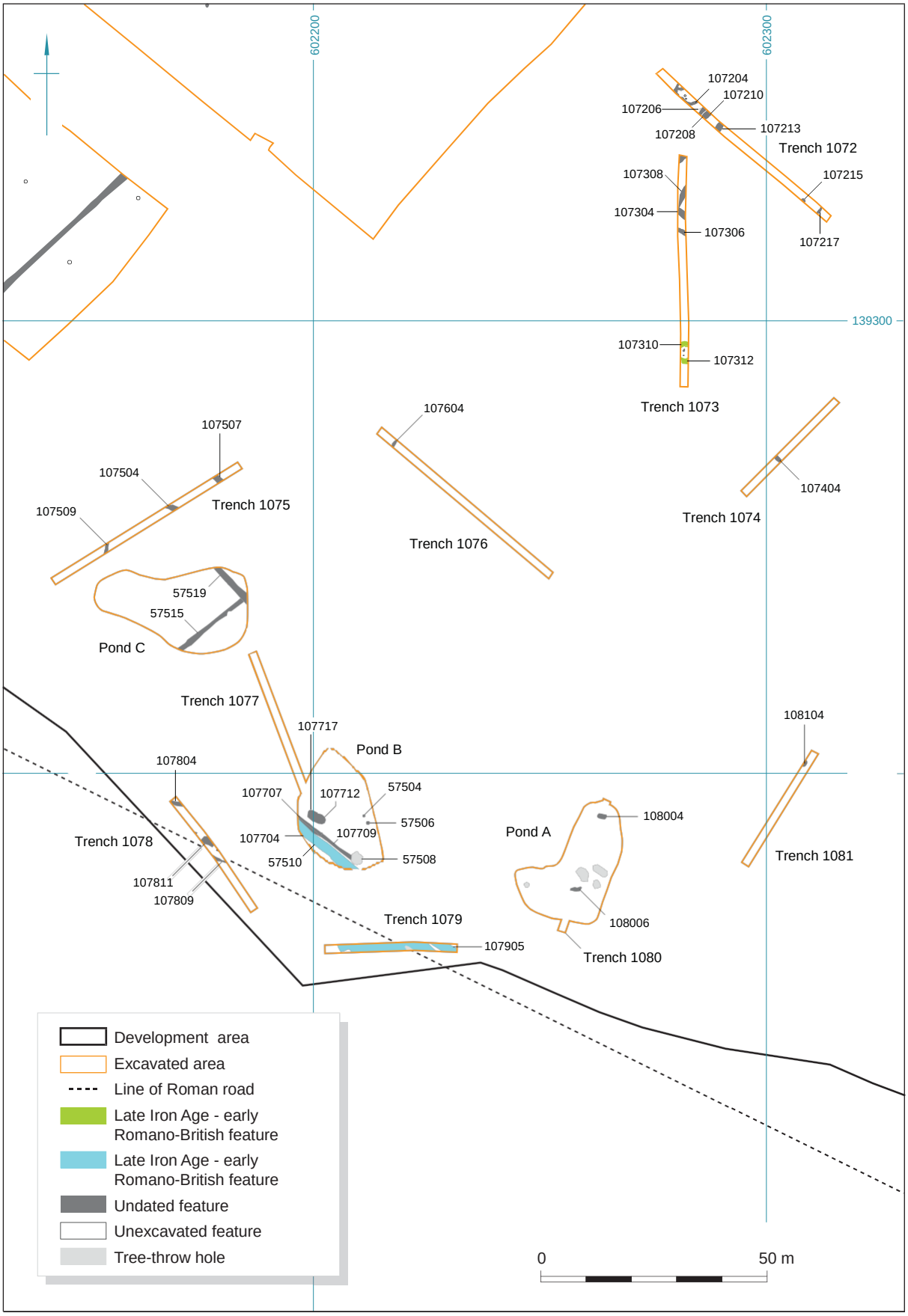


Figure 4.23 Bilham Farm, evaluation trenches and ponds A-C excavations

Figure 5.1 Excavation of oak trunk in feature 17814, Area 4N, viewed from the north

Figure 5.2 Oak trunk after excavation, showing axe/adze marks

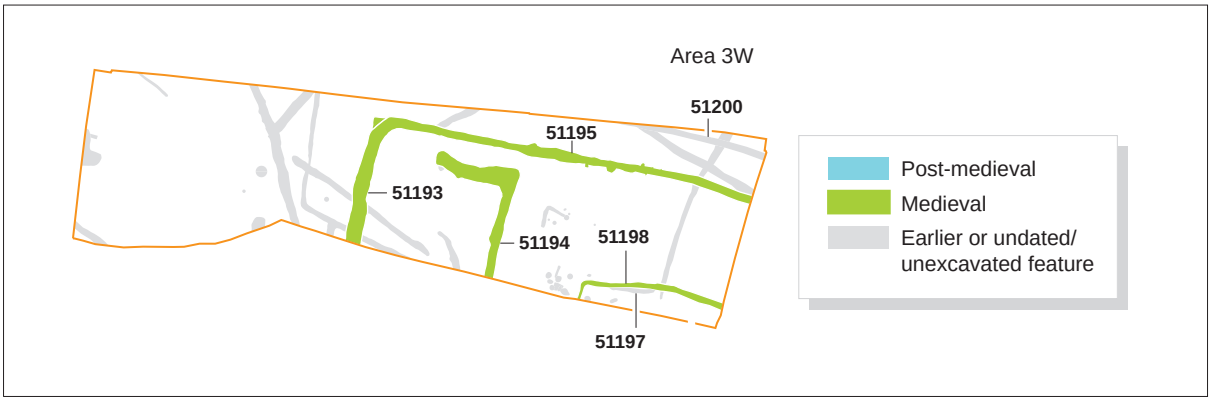


Figure 5.3 Medieval features in Area 3W

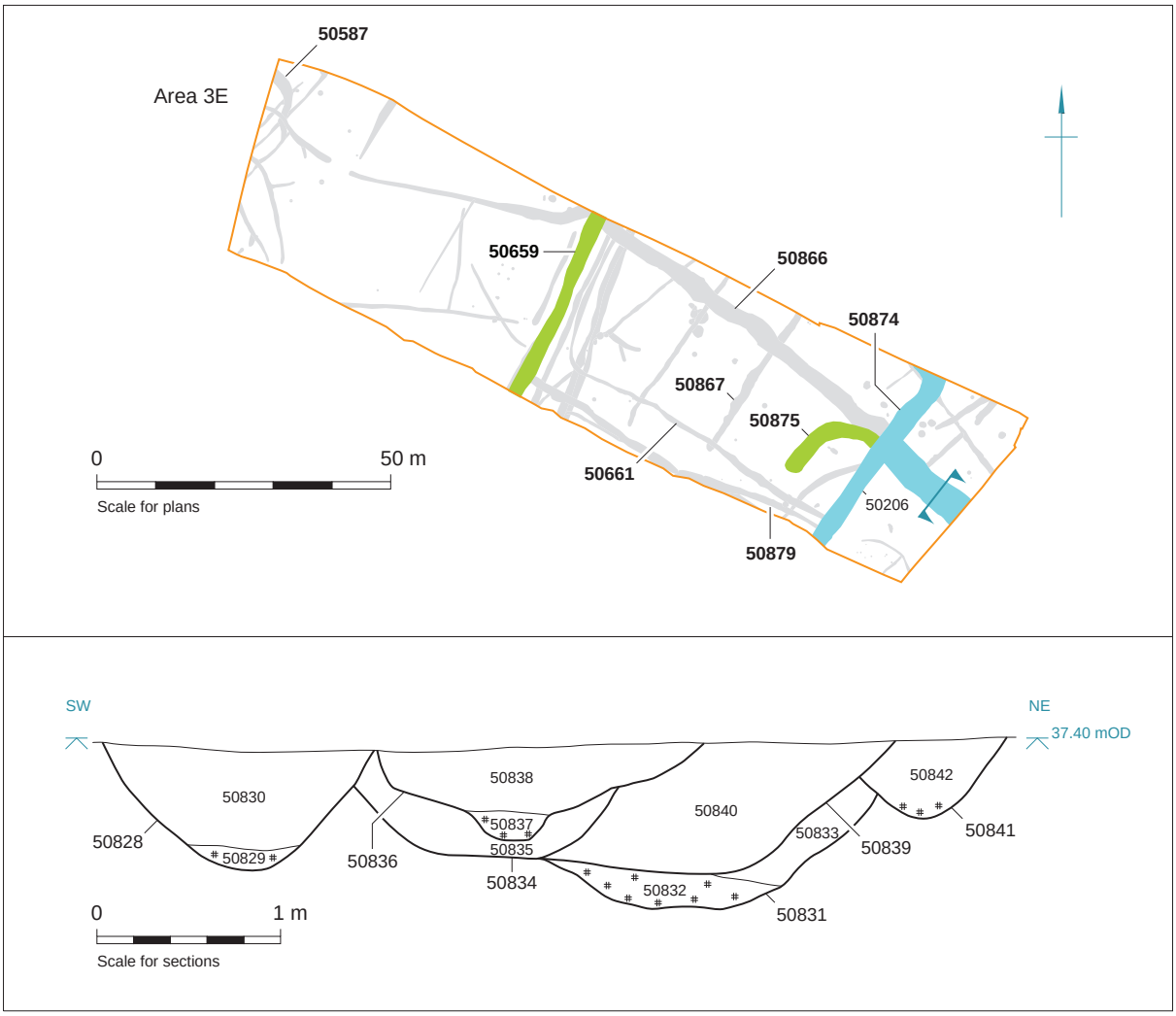


Figure 5.4 Medieval and post-medieval features in Area 3E, with south-east facing section across ditch 50866o

Figure 5.5 Details of the 1683/4 Bilham estate map and 1839 Kingsnorth tithe map, showing the relationship between field boundaries and the medieval, post-medieval and modern features

