Return to the Three Kings, Haddenham: further excavation of the early Anglo-Saxon cemetery discovered in 1989

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The excavation at the Three Kings, Haddenham, revealed evidence of early Anglo-Saxon activity, most significantly a continuation of the cemetery uncovered by previous excavations in 1989–1990 and reported on in PCAS 81 *(Robinson and Duhig 1992). The current excavation uncovered eight graves containing nine individual burials, six of the burials having associated grave goods which date them to the sixth century AD. The grave goods include a spearhead and shield boss and fittings, associated with a male burial, and dress accessories, including beads and brooches, associated with a female burial. Many of the accompanying grave goods are typical of the period, but some are more unusual, including a horse bridle which had been modified as a brooch and shield appliqués in the form of fish. In addition to the graves, four charnel pits were identified, containing disarticulated bones of numerous individuals, indicative that the cemetery was larger at one time. Some of the burials had been disturbed by broadly contemporary and later pitting, suggesting an adjacent settlement occupied from the early Saxon to the medieval period.*

Introduction

The archaeological excavation was undertaken by Pre-Construct Archaeology Ltd in advance of construction of a new house on land to the rear of the Three Kings Public House, Haddenham (Figs. 1, 2; Site Code CTKH14). The archaeological work was commissioned by Caldecotte Consultants on behalf of K&K Mills and took place between the 3rd and 13th February 2014. Excavation of an adjoining area of land to the north in December 1989 and January 1990 found part of an early Anglo-Saxon cemetery, with burials dated to the first half of the sixth century AD. The excavation reported on here uncovered nine additional inhumations, of similar date, as well as evidence of contemporary settlement close by. This article focuses on the significant results of the fieldwork and analysis; full descriptions of the background to the project, all the archaeological features investigated and complete specialist reports on the finds and environmental remains can be found in the archive report (House 2015), available at Cambridgeshire Historic Environment Record (CHER) or online via the Archaeology Data Service website (http://archaeologydataservice.ac.uk/archives/view/greylit/).

Location and Topography

Haddenham village lies on the south-western edge of a geological outcrop or ridge which forms the Isle of Ely, Ely itself lying 7 miles to the north-east. The outcrop is generally comprised of Kimmeridge Clay, capped by Lower Greensand and Gault; the British Geological Survey (2017) describes the bedrock geology of the site as Woburn Sands Formation, a sandstone sedimentary bedrock formed approximately 100 to 125 million years ago in shallow seas with sediments deposited as mud, silt, sand and gravel.

The site is located on land adjacent to Hop Row and situated to the rear of the Three Kings Public House, lying in the historic core of the village. It is bounded by residential properties to the north and east; the western boundary of the site is formed by the continuation of the Three Kings car park. The current site comprised an area of approximately 200m². The level of the ground within the excavation area sloped from 39m OD at the north-west corner to 38m OD at the south-east.

Archaeological Background

Prehistoric and Roman

Excavations in Haddenham parish have demonstrated the presence of settlement in the area from the Neolithic to the Romano-British period (Evans and Hodder 2006a, 2006b). This settlement appears concentrated on the lower ground surrounding the fen, although excavations at West End, Haddenham, in 2000 and 2003, revealed Romano-British occupation close to the centre of the later village (CHER CB15624).

Anglo-Saxon

Anglo-Saxon settlement is reflected in the name of the

Figure 1. *Site location.*

village, the earliest recorded form of which is *Haeda Ham* (Haeda's homestead or "Haeda's hemmed-in land") from AD 970 (KEPN; Reaney 1943, 231–2). An Anglo-Saxon presence is also indicated by St Ovin's stone, discovered in 1743, a stone cross that was formerly used as a mounting block outside the Three Kings Inn. The base of the cross bears an in-scription which reads ":LUCEM|:TUAM:OVINO DA; DEUS;ET;REQUIE AMEN" (O Lord grant your light and peace to Ovin Amen) (Okasha 1971, 75). The tradition that this names St Etheldreda's steward Ovin or Owine has tenuous historical support. According to Bede, Owine was head of Etheldreda's household when she was in Northumbria, but then left her ser-
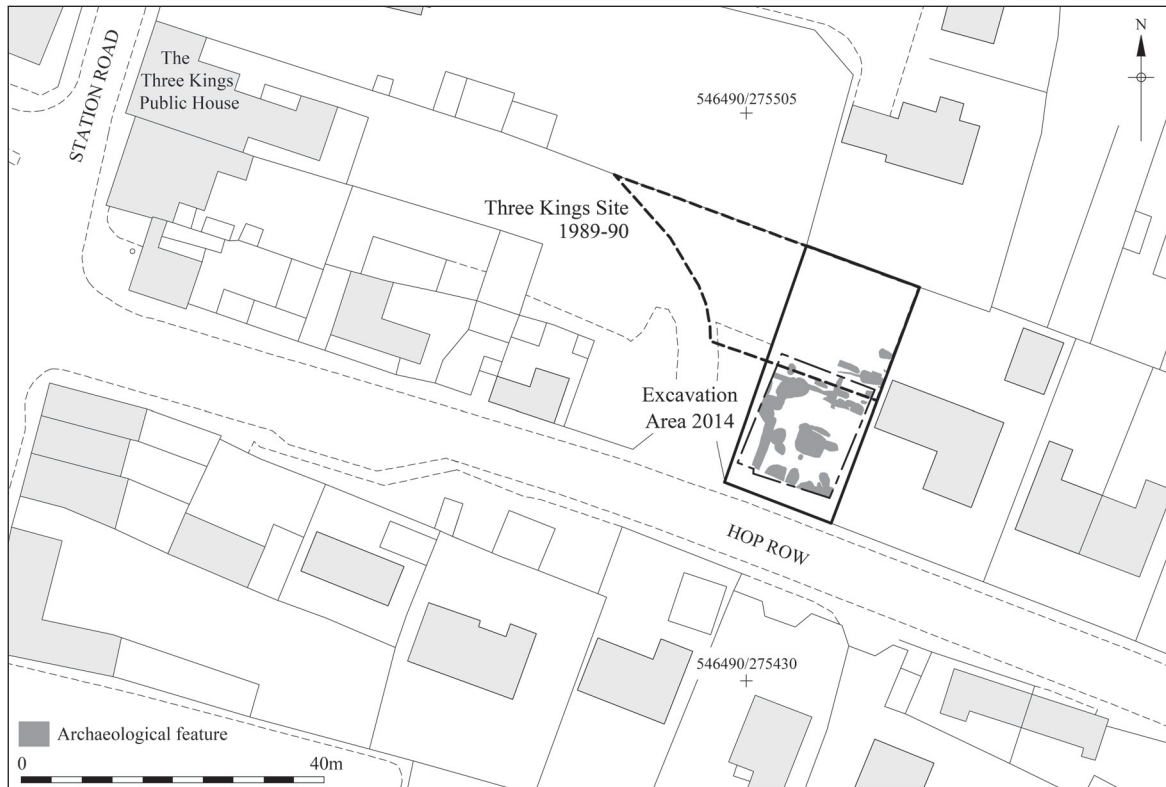
Figure 2. *Detailed site location.*

vice and joined the monastery at Lastingham. There is no reference to him coming to East Anglia (Colgrave and Mynors 1969, 339). According to Okasha, the script suggests a later date than the seventh century. The cross now stands at the Prior's Door at Ely Cathedral (CHER 05721). It seems unlikely that it had travelled far from its original position and probably does indicate Christian activity in Haddenham in the Anglo-Saxon period, although the church of the Holy Trinity has no recorded Anglo-Saxon fabric.

Archaeological investigation in the northern part of the Three Kings site in 1989–90 (HADTK 90) identified an early Anglo-Saxon cemetery dating to the first half of the sixth century (Robinson and Duhig 1992). The remains included a double burial; the male buried with a spear, knife, shield boss and buckle, the female with 27 amber and seven glass and silver beads, a bronze brooch, tweezers and a spindle whorl (CHER 09831). There were also a number of disturbed burials, and redeposited human bone. The present site directly adjoins the south side of the 1989–90 excavation (Fig. 2).

Recent finds recovered by metal-detectorists and recorded on the Portable Antiquities Scheme (PAS) database add to the evidence for Anglo-Saxon activity in the area: in fields to the east of Haddenham an Anglo-Saxon spearhead (PAS: CAM-1A6A98), wrist clasp (PAS: CAM-93B41D) and small-long brooch (PAS: CAM-A26623) have been recorded. These finds may represent accidental losses or disturbed Anglo-Saxon burials.

Excavation at Hinton Hall, Haddenham, revealed the remains of two timber buildings, of which the earlier was of wattle construction. The pottery sequence showed these to be of eleventh-century Saxo-Norman date. Earlier occupation was suggested by two pieces of Ipswich Ware but the high water table prevented excavation of the earlier deposits (CHER 05795A).

Medieval

Domesday Book records Haddenham together with the separate hamlets of Hill Row and Linden End, which are now incorporated into the village. In 1086 Haddenham was held by the Abbot of Ely in three portions: *Lindone* (now Linden End), *Helle* (now Hill Row) and *Haddenham*, the latter rated at three hides held by seven sokemen. In 1109 Haddenham was allotted to the Bishop of Ely, although the manor was generally known as Lindon. This suggests the focus of the settlement at this time was concentrated at Linden End, later supplanted by settlement around the crossroads, the current core of Haddenham (Pugh 2002, 140–9). The earliest mention of Hinton Hall, to the north-east of the site, is from 1221, when Simon de Insula held three carucates in Hinton (CHER 05795). Excavations along Haddenham High Street have revealed medieval boundary ditches, pits and a possible trackway (CHER CB15289 and CHER MCB17365).

Post-Medieval

In 1562 Haddenham was the most populous village in the county, with 188 householders. This prosperity has been linked to the position of Haddenham as the principal land entrance to the Isle of Ely, and it declined in size and importance during the nineteenth century with the development of the alternative route via Twenty Pence bridge (Pugh 2002). The Three Kings site was situated at the core of the post-medieval village and the pub building itself appears to be seventeenth- or eighteenth-century in origin. The north and east arms of the crossroads form part of a cross-country road from March and beyond.

Excavations in the heart of the village have revealed post-medieval drains and rubbish pits, mainly dating to the eighteenth century and associated with upstanding buildings in the village (CHER CB15289).

The Excavation Results

Introduction

The excavation identified Anglo-Saxon, medieval and post-medieval archaeological remains. The following description focuses on the most significant features: the early Anglo-Saxon (*c.* AD 450–650) burials, charnel pits and rubbish pits. Further information about the later Saxon, medieval and post-medieval features can be found in the archive report. Features are described from west to east (Fig. 3). One exception to this order is the cluster of early Anglo-Saxon pits located in the north-west of the excavation area, which are discussed as a group.

The topsoil deposits (100) consisted of dark greyish-brown clayey silt. The subsoil (101) was a mid- orange/brown sandy silt. The natural geology of the site was yellowish-brown sand.
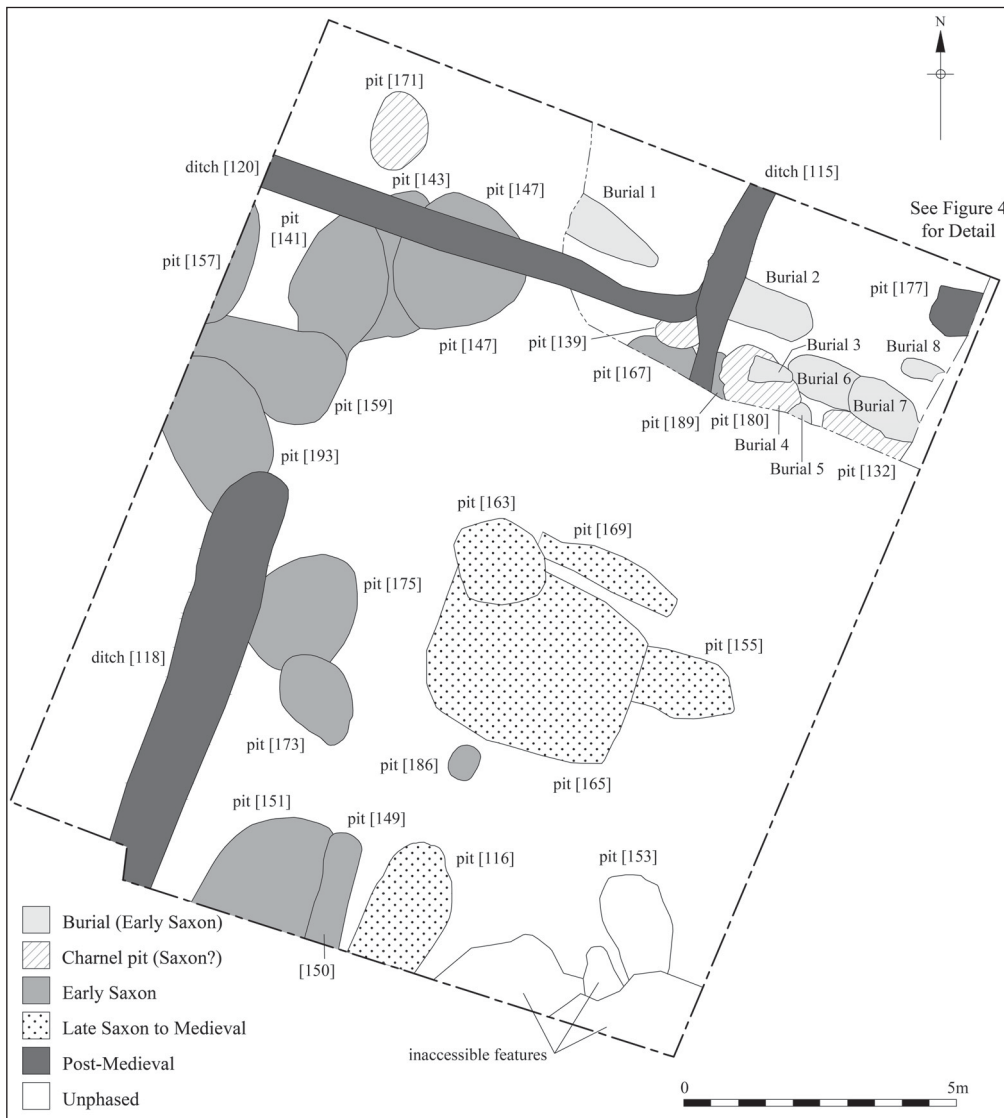

Figure 3. *Phase plan.*

Prior to the excavation, the site appeared to have been subject to widespread truncation, particularly across the southern and western parts of the site, effectively creating a higher stepped 'platform' of less disturbed ground in the north-east corner. The reason for this truncation is unclear, although it certainly postdates the burials and appears to have removed any graves beyond the higher ground in the north-east corner of the excavation area (Fig. 4). It also appears likely to postdate the medieval pitting activity on the site.

Early Anglo-Saxon

The Cemetery (Fig. 4)
The most significant period of activity relates to an early Anglo-Saxon cemetery, part of the same cemetery identified during previous archaeological works (Robinson and Duhig 1992). A total of eight graves were uncovered by the 2014 excavation, containing nine inhumations (Fig. 4). Human skeletal remains were also present in four charnel pits, as well as in later features and in the overburden soil deposits; it is likely that this material represents human bone from other disturbed and truncated graves. All the graves were located in the north-east corner of the excavation area and were orientated east-south-east to west-north-west. All the burials contained a similar single fill: a homogeneous light greyish-brown silty sand.

Skeletal analysis can be found in the osteological report. The associated grave goods suggest a sixth-century date for the cemetery. The significance of the items found is dealt with in more detail in the discussion of the grave goods.

Burial Inventory (incorporating information from specialist reports)
Burial 1 (Figs. 5, 6, 7, 8, 9, Table 1)
Young adult female (SK184), W–E orientation.
The west end of the burial had been truncated, removing the upper part of the skeleton, including the skull and upper vertebrae. The grave cut [183] measured 1.85m long (truncated), 0.81m wide and 0.08m deep. Grave goods accompanying the burial include items of dress and beads (Table 1, Figs. 7, 8 and 9). The beads (SF 49–52, 89–157, 162–164 and 207) were located around the neck and chest area; it was not clear during excavation whether the beads formed part of a necklace or would have been threaded into the individual's hair. Textile was noted on three items: the girdle-hanger (SF. 33), strap-mount (SF. 27) and brooch (SF. 25), the remains either of clothing or cloths covering the body. Impressions on the back of the girdle-hanger (Plate 3) suggest that the grave was lined with straw/grass or a similar organic material, also seen in Burial 7.

Associated finds:
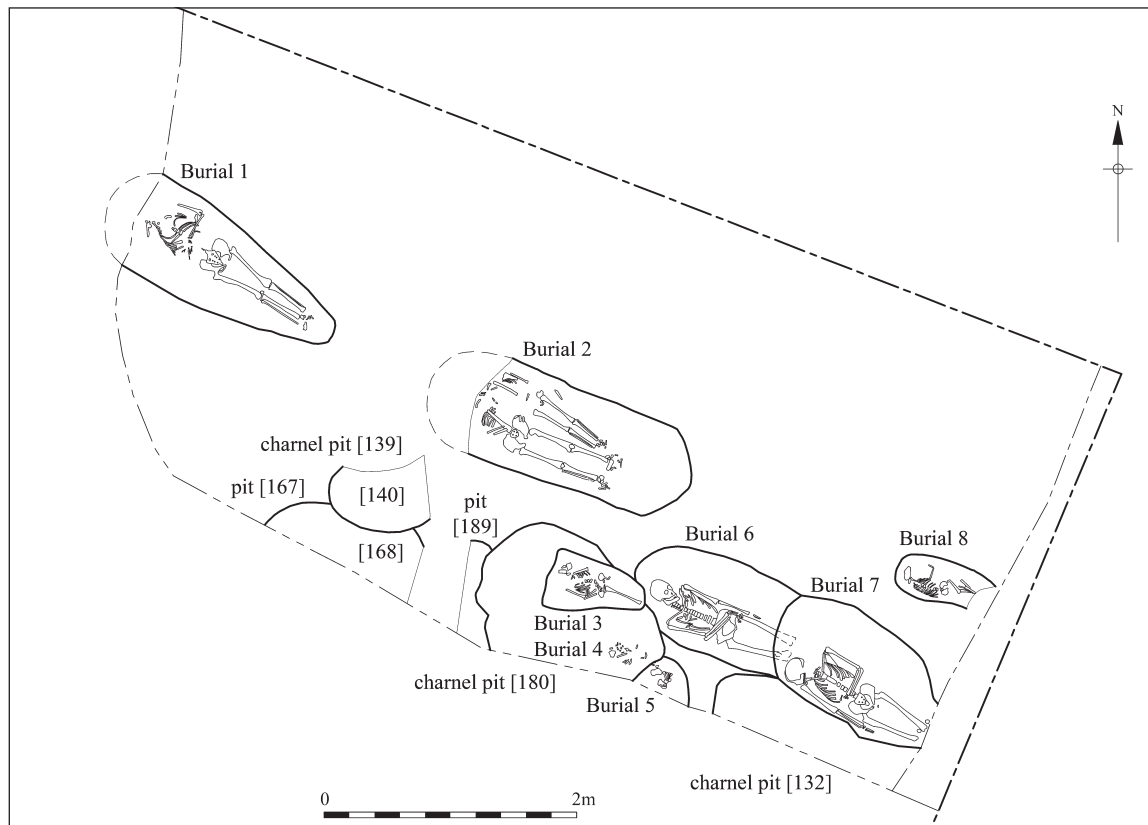SF. 25 Copper-alloy strap-pendant (Fig. 7, Plate 1)

Figure 4. *Detail of cemetery.*

Table 1. Burial 1 Small Finds.

Small Find No.	Material	Description	Approximate Location
SF. 25	Fe/Cu/Ag/Au/Enamel	Bridle fitting converted to brooch	Upper chest
SF. 26	Fe	Buckle	Upper chest
SF. 27	Cu and Textile	Strap-mount	Upper chest
SF. 28	Cu	Wrist clasp	Right forearm
SF. 29	Fe	Unknown	Right forearm
SF. 30	Cu	Mount/strap-end	Right side
SF. 31	Bone/Antler	Ring	Left waist
SF. 32	Cu and ?Leather	Buckle	Left waist
SF. 33	Fe/Cu	Tool-set and girdle-hanger	Left waist
SF. 34	Cu	Wrist clasp	Central chest
SF. 49–52	Glass and Amber	Beads	Upper chest
SF. 88	Cu	Strap mount	Left waist
SF. 89–157	Glass and Amber	Beads	Upper chest
SF. 158	Fe	Pin fragments	Upper chest
SF. 159–160	Cu	Sheet fragments	Upper chest
SF. 161	Fe	Pin	Upper chest
SF. 162	Bone	Bead	Upper chest
SF. 163	Cu	Beads	Upper chest
SF. 164	Chalk/Ivory/Bone	Bead	Upper chest
SF. 165	Cu	Loop	Left waist
SF. 166	Cu/Enamel	Mount	Left waist
SF. 207	Glass	Bead	Upper chest

L: 104mm; W: 25mm; Wt: 27.99g

A broadly rectangular, asymmetric copper-alloy strap-pendant, from a horse bridle, converted into a brooch. The front has a central section of gilded Style I decoration. This consists of a circular field with a small central stud with red enamel inlay surrounded by chip-carved decoration, showing either one coiled animal or two opposed heads and bodies. Either side of this circular field are two opposing Style I facemasks, whose eyes are indicated by pairs of small studs filled with red enamel. These face motifs can either be read as wearing helmets with nose- and cheek-guards or as having elaborate hair or eyebrows with flicked-out ends. Thin silver appliques adhere to each end of the strap-pendant, one of which is rectangular and the other notched with two side projections. The pin fittings are now separate from the strap-pendant. There remains part of a copper-alloy catch-plate, a copper-alloy plate still threaded with an iron spring, and a short length of iron pin. The copper-alloy plates both have rivet holes that correspond to rivet holes on the strap-pendant below one of the eyes on each of the face masks. There are remains of mineralised textile, a closely woven plain weave, on many areas of the brooch, with an especially well-preserved sample on the front.