Figure 5.6 Area 8

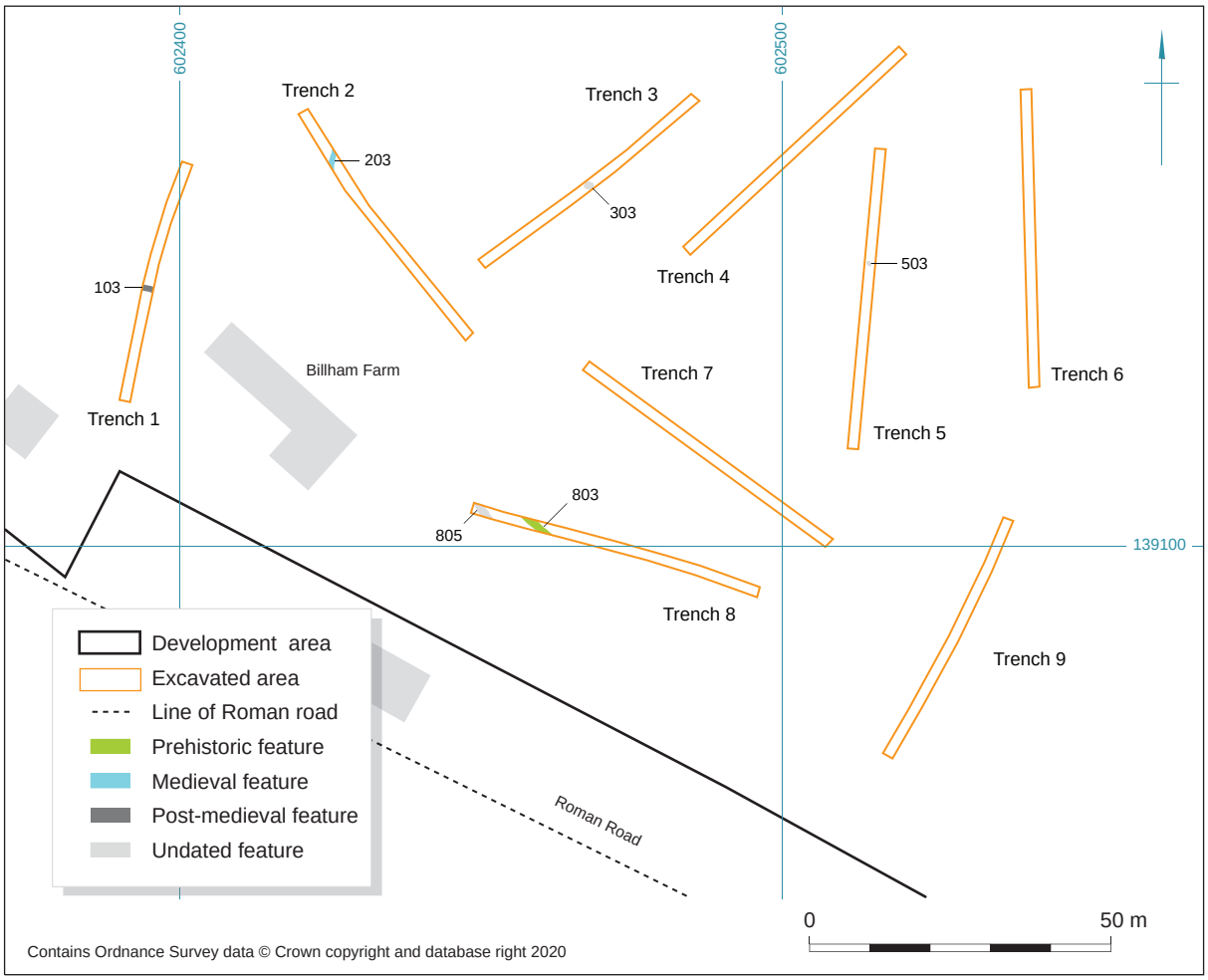


Figure 5.7 Evaluation trenches and archaeological features in Area A1

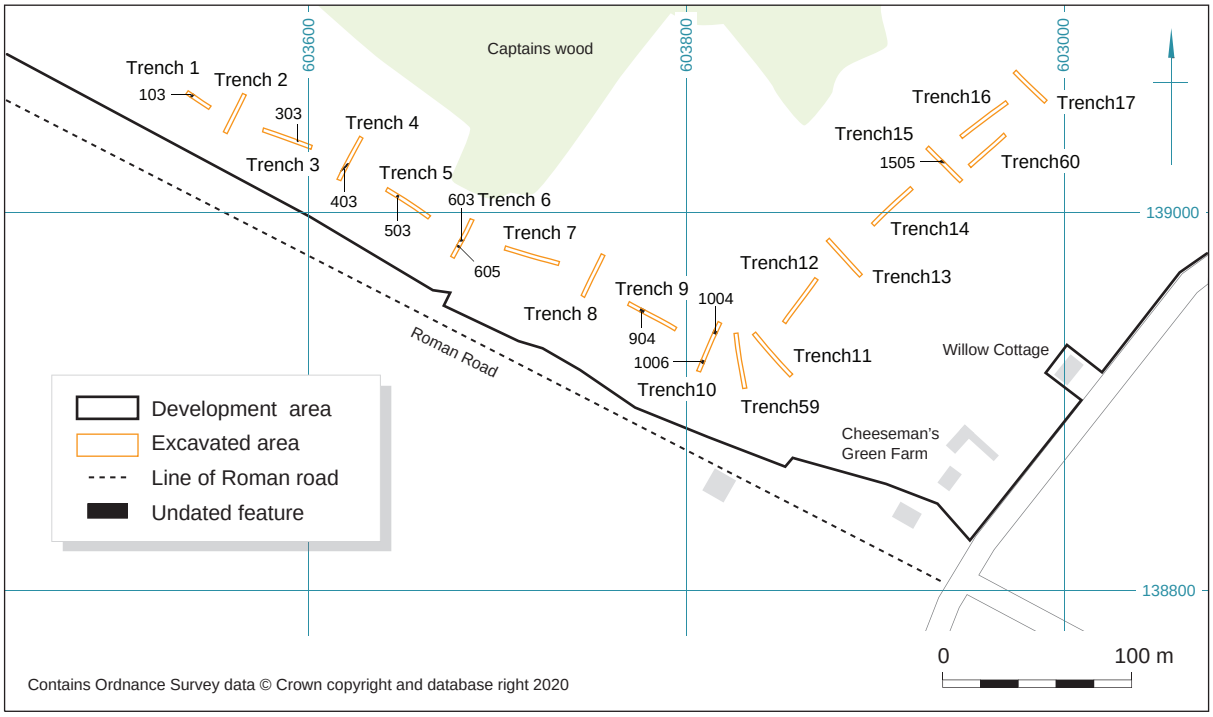


Figure 5.8 Evaluation trenches and archaeological features in Areas B6–B8 (Spine Road)

Figure 5.9 Segmented ditch 56308, Area 11

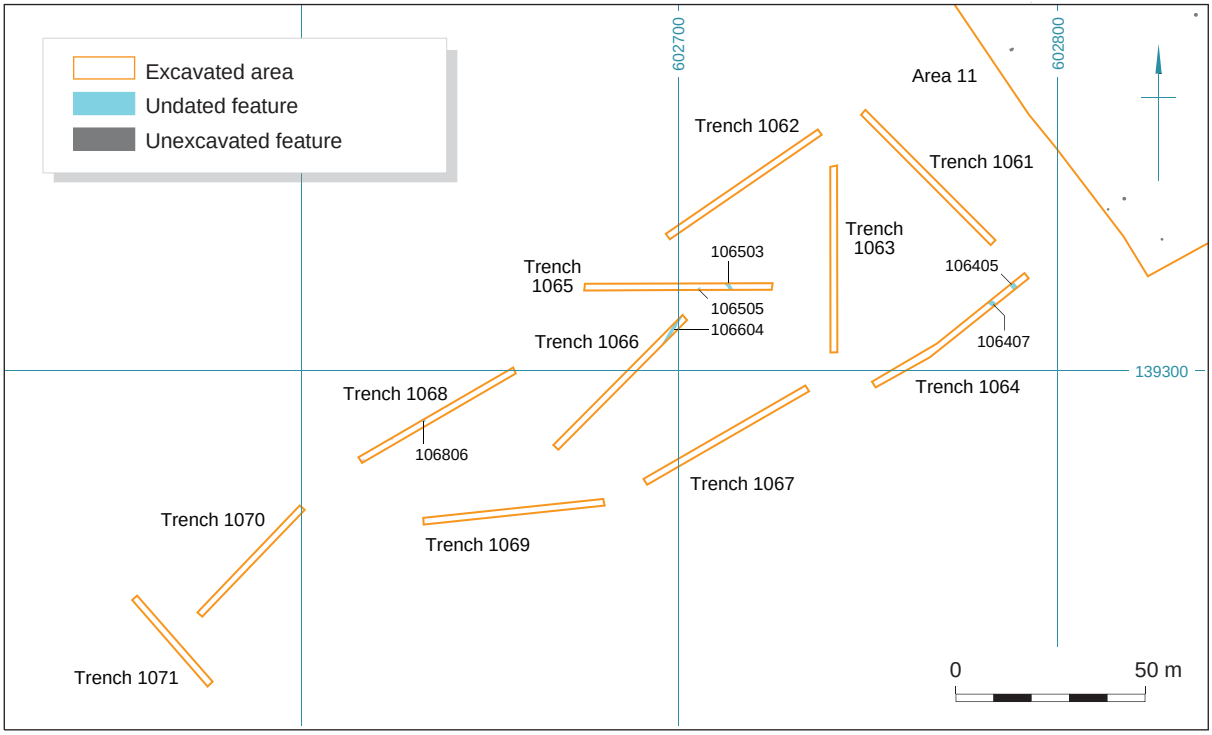


Figure 5.10 Plots B2–B3 evaluation trenches

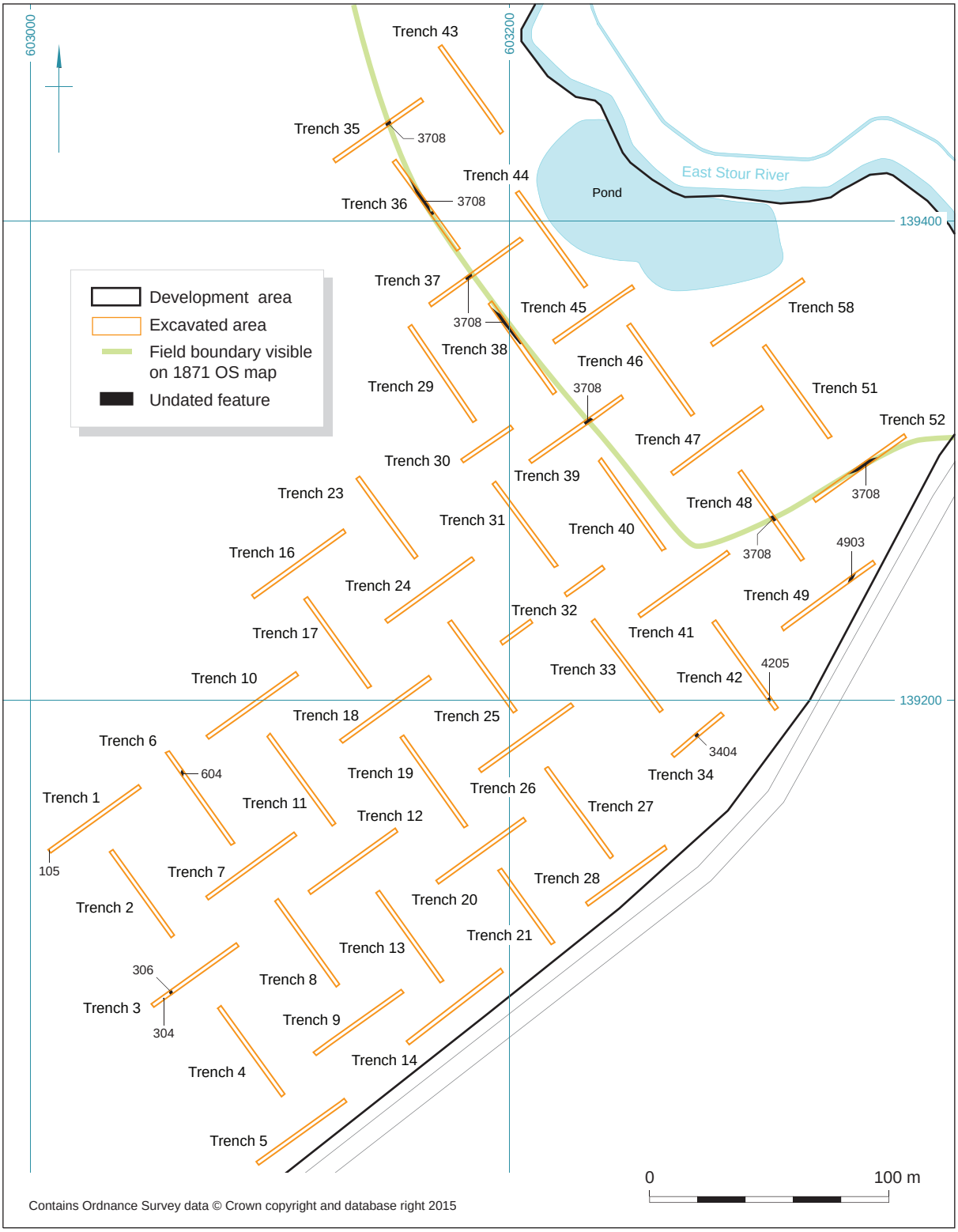


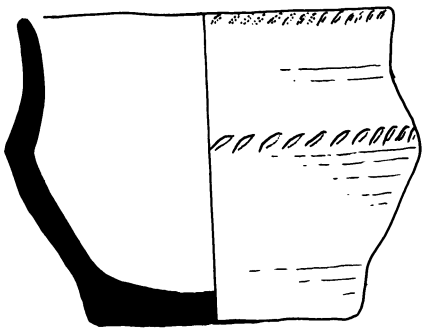
Figure 5.11 Evaluation trenches and archaeological features in Area B4–B5 and flood compensation area