 Also found with the brooch is a copper-alloy roundel, the front of which has four triangular sunken fields filled with ?enamel to create a cruciform motif. This appears to be one of a pair: see SF. 166.

SF. 26 Iron buckle (Fig. 7)
L: 29mm; Wt: 3.25g
Half of an iron oval-shaped buckle frame with tongue looped around (Marzinzik Type I.11a-i/Hines and Bayliss Type BU8).

SF. 27 Copper-alloy strap-mount (Fig. 7)
L: 74mm (combined three joining pieces)
Rectangular copper-alloy strap-mount, incomplete and in three joining parts with a copper-alloy washer and frag-

ment of textile. Very similar in form and decoration to SF. 88. The mount is a composite object, comprising an iron substrate (as remains in one fragment) with thin copper-alloy appliques adhered to the top surface. The copper-alloy applique is decorated with crescent-shaped stamps along top and bottom edge. Additionally, the middle fragment has parallel rows of penannular triangular and crescent-shaped stamps along the centre. The decorated surface appears to have been treated, perhaps tinned as on SF. 88. A single extant rivet and three other rivet holes suggest that it was attached to something organic; associated fragments of leather hint that it was perhaps riveted to a strap. There is also a small, square copper-alloy plate with rounded corners and central rivet hole, perhaps a washer for one of the rivets. There is mineralized textile on the front of one of the fragments, and a separate piece of mineralized folded textile.

SF. 28 Copper-alloy wrist clasp (Fig. 8)
Half with rectangular hole: L: 37mm; W: 22mm
Half with catch: L: 35mm; W: 12mm
A complete copper-alloy wrist clasp set of Hines Type B7. The two halves are both rectangular with a hole for attachment at the top two corners. One half has a rectangular-shaped hole to receive the rectangular-shaped catch of the other. Both parts are decorated with two parallel lines of repoussé dots.

SF. 30 Copper-alloy strip (Fig. 8)
L: 31mm
A tapering strip of tinned copper-alloy, that is curved or bent towards the narrower end. At the wide end is a single rivet hole. Probably a strap-mount or strap-end.

SF. 31 Antler ring (Fig. 8)
D: 52mm
Pierced antler ring with iron staining around the pierced hole, perhaps indicating that it was attached to an iron fitting.
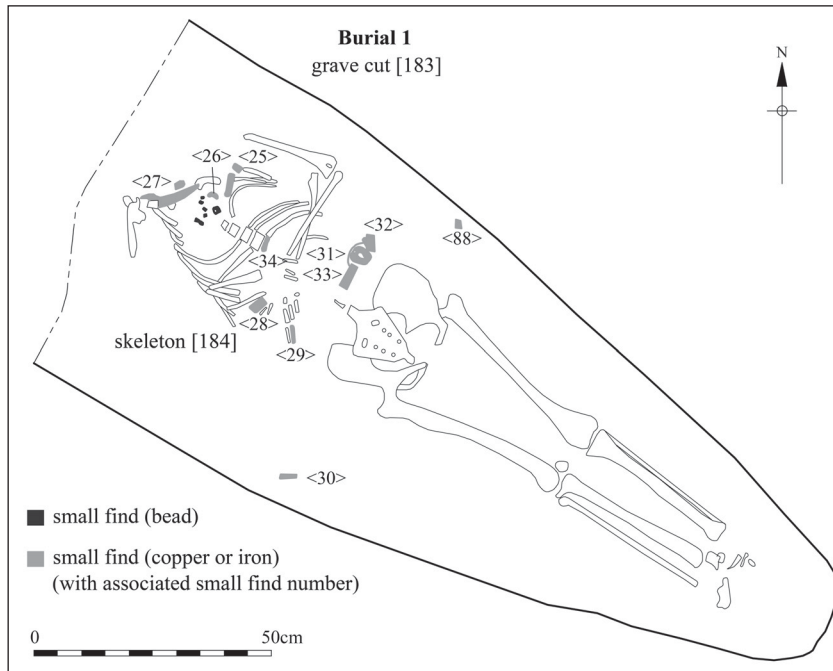
Figure 5. Detail of Burial 1.

SF. 32 Copper-alloy buckle (Fig. 8)
L: 40mm; W: 25.5mm
Copper-alloy buckle of Marzinzik Type II.17. It consists of four rectangular plates of copper-alloy sheet riveted together: a buckle plate; buckle loop; and two plates riveted underneath each of these to hold the belt strap (one is now detached). A rectangular-sectioned buckle tongue remains, looped through a circular hole in the buckle plate. The buckle plate has a border of repoussé dots on three sides. The buckle was associated with possible leather fragments.

SF. 33 Iron tool-set and copper-alloy girdle-hanger (Fig. 8, Plates 2 and 3)
Tool-set: L: 99mm
Girdle-hanger: L: 139mm
The tool-set consists of an iron ring from which three tools are suspended. The set is in poor condition and very fragmentary. This means that we cannot identify exactly what the suspended tools are, although based on parallels they are likely to be latch-lifters.

 The copper-alloy girdle-hanger is complete and has a Felder Type A2c terminal (Felder 2014, 77) with a Type IIIa shank neck (Felder 2014, 86). At the top is a suspension loop with the remains of an iron ring through it. Below this is a moulded element with transverse incised lines. The shank of the hanger is rectangular in section and decorated with punched dots and transverse lines. Midway down the shank is a double-ringed ring-and-dot motif, and either side of this project two mushroom-shaped lappets decorated with punched dots and lines. At the base of the shank is another double-ringed ring-and-dot motif; either side of this motif two side prongs extend out, turn 90 degrees upwards and terminate with an outward-facing lobe with central ring-and-dot motif. A mushroom-shaped element projects from the bottom of the shaft and is decorated with punched dots and lines. The outline of the object is bordered with a line of small circular punches. On the front of the girdle-hanger is preserved mineralized textile, the remains of a fine open plain weave. Impressions of
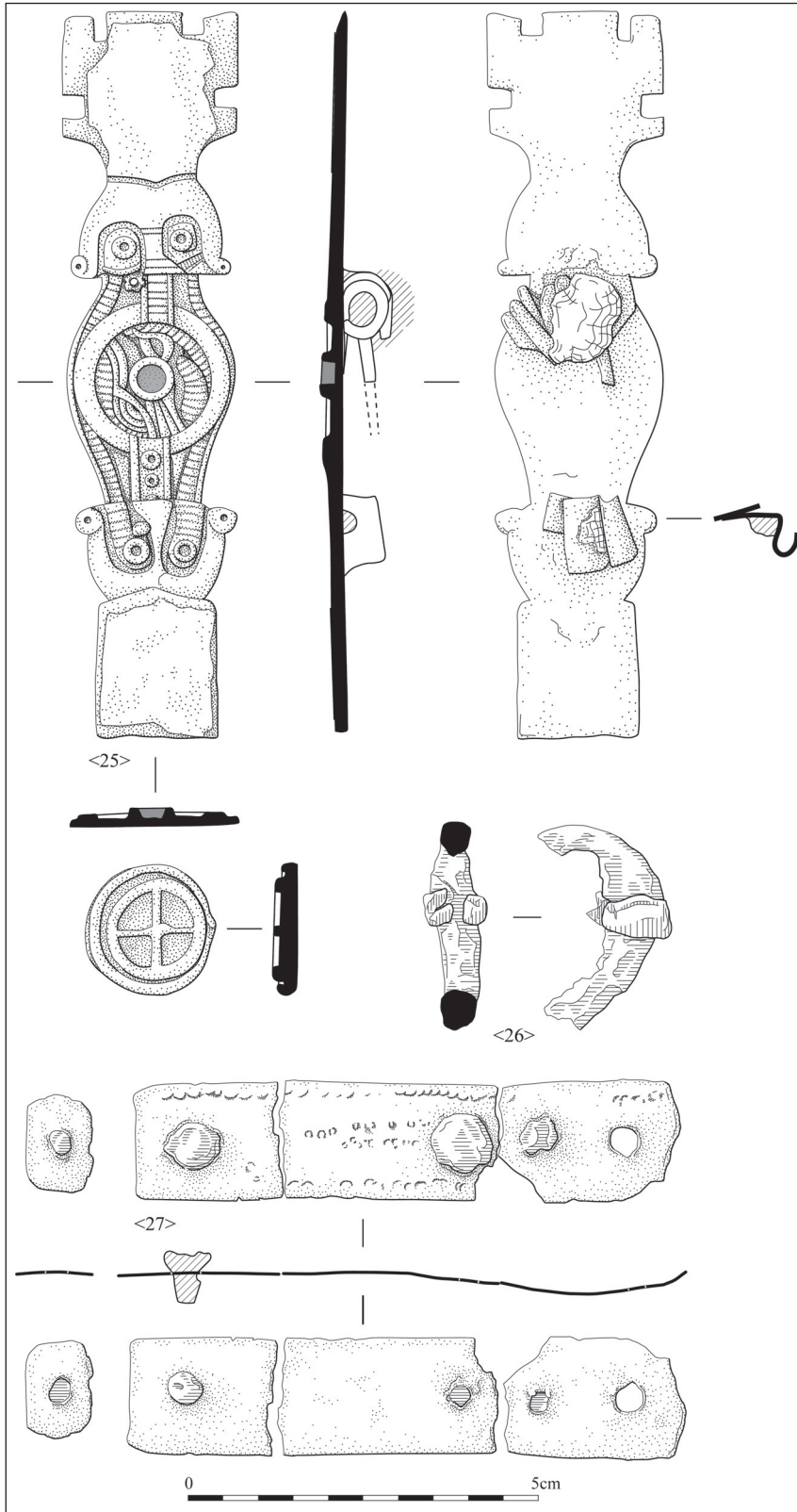

Figure 6. Burial 1, view south-west.
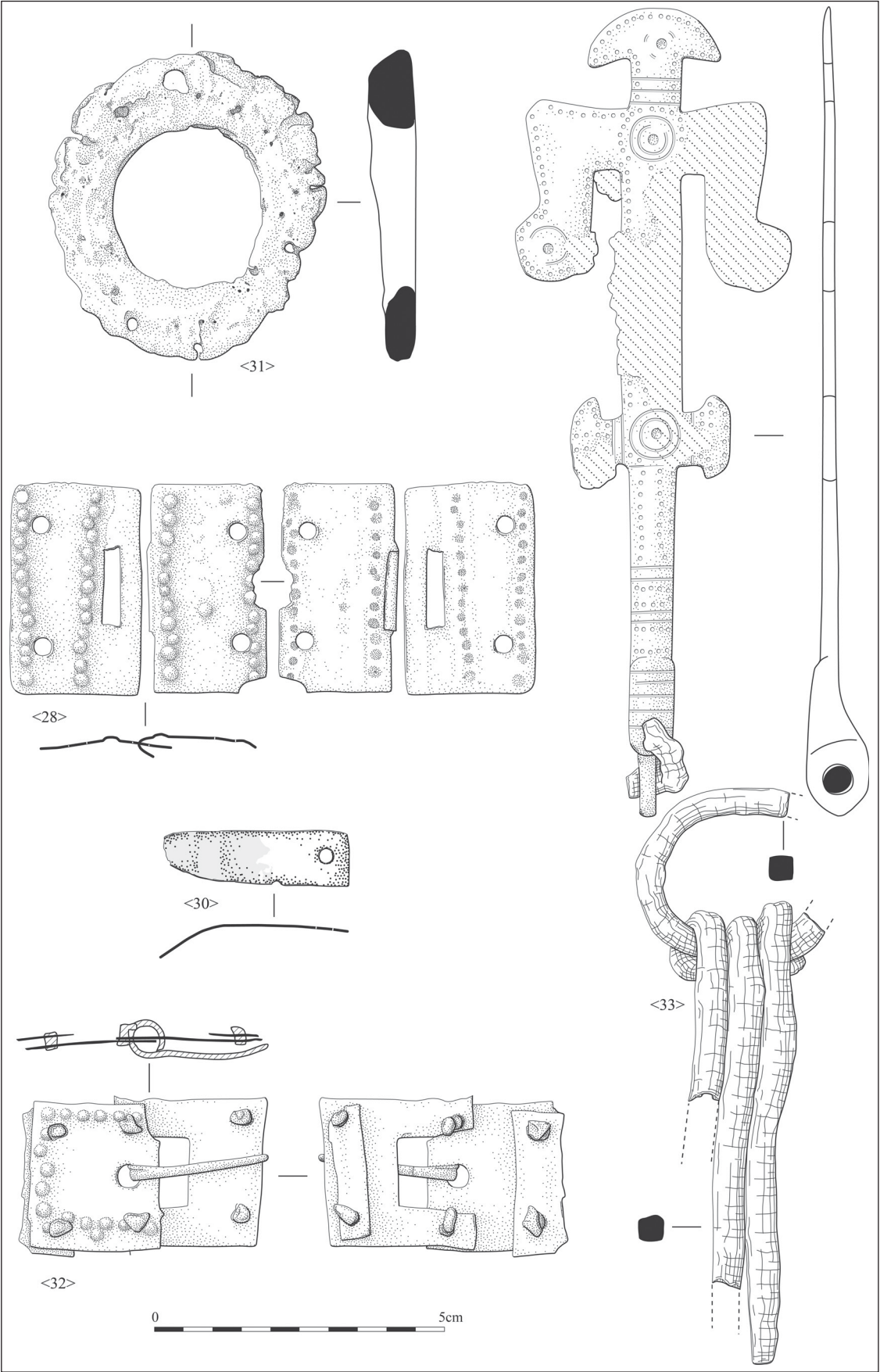
Figure 7. Finds from Burial 1 (page 1).

Figure 8. Finds from Burial 1 (page 2).

organic material, grass/straw or rush, have been preserved in metal corrosion on the reverse (Plate 3).

SF. 34 Copper-alloy wrist clasp (Fig. 9)
L: 34mm; W: 18mm
One half of a wrist clasp of Hines Type B7, consisting of a thin rectangular copper-alloy sheet in two pieces. In the top two corners are holes for attachment, and there is a rectangular catch bent under at the middle of the bottom edge. The wrist clasp is decorated with two rows of repoussé dots. It is very similar in form and decoration to the complete wrist clasp set SF. 28.

SF. 88 Tinned copper-alloy mount (Fig. 9)
L: 32mm; W: 18mm
Fragment of rectangular, tinned copper-alloy mount, similar in form and decoration to SF. 27. The two straight, unbroken edges are bordered by a single row of crescent-shaped stamps. Along the centre are two parallel rows of back-to-back crescent-shaped stamps. There is one rivet hole with the remains of the iron rivet inside. The tinning on the surface of the strip is well-preserved. Given its similarity to SF. 27, we can presume it held a similar function as a mount, perhaps attached to a leather strap.

SF. 166 Copper-alloy, ?enamel roundel (Fig. 9)
D: 19mm
Copper-alloy roundel with four triangular sunken fields filled with ?enamel to form a cruciform motif. Identical to the one associated with SF. 25. It is not clear what these objects were used for as there is no obvious mechanism for attaching or suspending them. There are traces of possible solder and copper-alloy corrosion on the reverse of both examples that may indicate they were soldered onto another metal object, although there are no obvious candidates amongst the objects recovered from the burial.

Necklace suite
SF. 49–52, SF. 92–94, SF. 98–157 Amber beads
67 amber beads of various round, cylindrical, and sub-triangular forms.
SF. 89 and SF. 90 Glass beads
Two small, round gold-in-glass beads. One in four fragments.
SF. 91 Glass bead
L: 7.5mm
Crimped, segmented gold-in-glass bead consisting of two globular beads.
SF. 95 and SF. 207 Glass beads
Two tubular beads.
SF. 96 Glass bead
D: 11mm
Flower-shaped blue glass bead.
SF. 162 Bone bead
L: 12mm
Cylindrical bead or spacer
SF. 164 'chalk' or ivory/bone bead (Fig. 9)
D: 19mm
Cylindrical 'chalk' or ivory/bone bead fragment.

SF. 160 Copper-alloy sheet
Eleven fragments of copper-alloy sheet. The largest fragment consists of a folded 'tube' with a projecting tab, now broken. The other fragments may be part of this object, or from the secondary copper-alloy pin fittings on the back of the brooch SF. 25.

SF. 163 Copper-alloy beads
Fragments of copper-alloy folded into tube-shaped beads. Fibre remains within the tubes.

SF. 165 Copper-alloy loop (Fig. 9)
L: 13mm
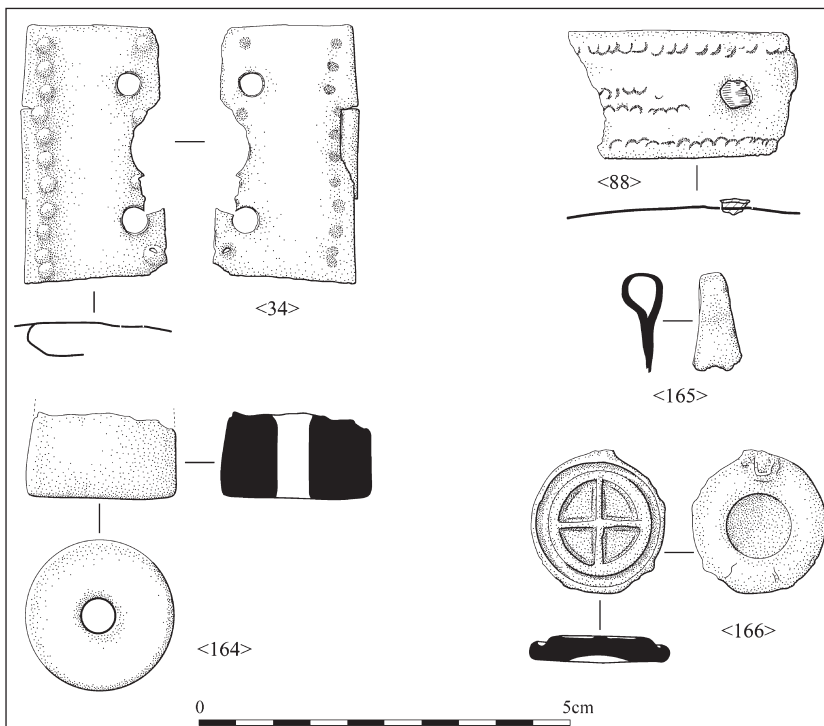Copper-alloy suspension loop for a now-missing pendant.

Figure 9. *Finds from Burial 1 (page 3).*

Formed of a folded strip, with drop-shaped loop and fanned plate with solder remains where pendant would have been attached. Significant wear can be seen at the top of the loop, where the metal is much thinner as a result of being hung from the necklace.

SF. 159 Copper-alloy fragments
Small fragments of copper-alloy, including some sheet copper-alloy possibly associated with SF. 165 or SF. 25.

Miscellaneous
SF. 29 Iron fragments
Small fragments of iron.

SF. 158, SF. 161 Iron pin fragments?
Small fragments of iron possibly associated with the pin of SF. 25.

Burial 2 (Figs. 10, 11, 12, 13, Table 2)
Double burial. Adult female (SK127) and juvenile of 8–9 years (±24 months) (SK128), both W–E orientation. The burials appeared to have been placed within the same grave cut. The grave [111] measured 2.02m long (truncated), 0.86m wide and 0.26m deep (Fig. 10). A later ditch [115] had removed the upper parts of both the skeletons, including the skulls. Four fragments of un-worked limestone were located at the feet of the two skeletons, possibly representing the remains of a marker. The grave goods, a range of dress accessories and beads, appeared to be exclusively associated with the adult female (Table 2, Figs. 12 and 13). Lace tag SF. 16, although found by the right shin of the juvenile (SK128), had almost certainly been displaced from its original location on the left shin of SK127. Two items within this grave, the buckle and wrist clasp SF. 21, have evidence for textile, a finely woven twill with s-spun threads.

Associated finds:
SF. 10 Copper-alloy wrist clasp (Fig. 12)

L: 38mm (combined); W: 32mm
A complete wrist clasp set of Hines Type B14b, plus a small fragment of copper-alloy sheet. Both halves of the wrist clasps are rectangular with two lugs with holes for attachment projecting from two corners. One has a rectangular-shaped hole to receive the rectangular-shaped catch on the other. The surfaces of the clasps have the remains of solder indicating where a thin decorative applique was attached. Only a fragment of this applique survives. Some repoussé decoration can be identified, including a double line border, hatching along the outer edge of the plaque, and some wavy lines.