Pottery

Figure 6.1 Early Bronze Age

Figure 6.2 Early to Middle Iron Age

Figure 6.3 Late Iron Age-early Romano-British



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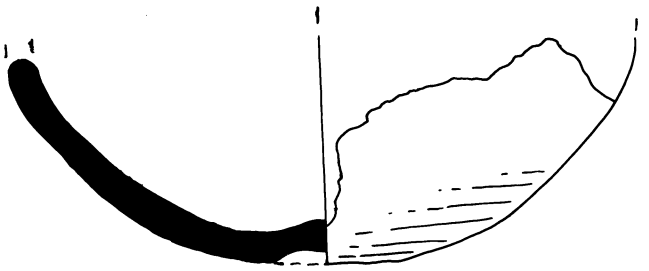
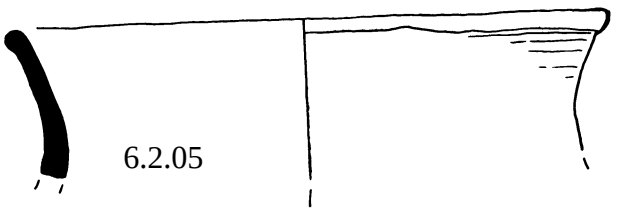


6.2.02

6.2.03

6.2.04



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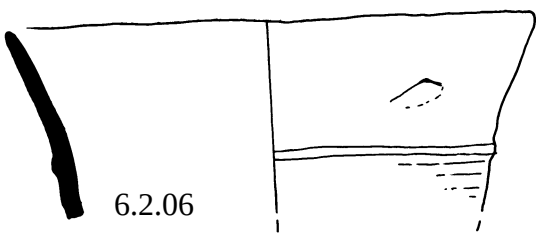

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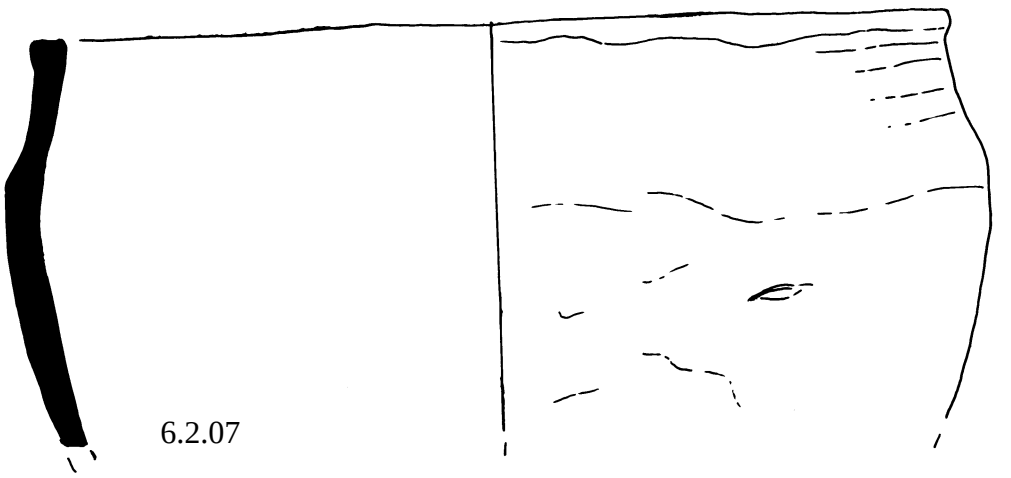

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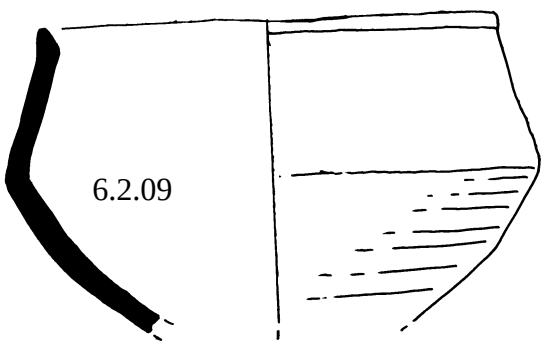

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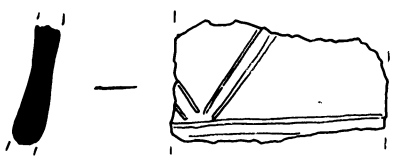

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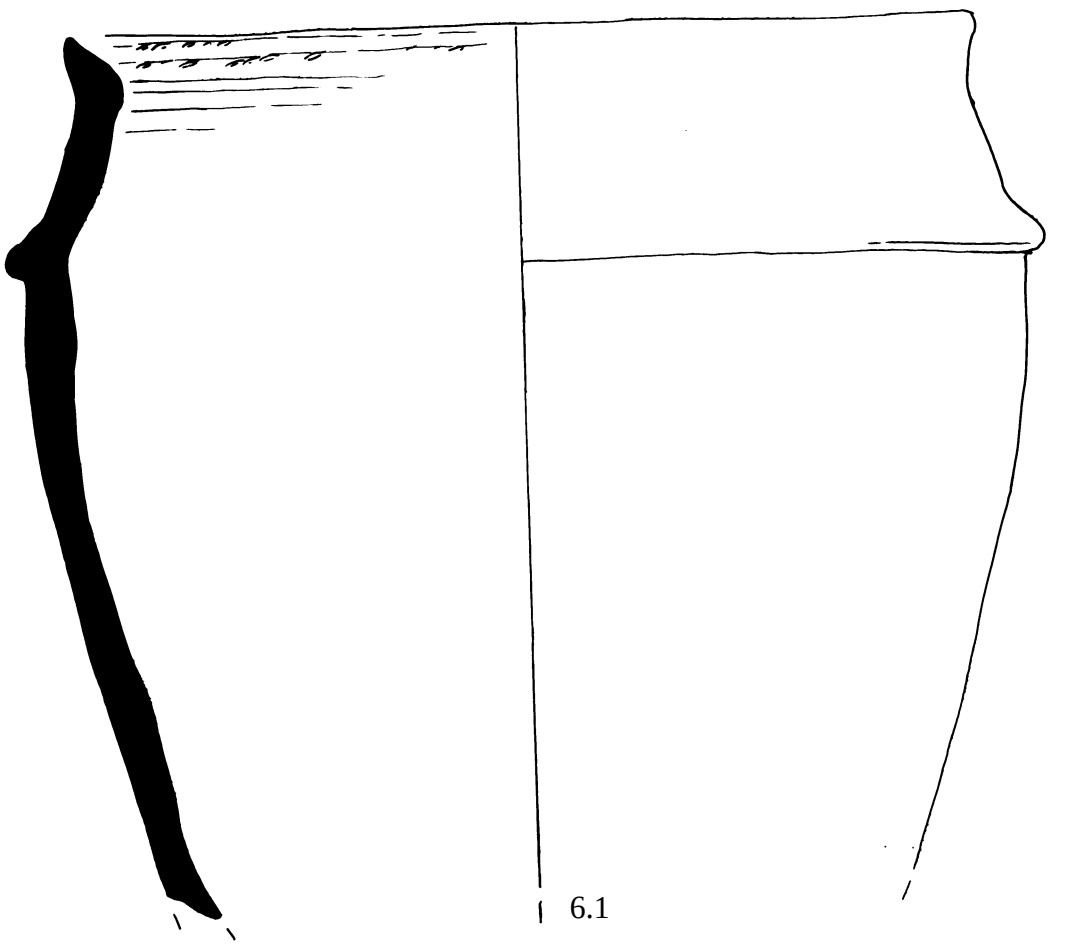

6.1

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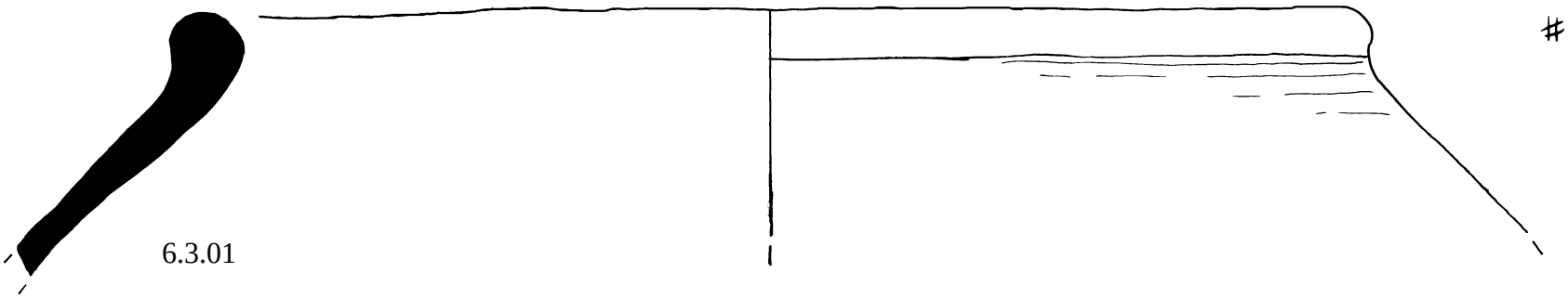

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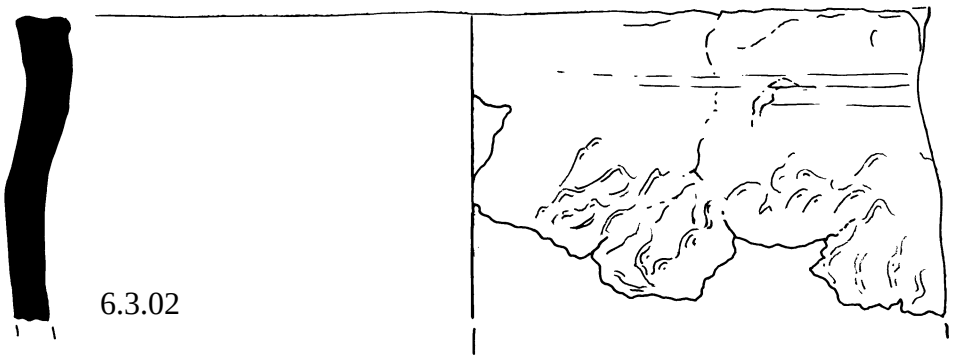

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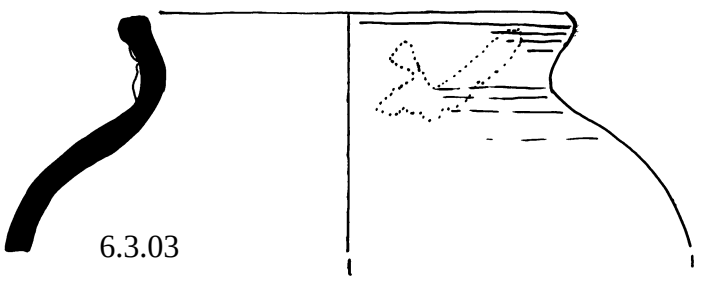

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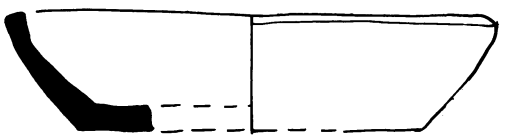

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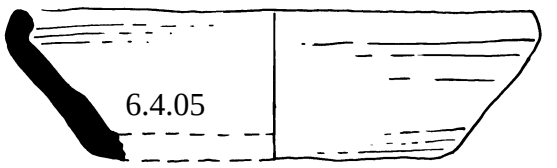

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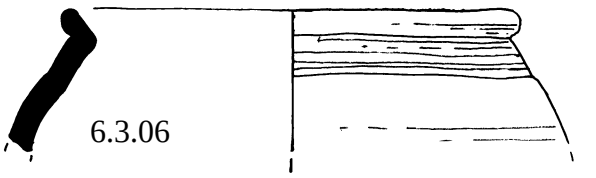

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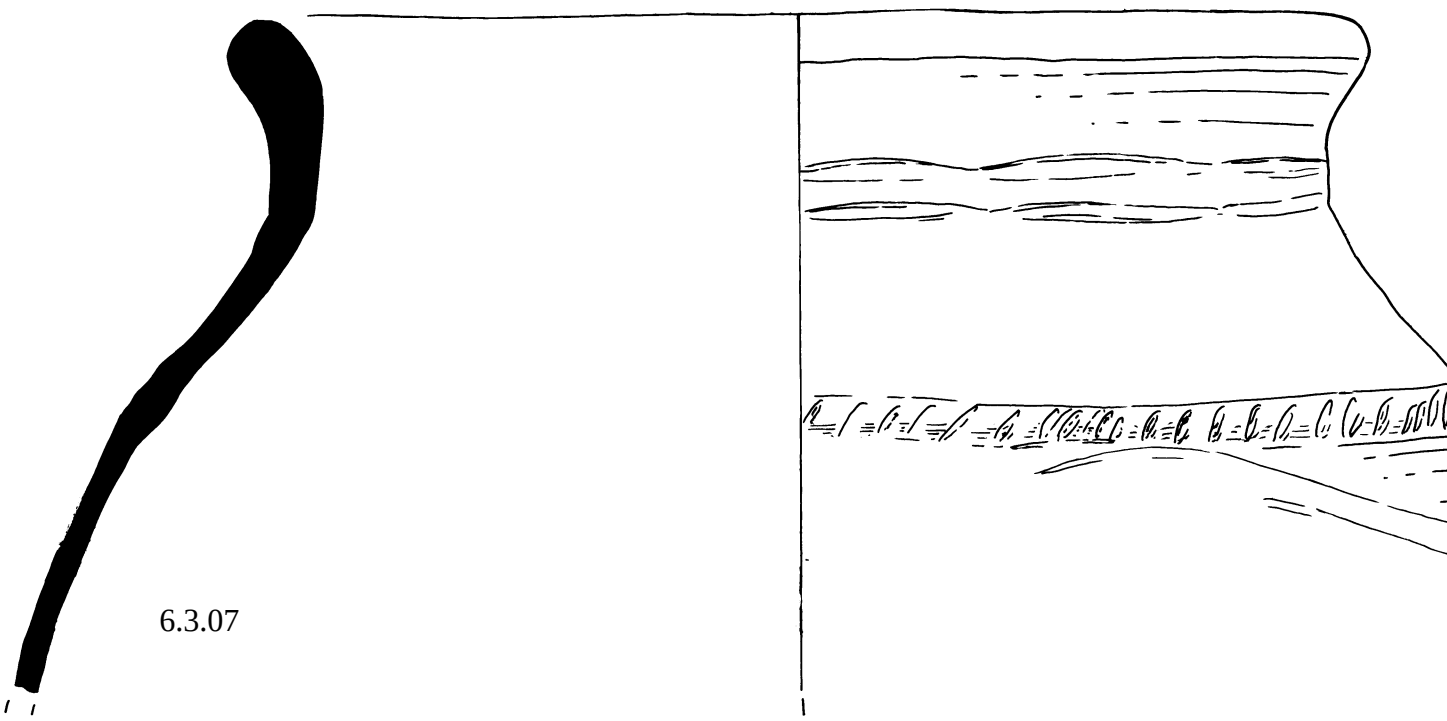

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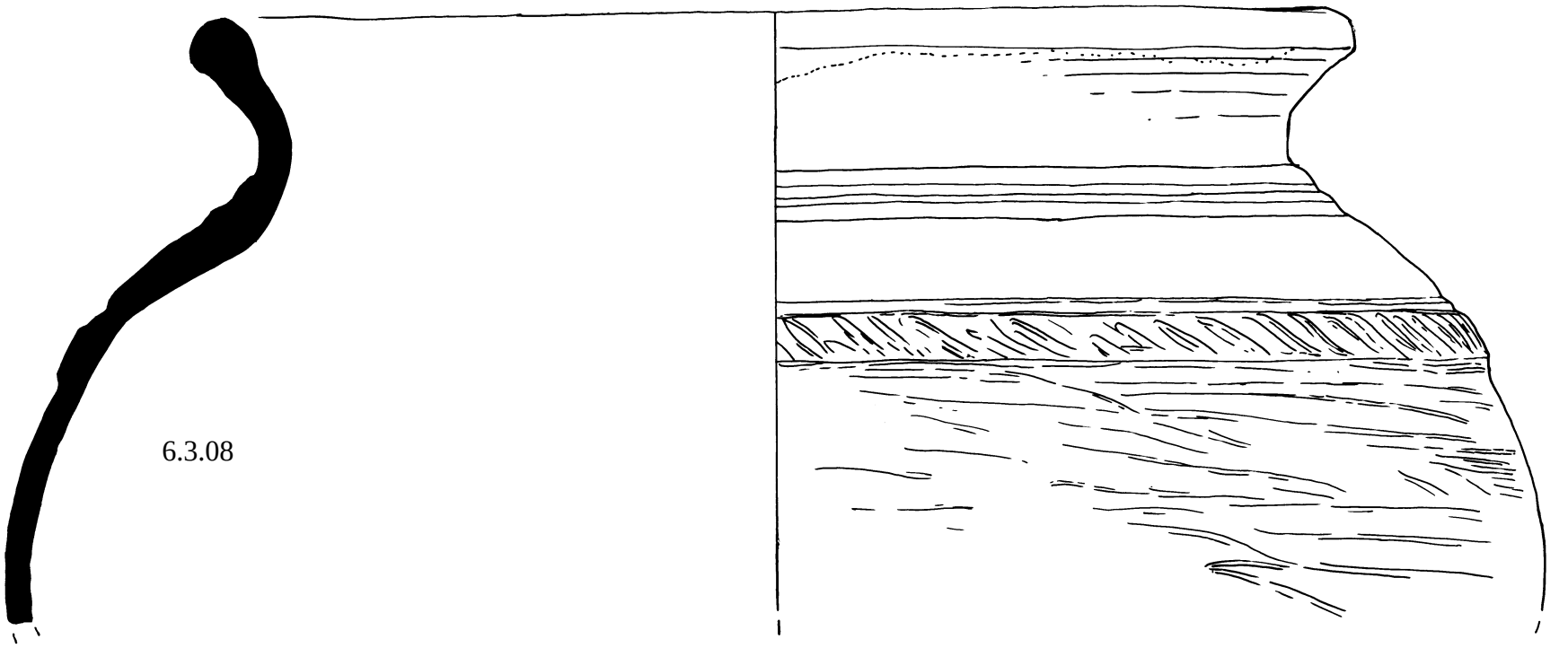

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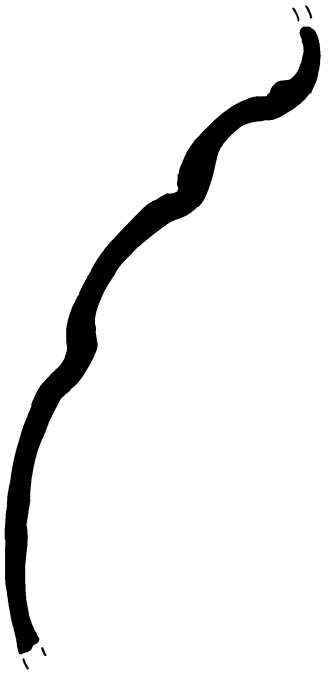

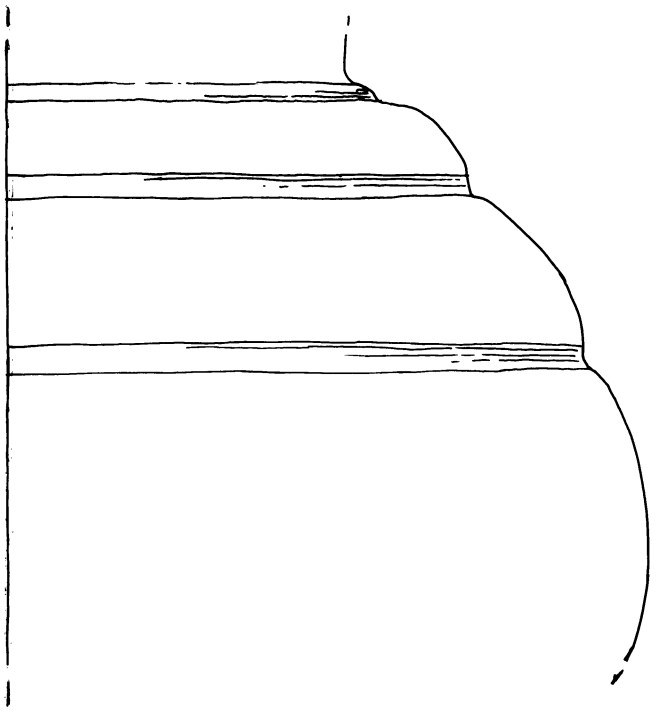

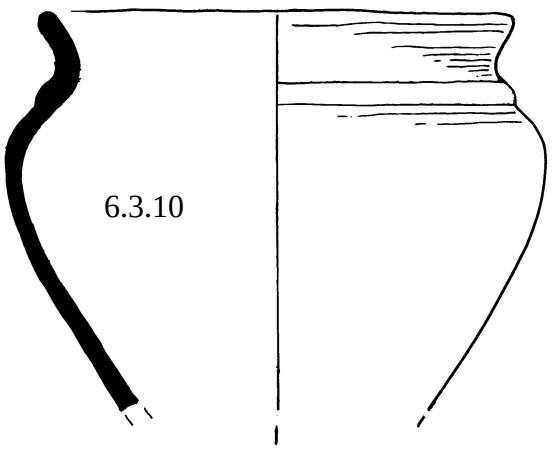

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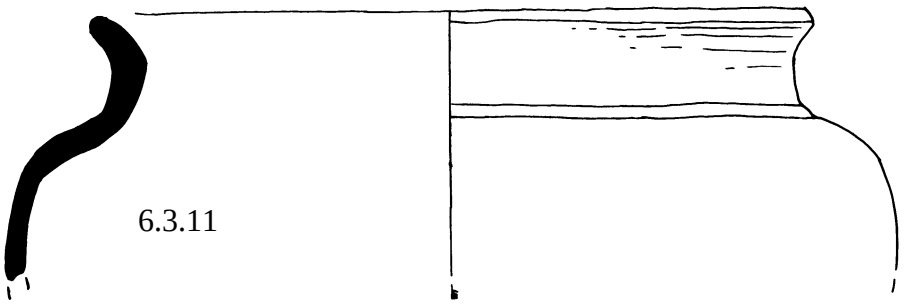