SF. 11 Copper-alloy lace tag (Fig. 12)
L: 56mm; W: 6mm
Lace tag formed of a copper-alloy sheet bent into a tube with a straight edge-to-edge seam, found by the right ankle of SK127. Decorated with three sets of crudely-inscribed transverse lines at the ends and in the middle of the tube.

SF. 12 Copper-alloy lace tag (Fig. 12)
L: 56mm; W: 6mm
Lace tag found by the right foot of SK127. Form and decoration as SF. 11.

SF. 15 Copper-alloy lace tag (Fig. 12)
L: 56mm; W: 6mm
Lace tag found by the left shin of SK127. Form and decoration as SF. 11.

SF. 16 Copper-alloy lace tag (Fig. 12)
L: 58mm; W: 6mm
Lace tag found by the right shin of SK128, although it was probably displaced from its original location somewhere on the left shin of SK127. Form and decoration as SF. 11.

SF. 19 Copper-alloy wrist clasp (Fig. 13)
L: 26mm; W: 13mm
One half of a wrist clasp belonging to Hines Type B7. Based on the location of the object, size, and decoration, it is likely to be the other half of SF. 20. The rectangular

Table 2. *Burial 2 Small Finds.*

| Small Find No.	Material	Description	Approximate Location
SF. 10	Cu	Wrist clasp	Right forearm
SF. 11	Cu	Lace tag	Right lower leg
SF. 12	Cu	Lace tag	Right lower leg
SF. 13	Amber	Bead	Upper chest
SF. 15	Cu	Lace tag	Left lower leg
SF. 16	Cu	Lace tag	Left lower leg
SF. 19	Cu	Wrist clasp	Left hand/lower back
SF. 20	Cu	Wrist clasp	Left forearm
SF. 21	Cu and Textile	Wrist clasp	Left forearm
SF. 37–48	Amber	Beads	Upper chest
SF. 53	Fe	Buckle	Lower chest
SF. 54	Cu	Bucket pendants	Lower chest
SF. 55	Chalk/Ivory/Bone	Bead	Upper chest
SF. 56–87	Glass and Amber	Beads	Upper chest
SF. 84	Bone	Bead	Upper chest
SF. 167–173	Glass and Amber	Beads	Upper chest
SF. 180	Cu	Wrist clasp	Left forearm
SF. 182–184	Amber	Beads	Upper chest
SF. 190–197	Amber	Beads	Upper chest
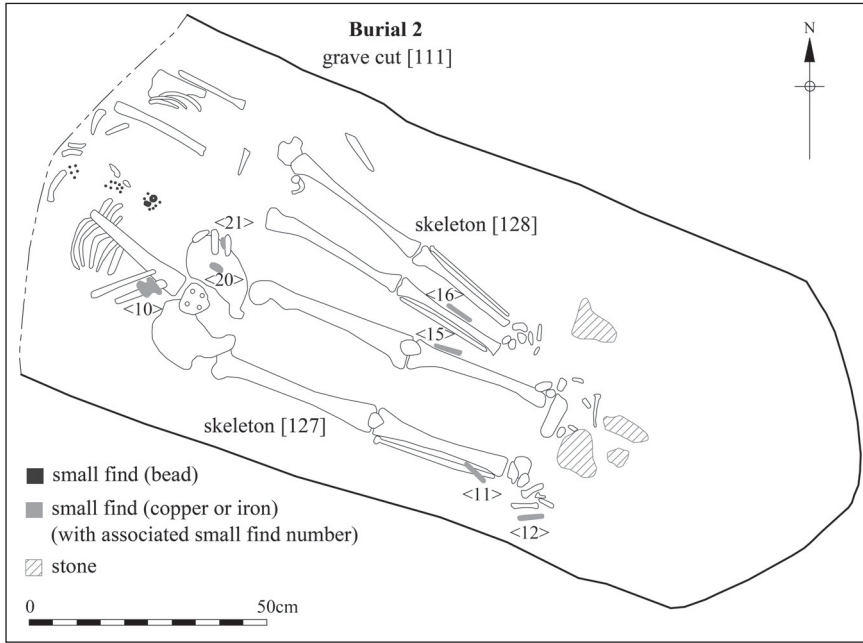
Figure 10. Detail of Burial 2.
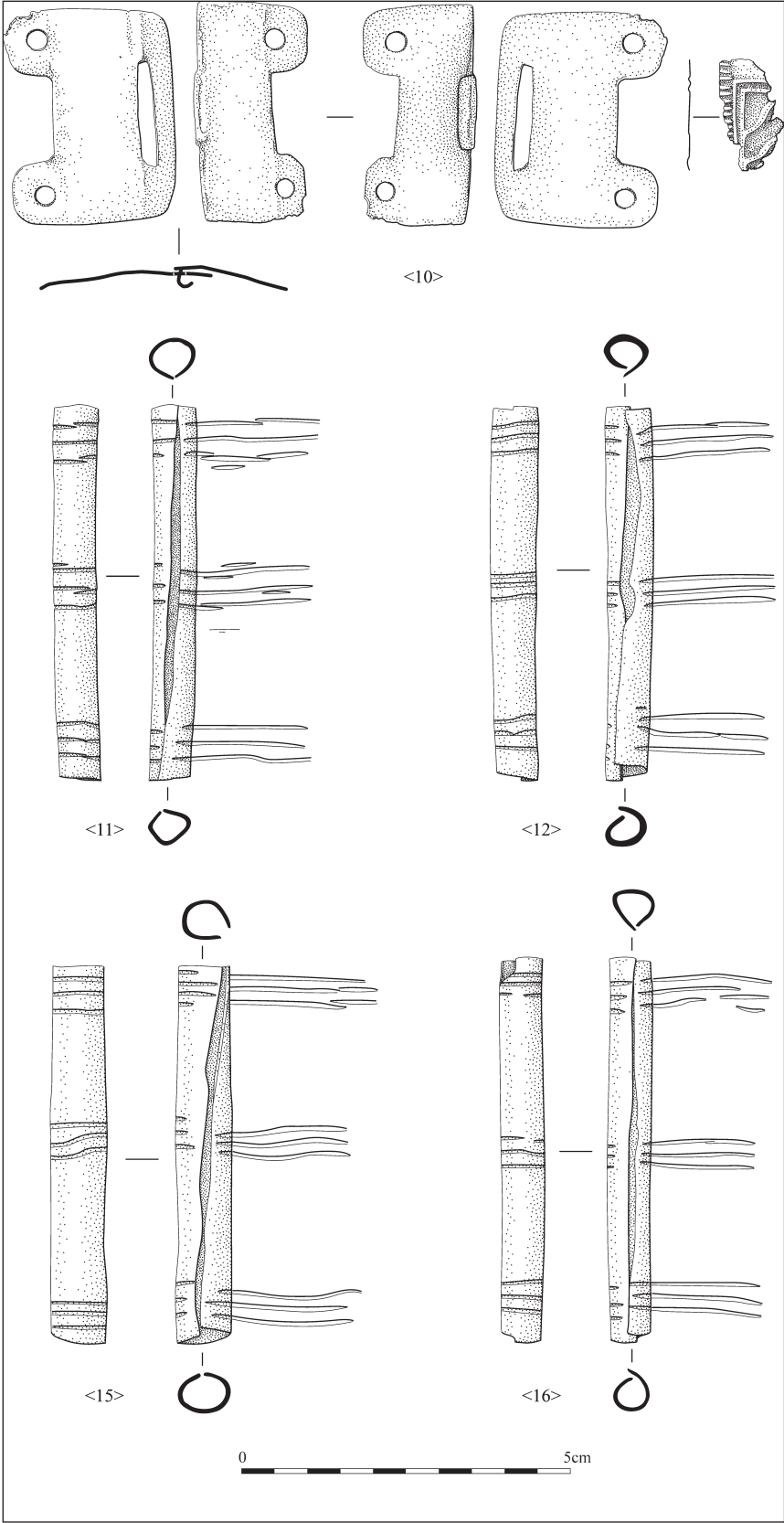

Figure 11. Burial 2, view north-west.

Figure 12. Finds from Burial 2 (page 1).

clasp is made from sheet copper-alloy with two holes for attachment on the top corners, and a stadium-shaped hole to accommodate the catch of the opposite clasp. It is decorated with three rows of repoussé dots.

SF. 20 Copper-alloy catch-plate (Fig. 13)
L: 26mm; W: 12mm
The catch-plate half of a wrist clasp belonging to Hines Type B7. Probably the other half of SF. 19. The rectangular clasp is made from sheet copper-alloy with two holes for attachment on the top corners, and a small catch bent under on the opposite length. It is decorated with an arc of repoussé dots, some of which have pierced through the front of the clasp.

SF. 21, SF. 180 Copper-alloy wrist clasp (Fig. 13)
Incomplete wrist clasp set of Hines Type B7, both halves of which are fused together (SF. 21), and a separate joining fragment (SF. 180). Both clasps are broken and in a poor condition; they would originally have been rectangular with attachment holes in the top corners, only one of which is still intact. No decoration can be seen as the front of the clasp is covered with mineralized textile. The separate fragment (SF. 180) has a small fragment of copper-alloy applique still attached, with faint indication of decoration comprised of a double border.

SF. 53 Iron buckle (Fig. 13)
L: 34mm; W: 25mm
A complete oval iron buckle with square-sectioned buckle tongue looped around the frame. The form belongs to Marzinzik Type I.11a-i (Hines and Bayliss Type BU8). Fragments of mineralized, coarsely woven cloth remain attached to the buckle frame.