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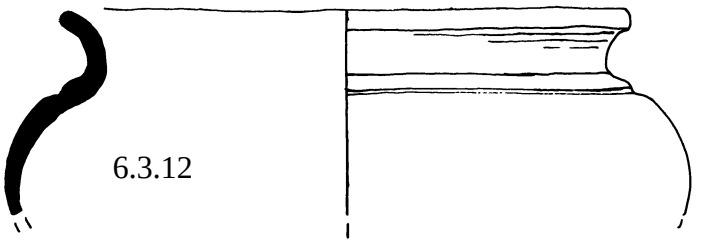

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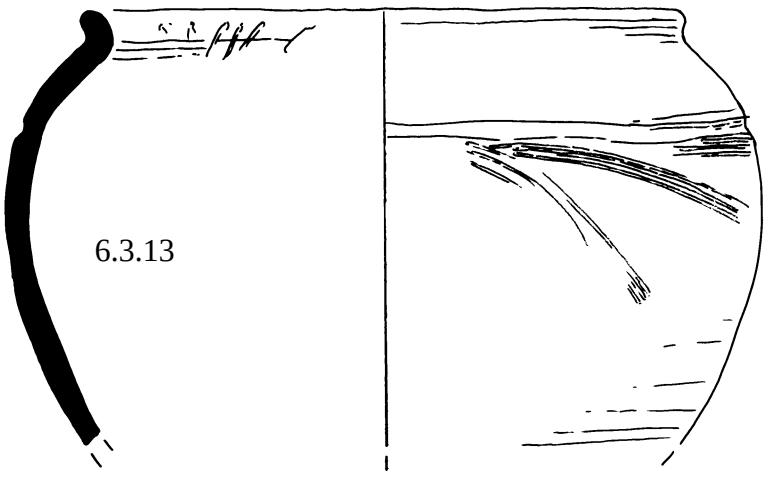

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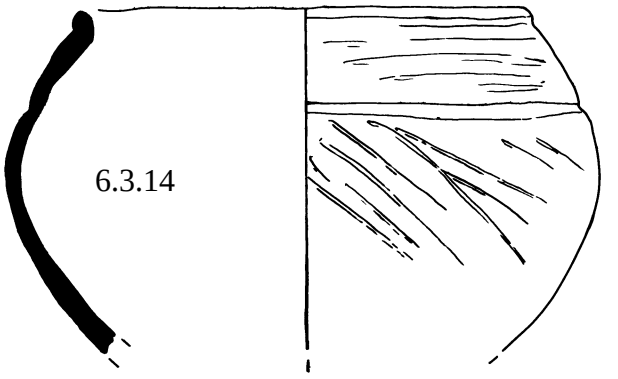

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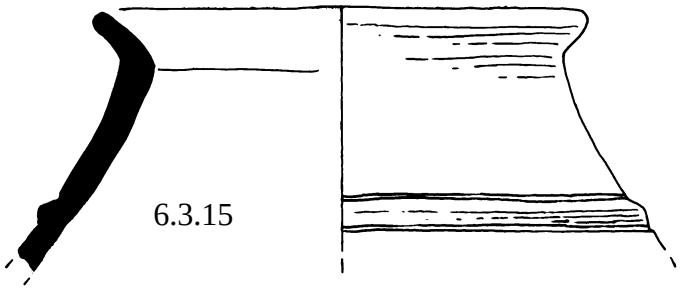

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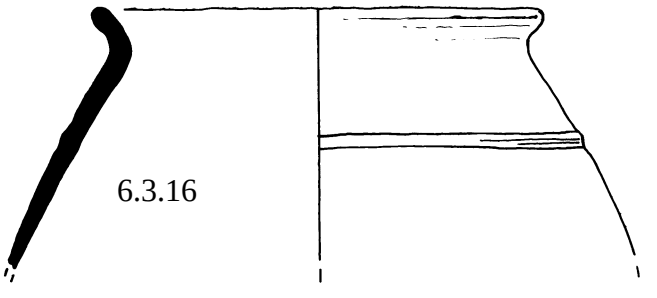

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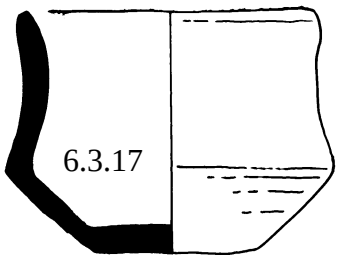

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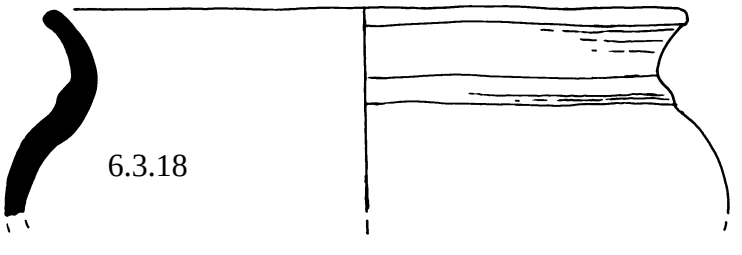

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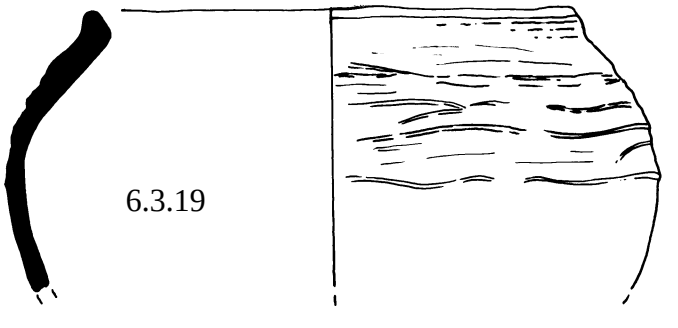

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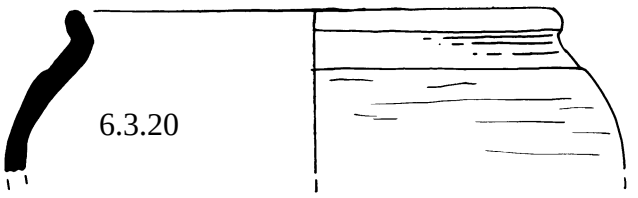
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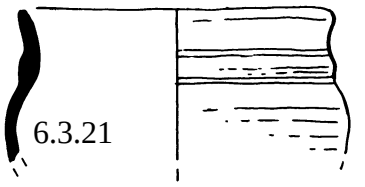
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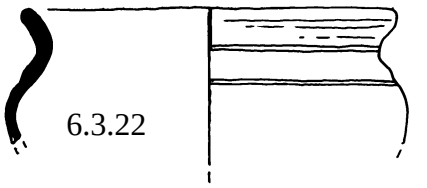
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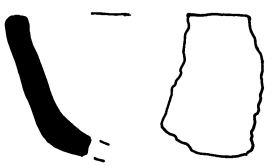
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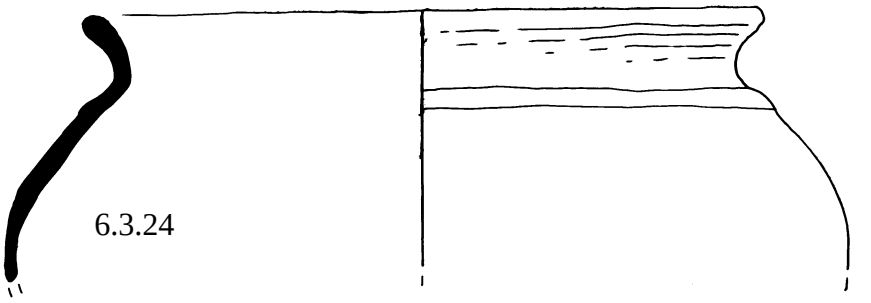
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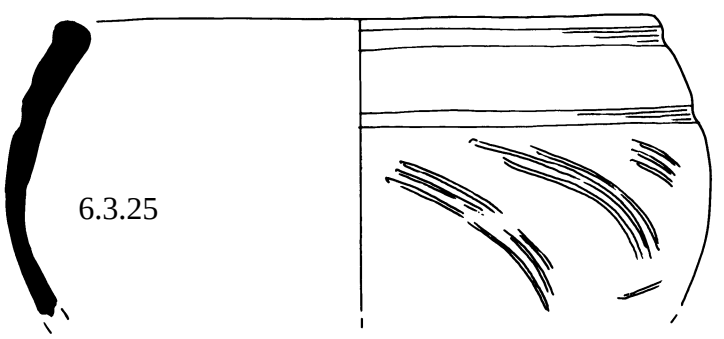
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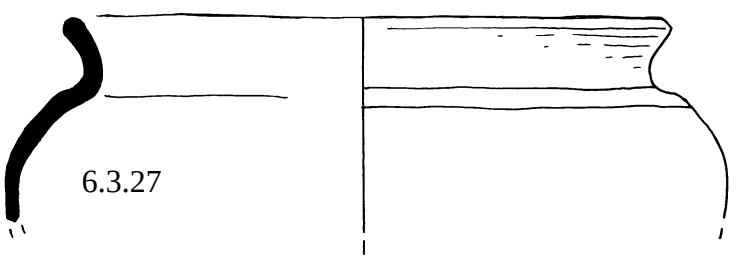
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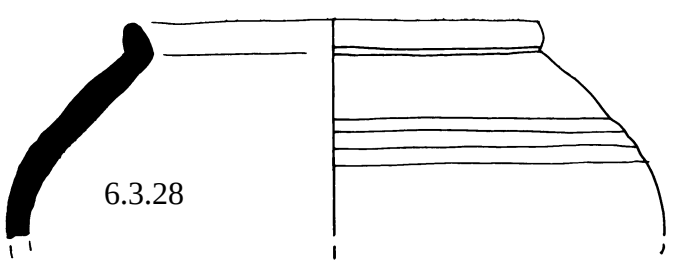
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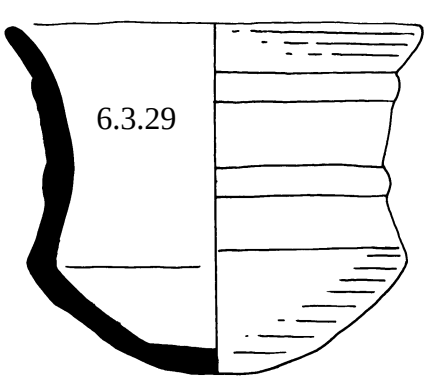
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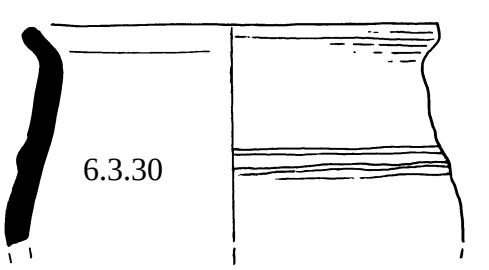
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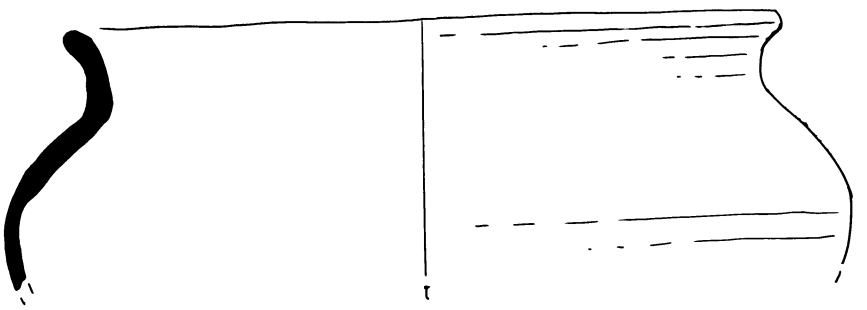

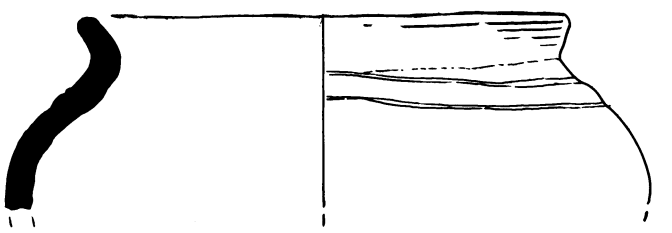

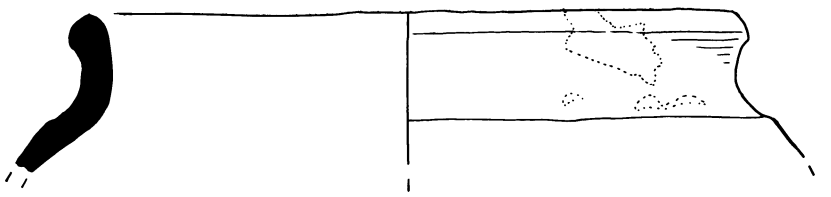

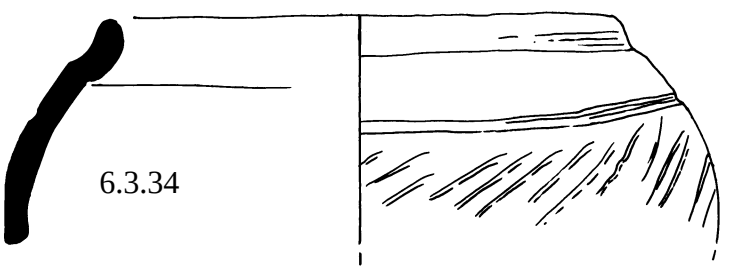
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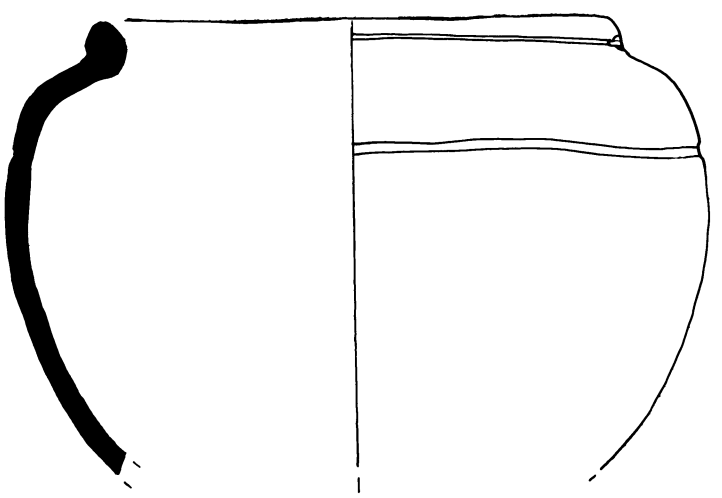

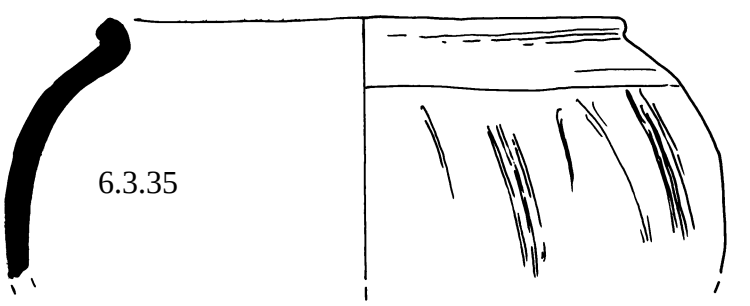
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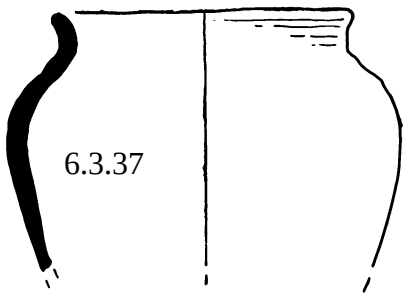
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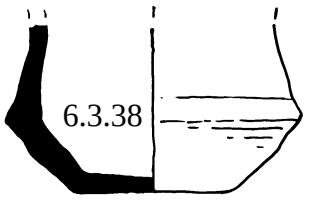
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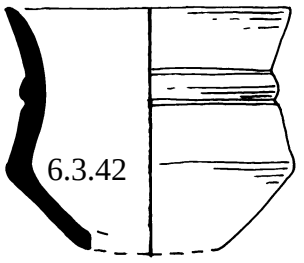
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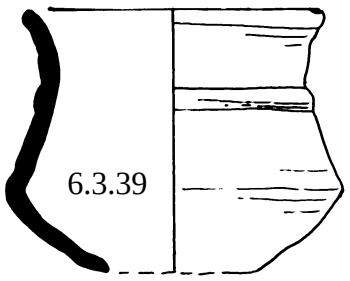
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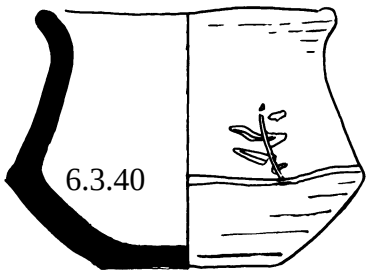
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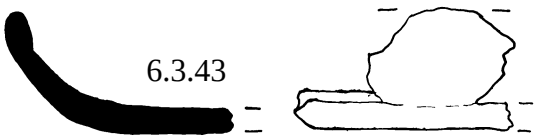
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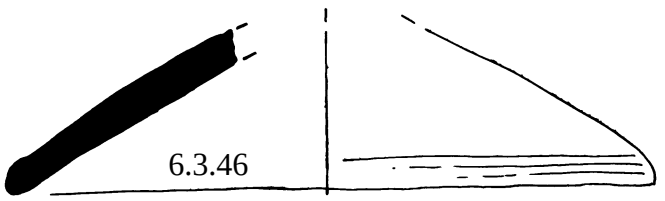
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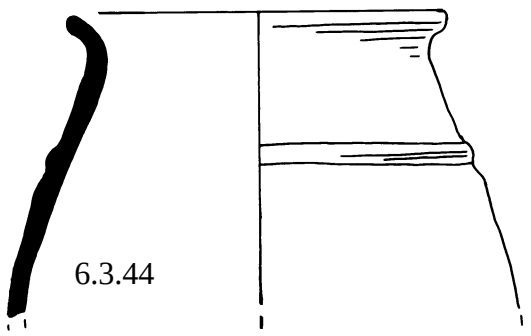
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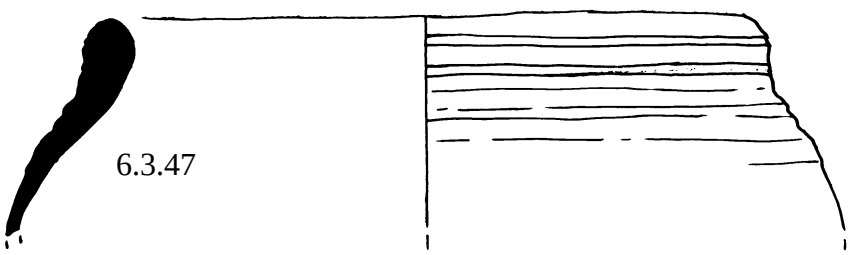
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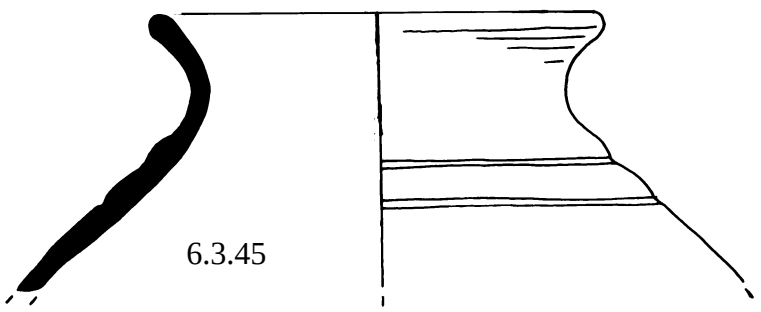
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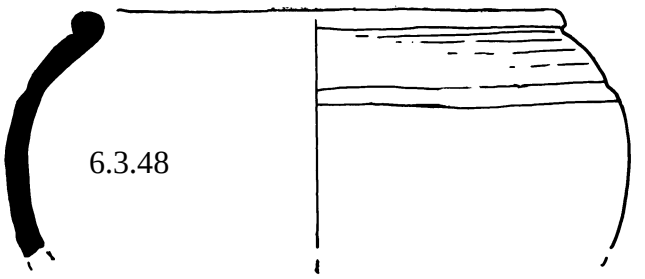
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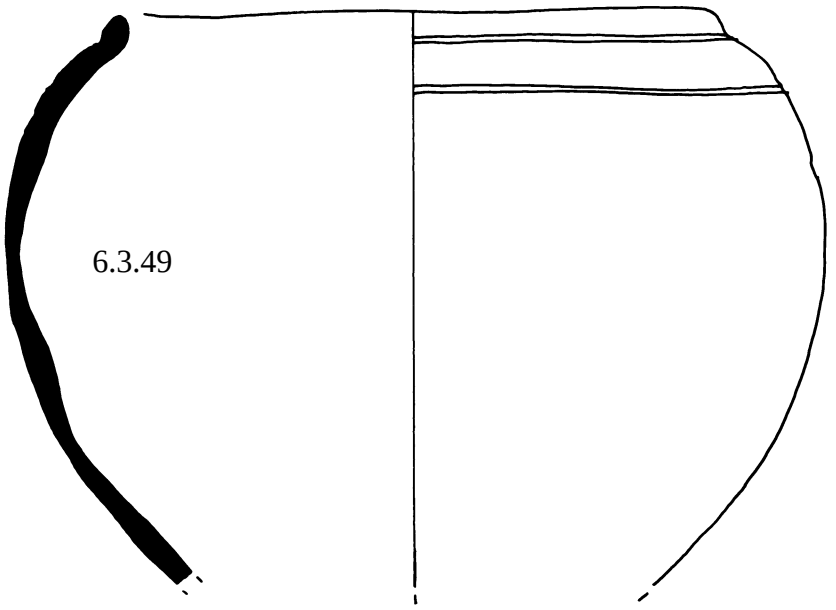
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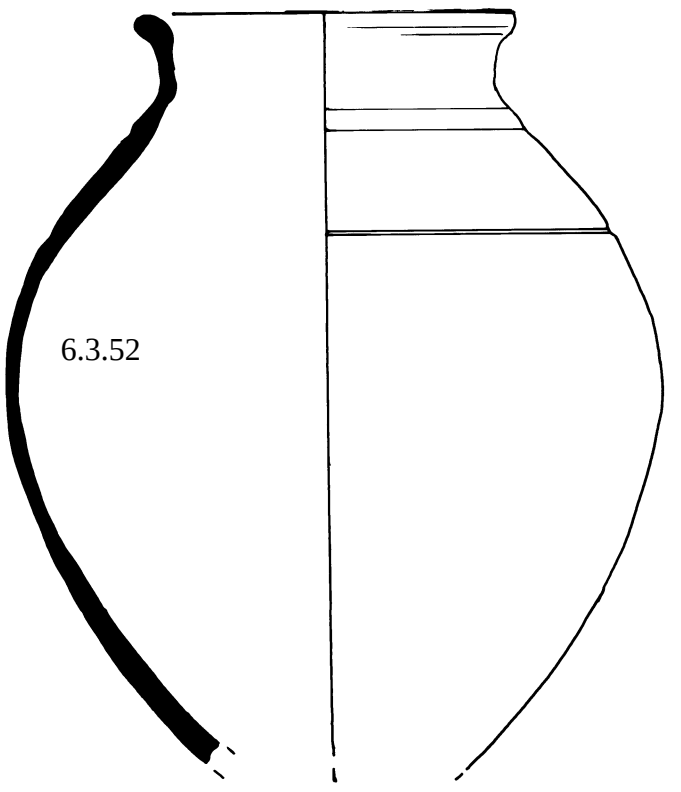
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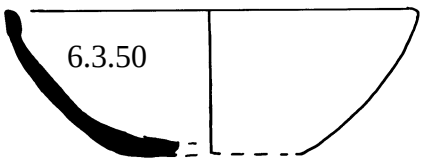
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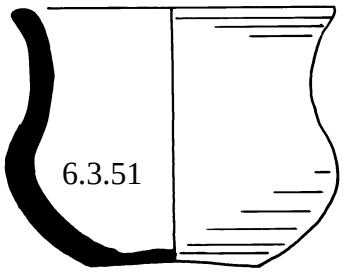
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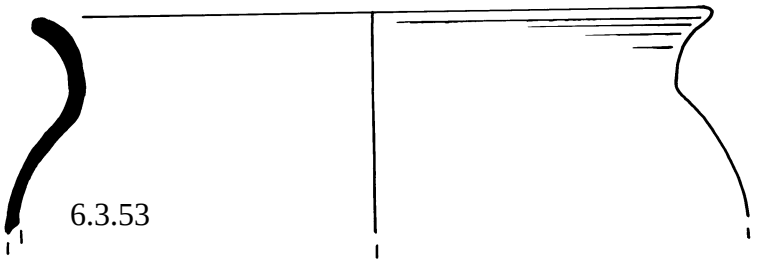