Necklace suite
SF. 13, SF. 37–48, SF. 56–64, SF. 66–86, SF. 167–172, SF. 182–184, SF. 190–197 Amber beads
51 amber beads of various forms.
SF. 84 Bone bead
L: 11mm
Cylindrical bone bead or spacer.
SF. 55 'chalk' or ivory/bone bead
D: 17mm
Cylindrical bead.
SF. 54 Copper-alloy bucket pendants (Fig. 13)
Complete example: L: 12mm
Two copper-alloy bucket pendants, one complete and one fragmentary. Both are constructed from three pieces of copper-alloy sheet soldered together: a rectangular-shaped piece bent into a tube to form the body of the pendant; a flat circular piece to form the base; and a long rectangular strip bent to form the handle.
SF. 65 Glass beads
L: 12mm
Crimped segmented gold-in-glass bead, consisting of three globular beads.
SF. 83 Glass bead
L: 8mm
Black tubular glass bead, with remains of metallic gold colour.
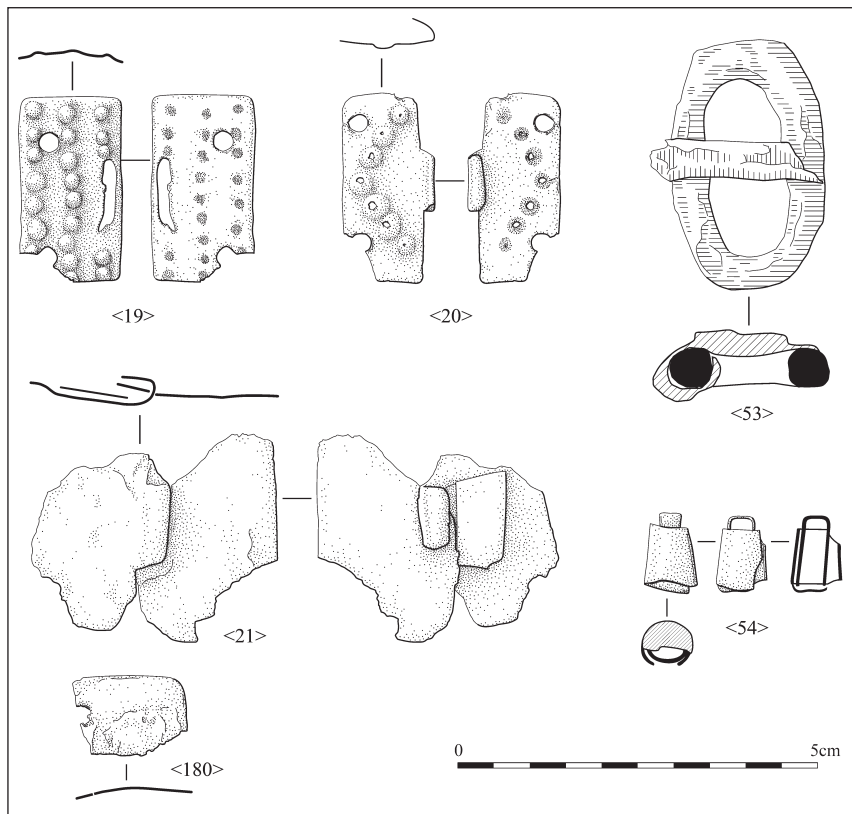SF. 87 Glass bead (Plate 7)

Figure 13. *Finds from Burial 2 (page 2).*

L: 15.5mm
Crimped segmented gold-in-glass bead, consisting of four globular beads.
SF. 173 Glass bead
Fragment of black tubular glass bead with remains of metallic gold colour.

Burial 3 (Figs. 14, 15, Table 3)
Infant, 2–3 years (±12 months) (SK138).
The grave was shallow, truncated, and therefore incomplete. It measured 0.79m long, 0.47m wide and 0.07m deep and cut Pit 180. Three possible grave goods were identified: a fossil or possible fragment of worked bone (SF. 22), a small fragment of blue glass (SF. 189) and two fragments of worked bone (SF. 201), possibly from a comb, the latter found in a soil sample taken from the grave fill. They may be parts of the comb found in Burial 6 (SF. 188), which was cut by Burial 3. It is not clear if these objects had been placed with the burial or had been unintentionally incorporated in the grave fill. The four small un-worked limestone fragments close to the remains of the skull may have been a grave marker.

Associated finds:
SF. 22 Bone/fossil
L: 26mm
Fragment of bone or fossil?

SF. 201 Bone
Two fragments of worked bone, possibly from a comb or comb case. The larger piece has a double ring-and-dot motif and the remains of a single ring-and-dot motif. The smaller fragment has three incised transverse lines.

SF. 189 Glass
Fragment of blue glass. It is not clear what kind of object this came from, but it is unlikely to be a bead, more probably a glass vessel.

Burial 4 (Figs. 14, 16)
The partial remains of an infant, SK136.
No discernible grave cut was identified as the burial was located within an earlier pit, 180. It was uncertain whether the remains had been deliberately deposited within the pit, or whether a grave had been cut into the pit and then rapidly backfilled with the same material. No associated grave goods were recovered. A large limestone fragment close to the probable original location of the head of the burial may have been the remains of a grave marker.

Burial 5 (Figs. 14, 17)
Partial remains of an adult, SK122
The burial had been almost entirely removed by truncation (Fig. 14). All that remained was the eastern end of grave cut [123]. The only remaining evidence for a burial were the partial remains of two feet (SK122). It is possible to identify the skeleton as an adult but, with the limited skeletal remains and no associated grave goods, sex cannot be determined.

Burial 6 (Figs. 18, 19, 20, Table 4)
Mature adult male (SK106), W–E orientation.
The grave was cut by Burials 3 and 7. The cut for the grave [107] measured 1.44m long (truncated), 0.85m wide and 0.18m deep. The skeleton shows signs of physical hardship, as well as injuries on the right-hand side of the rib cage. The finds consist of a bone comb (SF. 188) and a spearhead (SF. 7 and 18). The spear blade (SF. 18) and the comb were found near the waist of the burial, almost fused together, the preservation of the bone comb probably helped by its proximity to the iron object. The spear may originally have been laid along the individual's left side, as the socket (SF. 7) was found beside the upper left leg; the blade might have been disturbed from its original position, perhaps when Burial 7 was cut through the grave.

Associated finds:
SF. 7 and SF. 18 Iron and ash spearhead (Fig. 20)
Socket: L: 51mm
Blade: L: 72.5mm (reconstructed)
Small iron spearhead belonging to Swanton Type C1. In three parts, including part of tapering split socket (SF. 7) and leaf-shaped blade (SF. 18) with a broken tip. The wood within the socket has been identified as ash.

SF. 175 Iron nail shaft?
L: 36mm
Cylindrical iron object, possibly a nail shaft.

SF. 188 Bone comb (Fig. 20)
Fragmentary single-sided composite bone comb, a type

Table 3. Burial 3 Small Finds.

Small Find No.	Material	Description	Approximate Location
SF. 22	Bone/Fossil	Worked bone?	Upper body
SF. 189	Glass	Fragment	Recovered from sample
SF. 201	Bone	Comb fragments	Recovered from sample

Table 4. Burial 6 Small Finds.

Small Find No.	Material	Description	Approximate Location
SF. 7	Fe and Wood	Socket	Left upper leg
SF. 18	Fe	Spearhead	Central waist
SF. 175	Fe	?Nail	Recovered from sample
SF. 188	Bone	Comb	Central waist

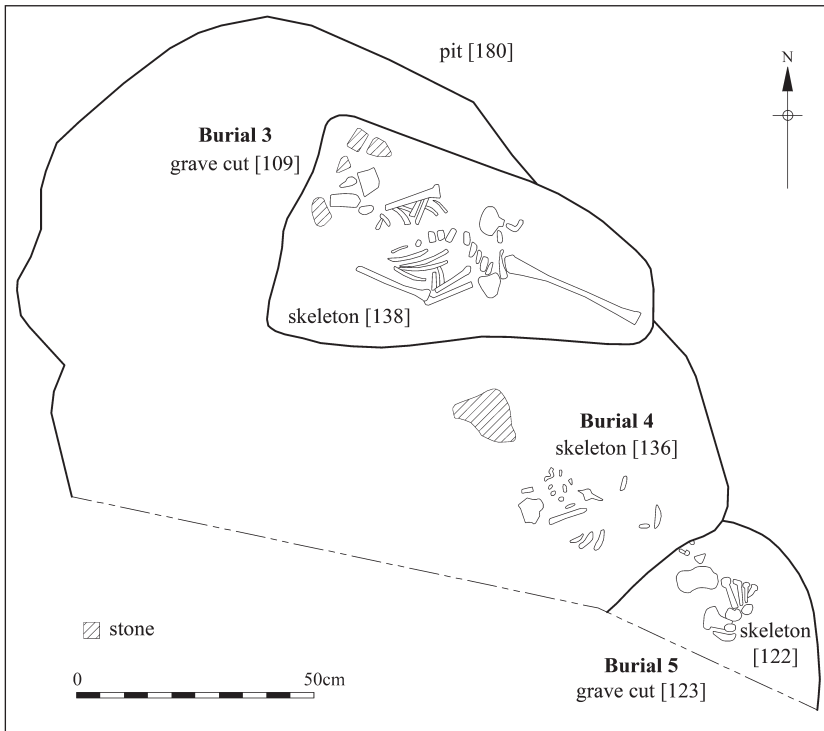*Figure 14.* Detail of Burials 3, 4 and 5.

Figure 15. Burial 3, view from above.

Figure 16. Burial 4, view from above.

Figure 17. Burial 5, view north-east.
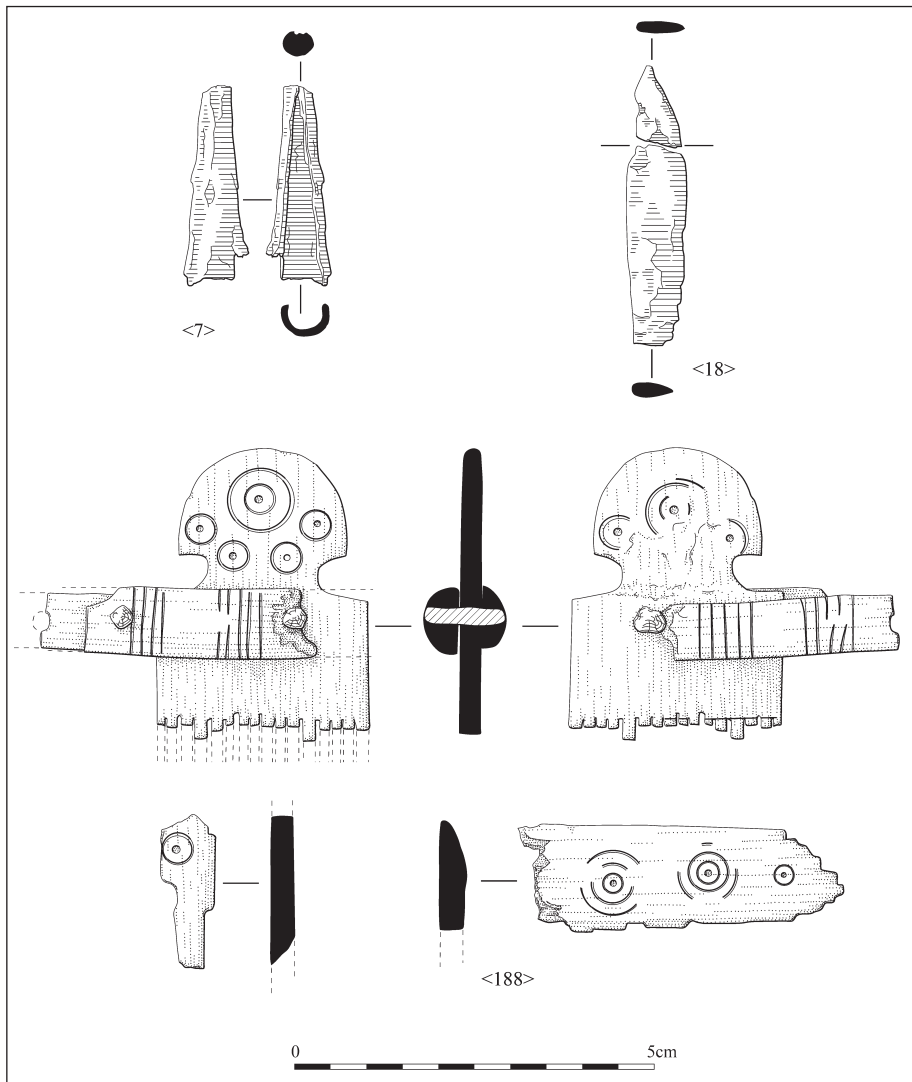
Burial 6
grave cut [107]