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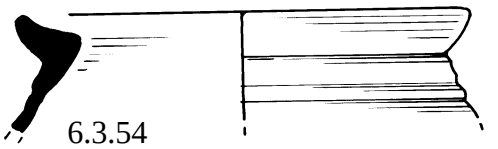

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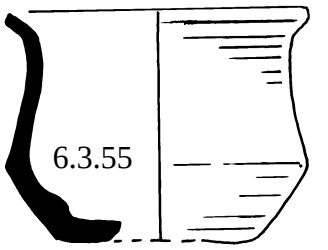

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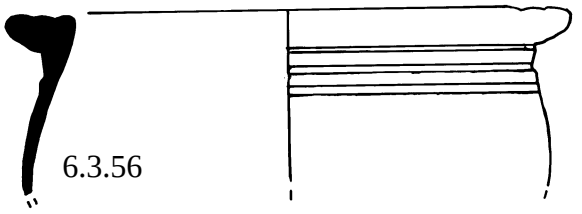

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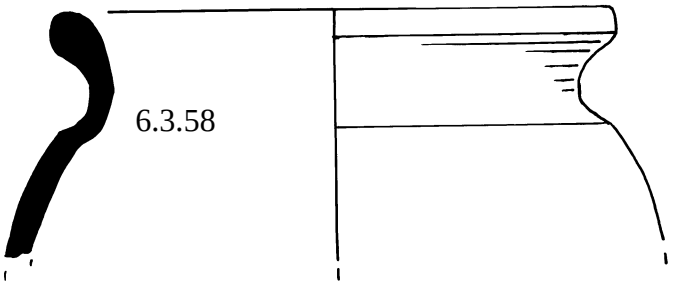

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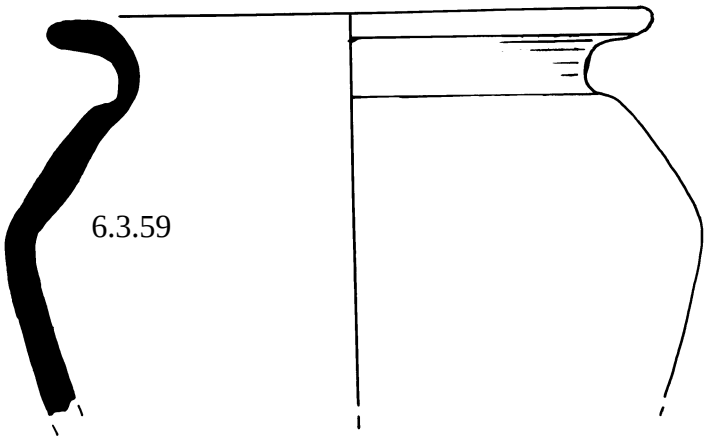

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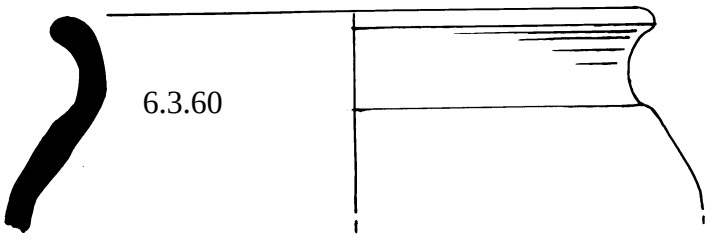

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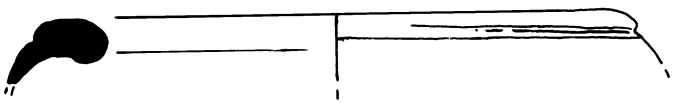

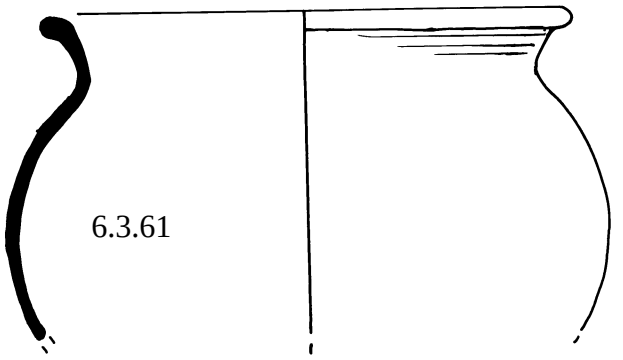

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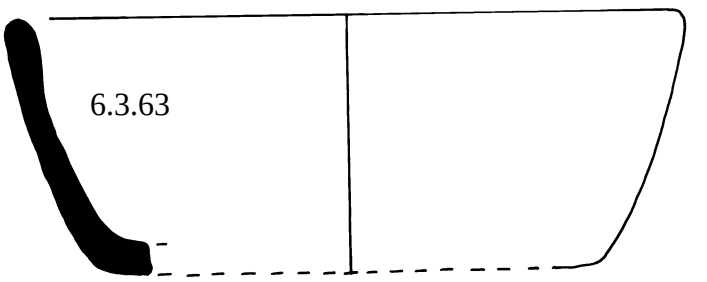

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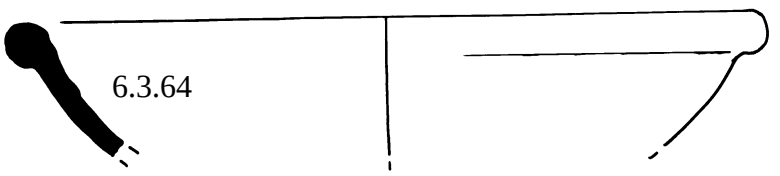

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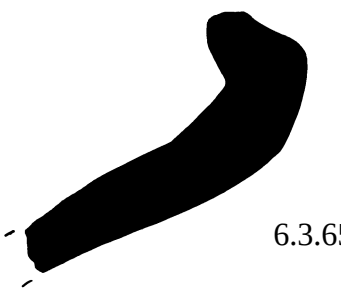

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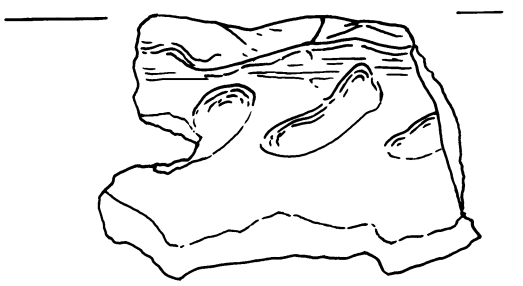

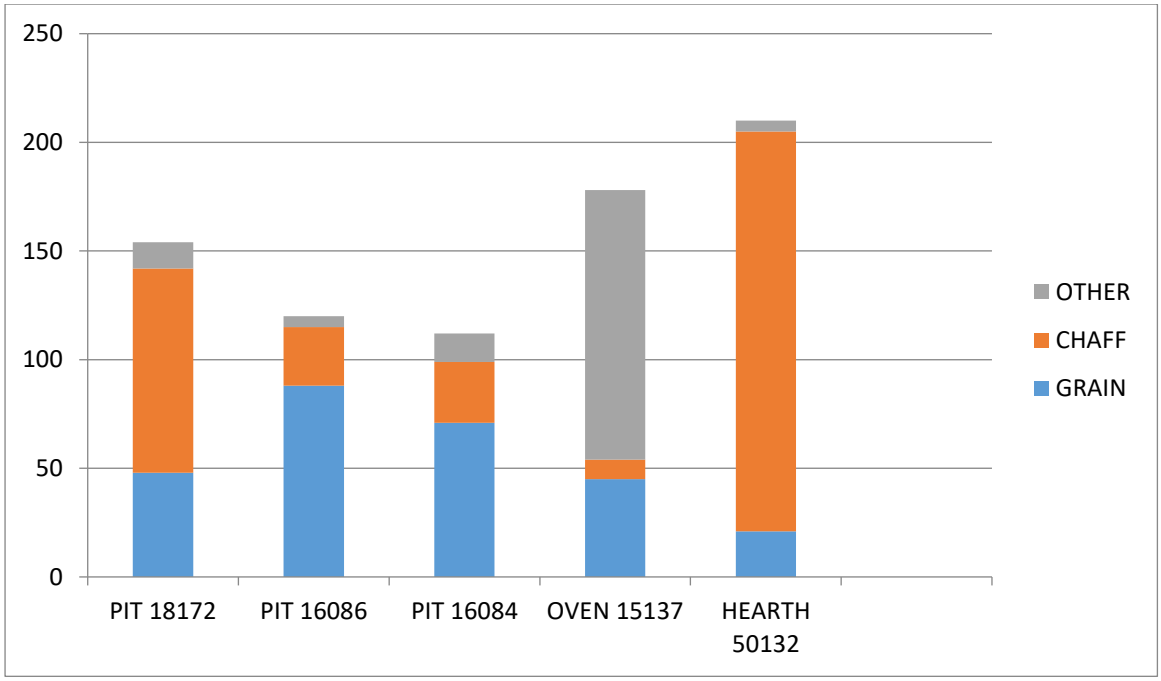

Figure 7.1 Number of grain, chaff and weed seeds in late Iron Age/early Romano-British samples containing more than 100 items

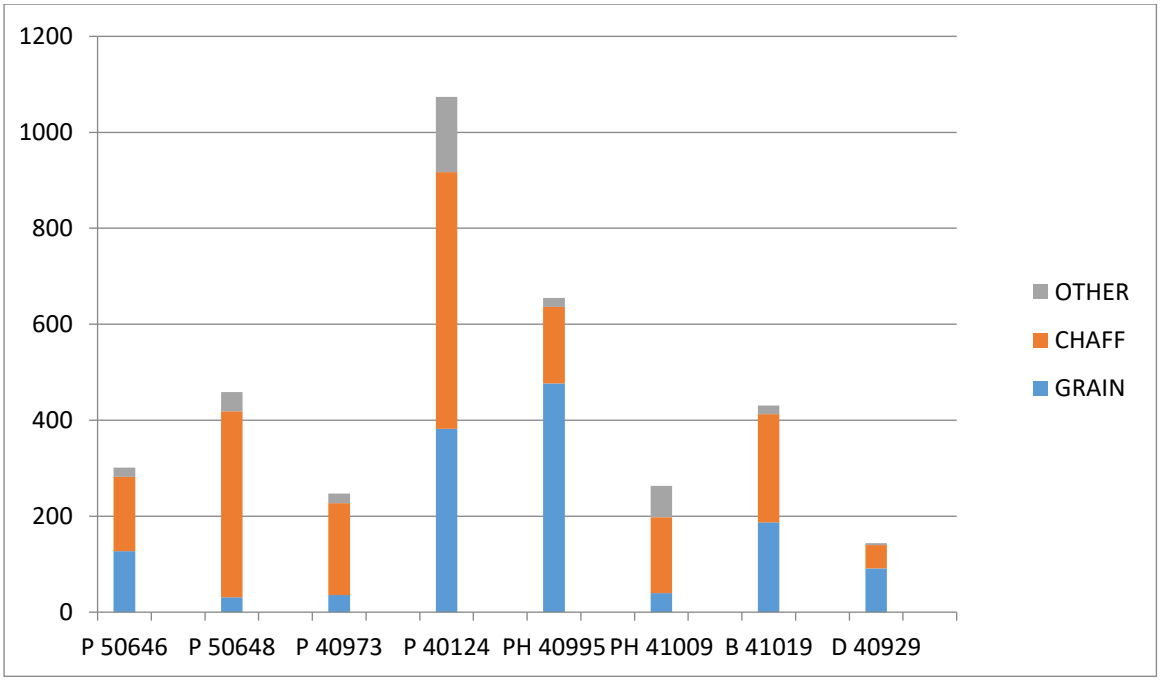

Figure 7.2 Number of grains, chaff fragments and weed seeds in Romano-British samples (containing more than 100 items)

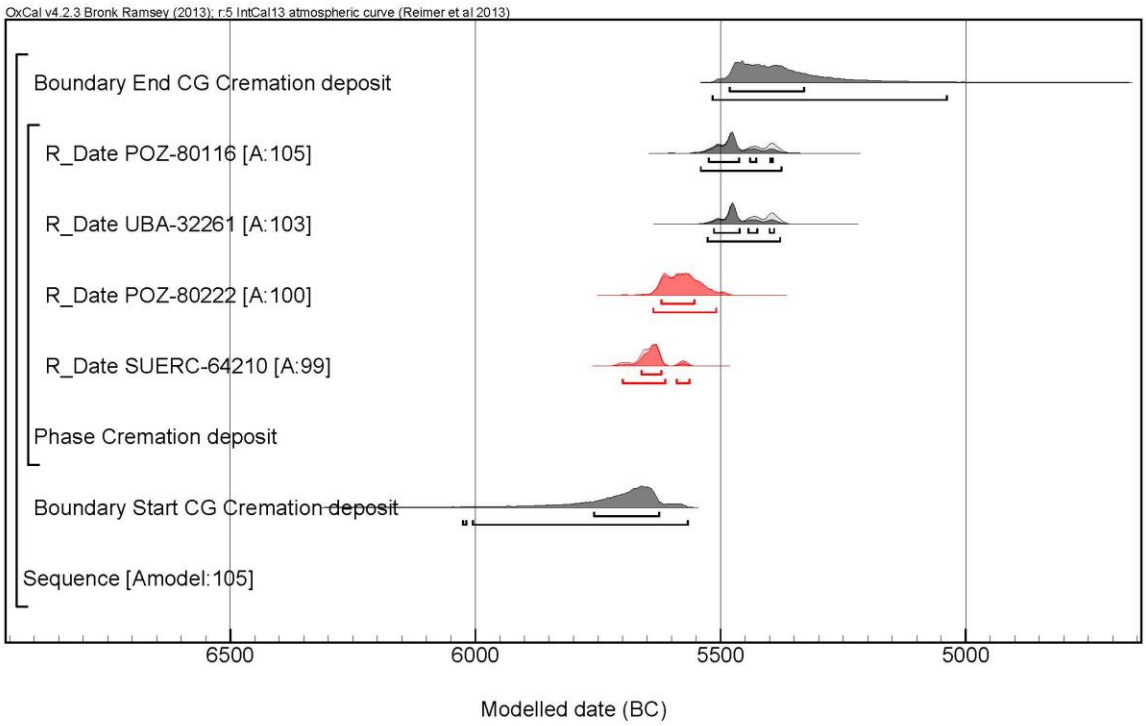

Figure 7.3 Mesolithic cremation deposit 50161

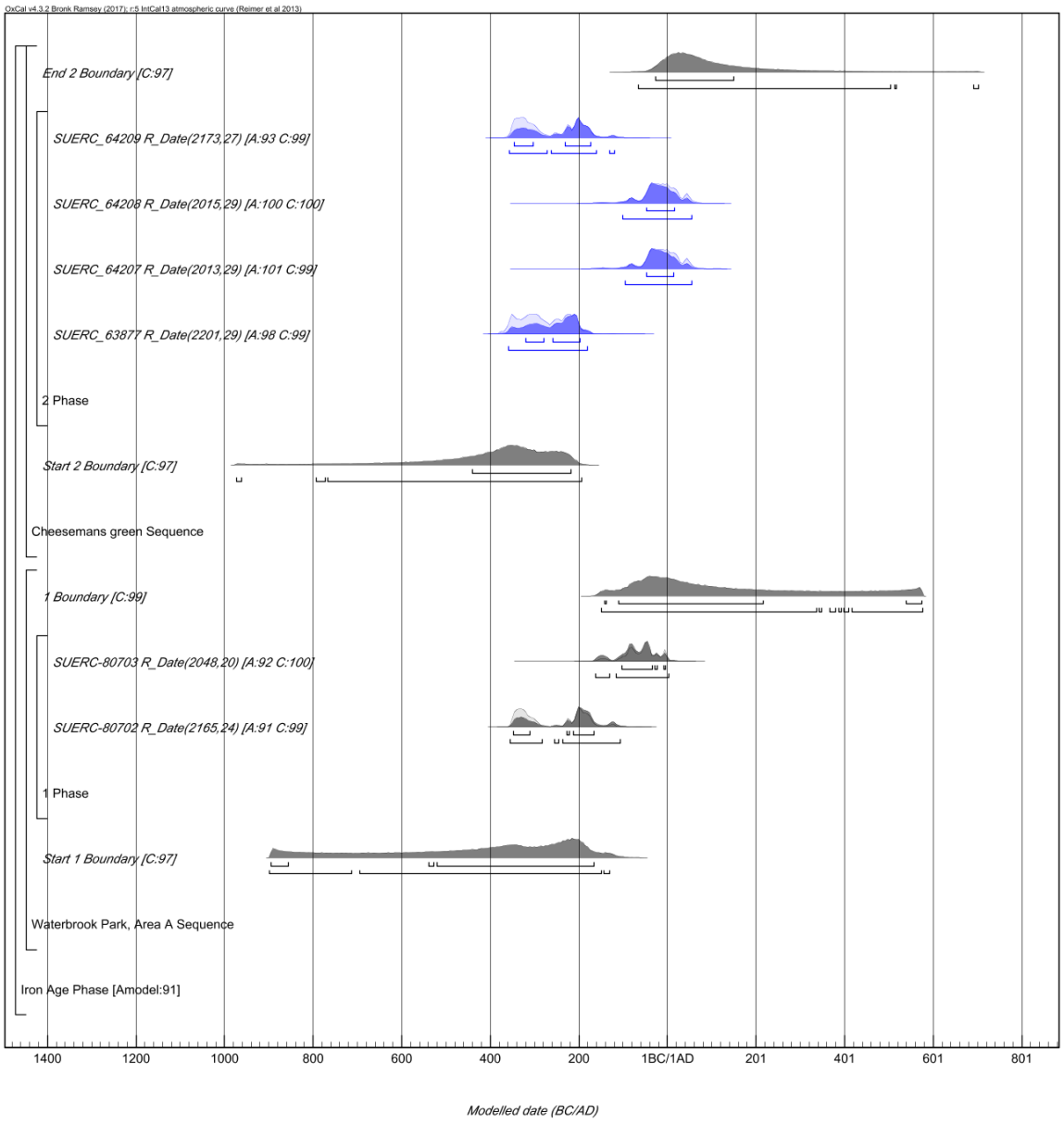

Figure 7.4 Posterior density estimates for Iron Age cremation burials at Cheeseman's green (blue) and Waterbrook Park (grey)

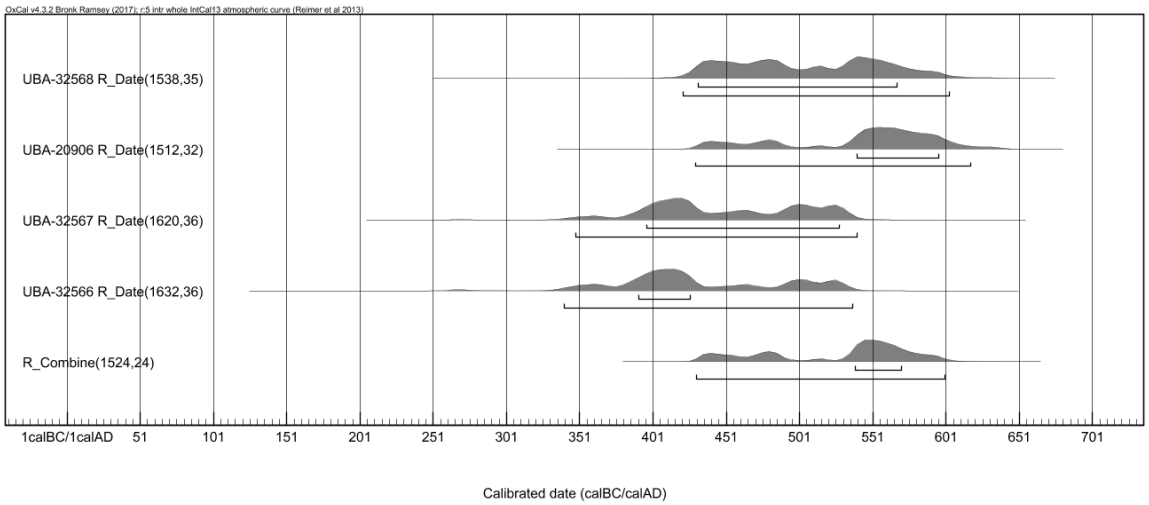

Figure 7.5 Calibrated dates and combined result for the waterlogged timber at Cheeseman's Green.

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