N

skeleton [106]

<7>

■ small find (copper or iron)
(with associated small find number)

0   50cm
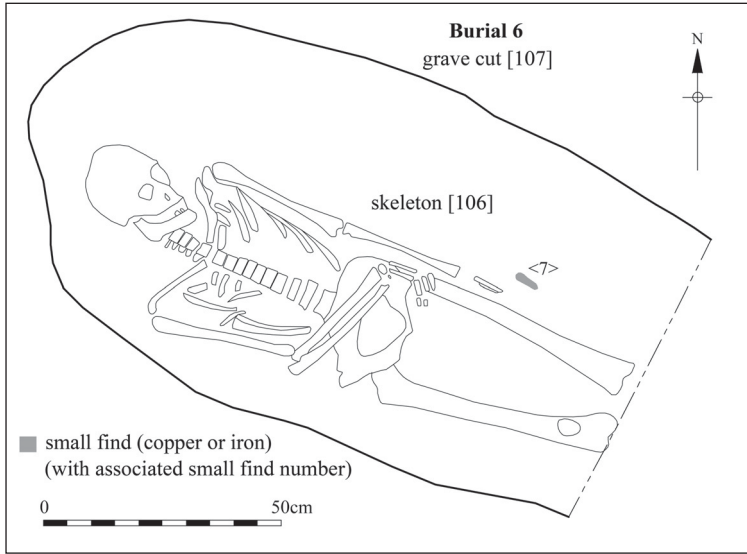
Figure 18. Detail of Burial 6.

Figure 19. Burials 6 and 7, view north-west.

Figure 20. Finds from Burial 6.

known as "barred zoomorphic". This comb type can be distinguished by its method of construction: tooth plates riveted between a flat plate on one side and two plano-convex bars on the other, with zoomorphic ends. Only one section of tooth plate remains and all the teeth have broken off. The handle of the tooth plate is mushroom-shaped, decorated with large and small ring-and-dot motifs. This pattern is repeated on the reverse, although very worn. Two identifiable fragments of the flat plates remain, both decorated with ring-and-dot motifs. The largest of these joins with the iron rivet projecting from the back of the tooth plate. There are 11 fragments of the two plano-convex bars, many of which can be reconstructed. One piece is still attached to the tooth plate with an iron rivet. The bars are decorated with evenly-spaced sets of 4–6 inscribed lines. There are a number of other pieces, some with iron rivets still attached, whose position within the comb cannot be reconstructed.

 This bone comb was found fused to the tip of the spearhead (SF. 18) near to the waist of the skeleton. Both of these objects are likely to have been displaced from their original locations. The fragments of worked bone in Burial 3 could be additional displaced fragments of the same comb.

Burial 7 (Figs. 19, 21, 22, 23, 24, Table 5)
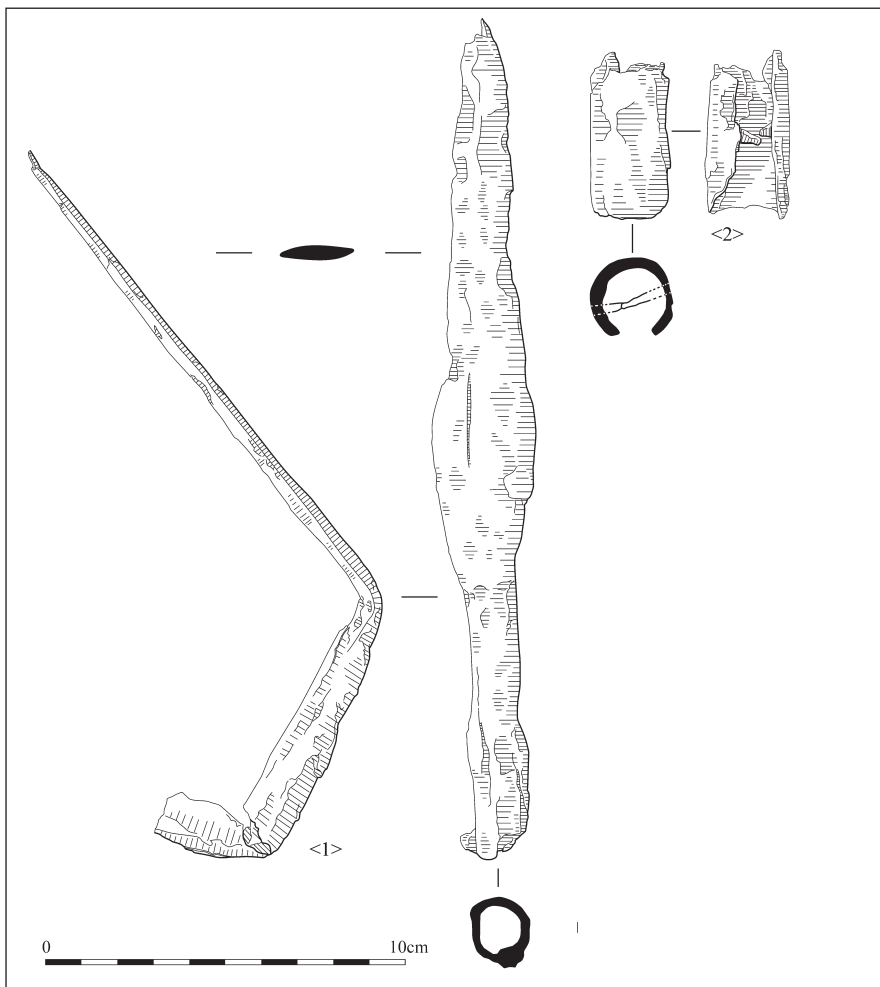Adult male (SK103), W–E orientation.
The cut for Burial 7 [104] had truncated the eastern end of Burial 6, removing the lower legs of SK106. The grave cut measured 1.35m+ long, 0.94m wide and 0.15m deep, with the eastern end of the grave continuing beyond the limit of the excavation area. A shield, of which the boss, grip and decorative appliques survived, had been laid face-down at the west end of the grave, with the head and shoulders of the body apparently resting on it. The shield boss has preserved impressions indicating that the grave was lined with grass/ straw or other organic material, as also seen in Burial 1. The burial was also accompanied by a spearhead and knife.

Associated finds:
SF. 1 and SF. 2 Iron spearhead (Fig. 22)
Blade: L: 136mm; Socket: L: 135mm (reconstructed)
Leaf-shaped spearhead (Swanton Type C2). The blade is lentoid in section. The short neck between the blade and the split socket is bent almost to 90 degrees. Part of the socket is now detached (SF. 2), and inside are two oppos-

N

Burial 7
grave cut [104]

Burial 8
grave cut [129]

skeleton [130]

pot sherd

<4>

shield boss

<3>

<206>

skeleton [103]

■ small find (bead)

▨ small find (copper or iron)
   (with associated small find number)

0   50cm

<2>

<1>

0   10cm
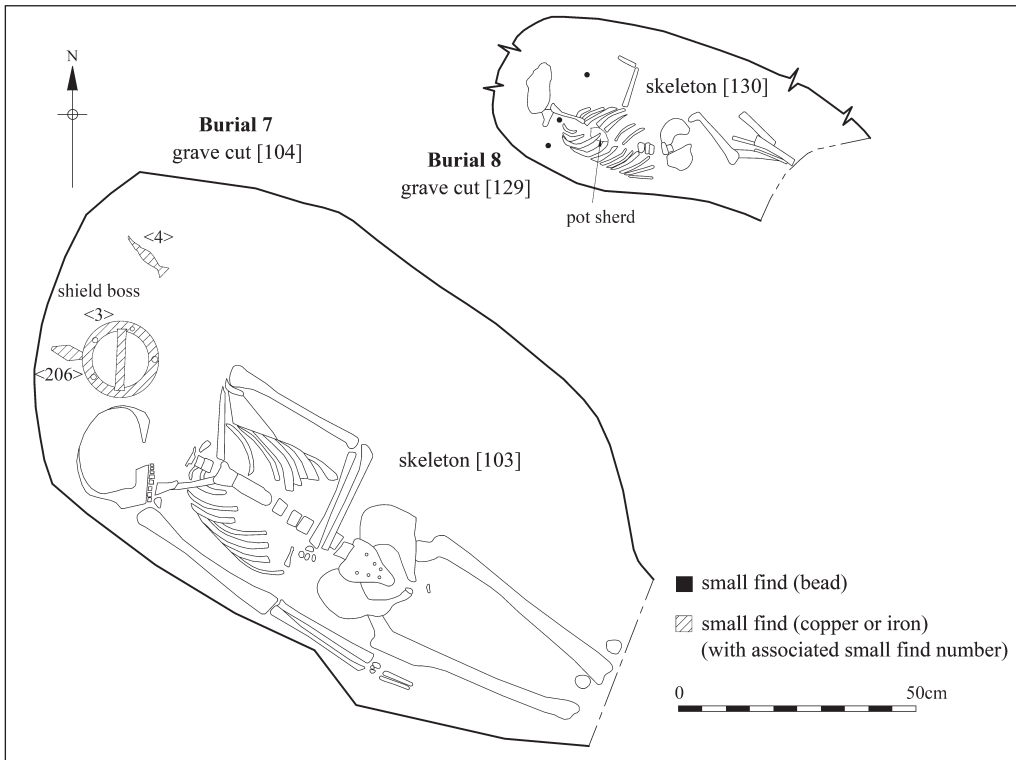
Above: **Figure 21.** *Detail of Burials 7 and 8. Left:* **Figure 22.** *Finds from Burial 7 (page 1).*
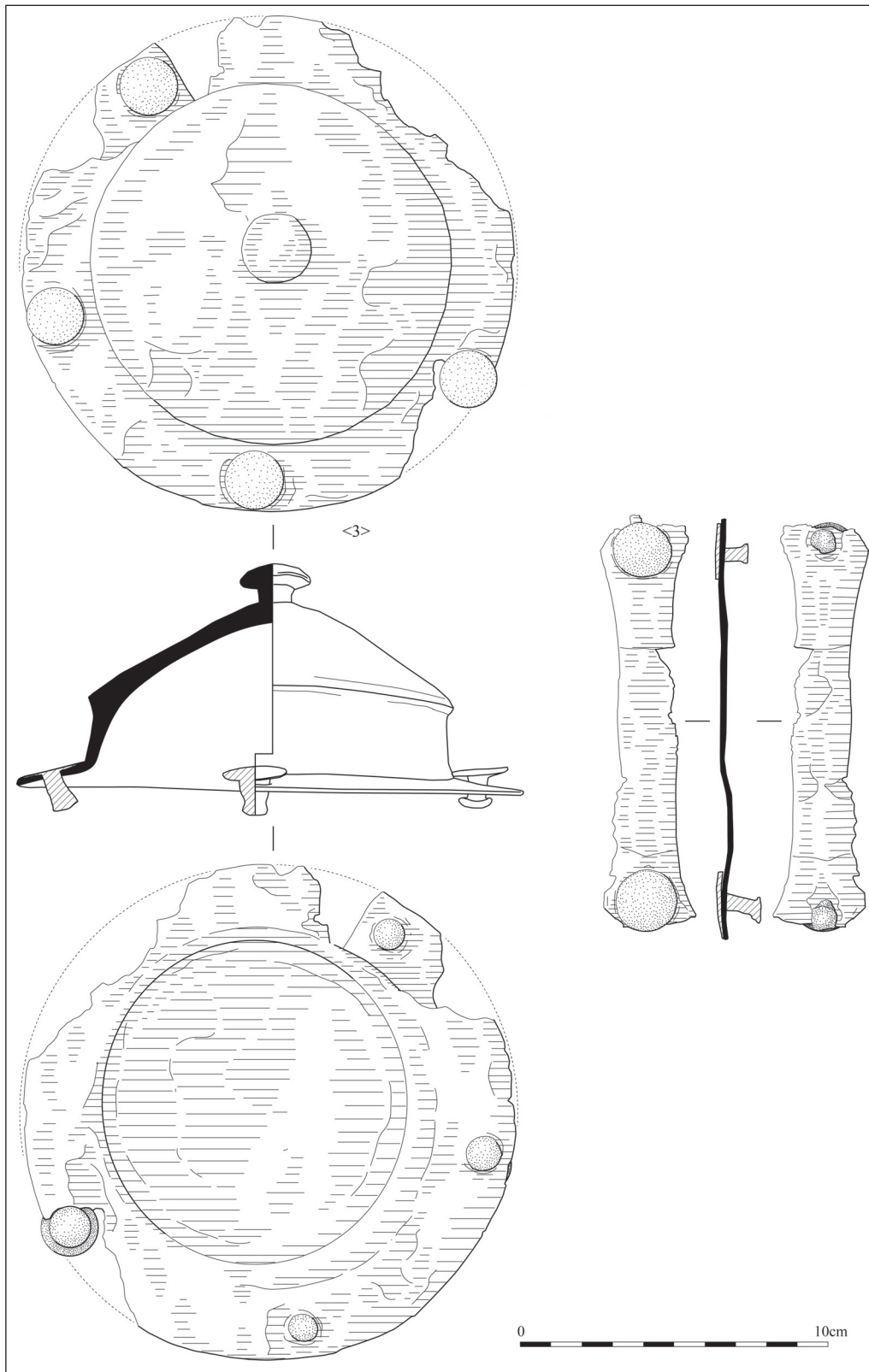
<3>

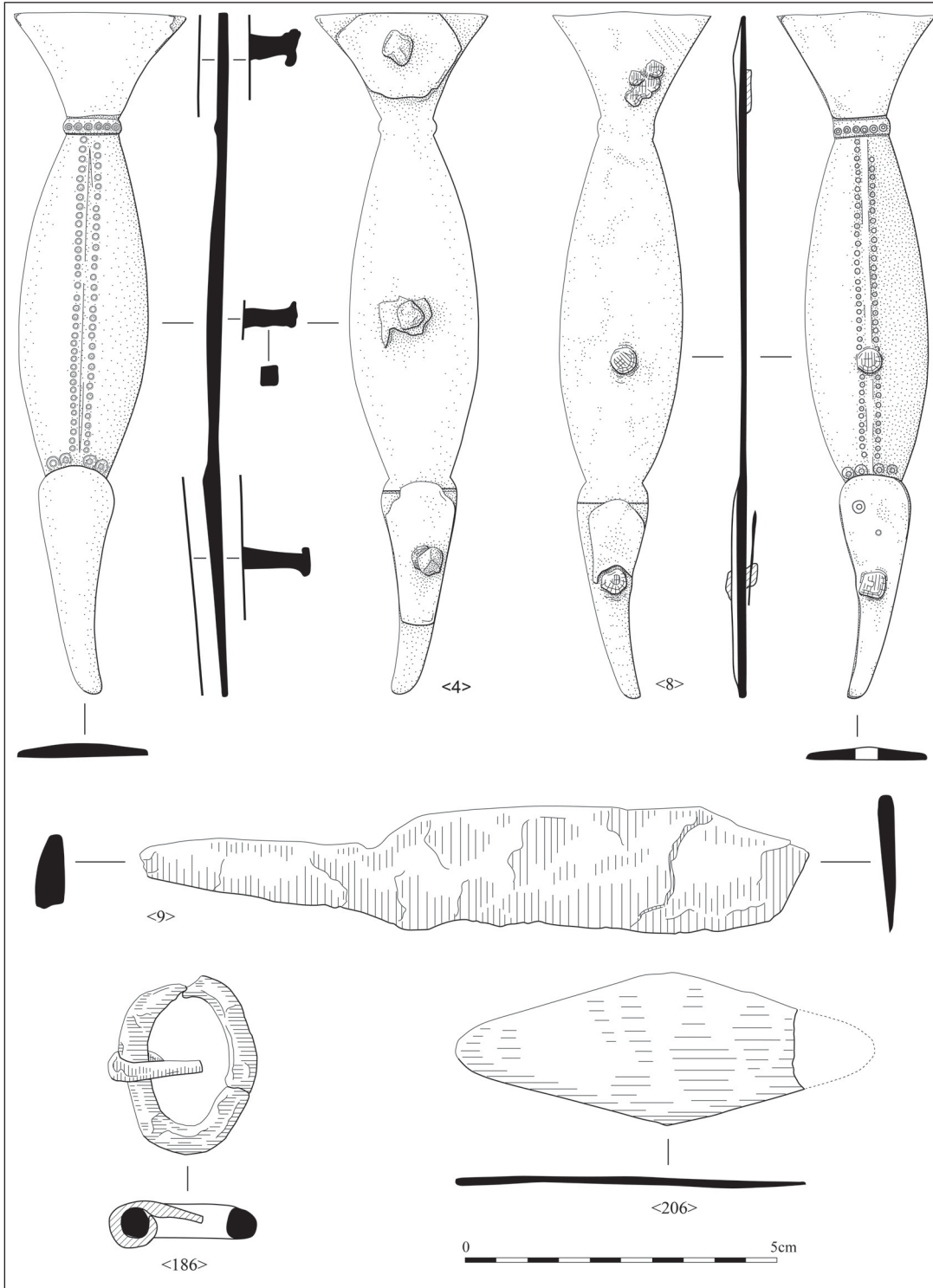*Figure 23. Finds from Burial 7 (page 2). See also Plate 4.*

Figure 24. Finds from Burial 7 (page 3).

Table 5. Burial 7 Small Finds.

Small Find No.	Material	Description	Approximate Location
SF. 1	Fe	Spearhead	Head
SF. 2	Fe and Wood	Spearhead socket	Head
SF. 3	Fe/Cu/Ag	Shield boss and handle	Head
SF. 4	Fe/Cu/Ag/Au	Shield applique	Head
SF. 8	Fe/Cu/Ag/Au	Shield applique	Head
SF. 9	Fe	Knife	Upper body
SF. 14	Ag	Shield applique	Head
SF. 186	Fe	Buckle	Left hand
SF. 204	Cu	Rivet	Left hand
SF. 206	Fe	Shield fitting	Beneath head

ing iron rivets. Remains of wood have been identified as either oak or ash.

SF. 9 Iron knife (Fig. 24)
L: 105mm (including tang)
Short iron knife with broken tip. The back of the knife is curved and there is a distinct interface between the tang and the blade on both sides.

SF. 186 Iron buckle (Fig. 24)
L: 27mm; W: 23mm
An oval iron buckle of Marzinzik Type I.11a-i (Hines and Bayliss BU8) with square-sectioned buckle tongue looped about the frame.

Shield Fittings:
SF. 3 Iron, silver and copper-alloy shield boss (Fig. 23, Plate 4)
Boss: D: 155mm; H: 77mm
Handle: L: 125mm
Iron shield boss with convex-profiled cone, disc-headed knop, over-hanging carination, and straight sided-walls, of Dickinson and Härke's Group 3. There are organic impressions over the surface of the shield boss, perhaps of straw or grass. Around the flange, four of the five disc-headed rivets with silver appliques were attached upon excavation. White corrosion on the bottoms of the rivets may indicate the presence of lead-alloy washers, as seen on one of the loose rivets. Some of the loose rivets also show traces of mineralized wood, probably oak. The shield handle has a straight middle section with widening ends and two copper-alloy disc-headed rivets; in Dickinson and Härke's typology of handles, it belongs to group Ia1: short, flat, with expanded terminals (Dickinson and Härke 1992, 24).

SF. 4 and SF. 14 Copper-alloy shield applique (Fig. 24)
L: 108mm
Left-facing fish-shaped shield applique, copper-alloy with gilt body and silver applique head (now detached, SF. 14) and fan-shaped tail. The head is an elongated drop-shape with the end curving upwards. The fragment of silver applique that would originally have been attached to the

head has a punched ring-and-dot eye. The same punch appears to have been used to decorate where the head meets the body. The gilt body is bowed with a central rib, either side of which is a row of punched annulets. A small bar with circular punches demarcates the end of the body and where the plain fan-shaped tail with silver applique begins. On the reverse of the fish are patches of solder which indicate where three plate-rivets would have been attached. The plates of two of these rivets take the form of the area of the fish to which they were attached: a fan-shaped one for the tail, and a drop-shaped one for the head.

SF. 8 Copper-alloy shield applique (Fig. 24, Plate 5)
L: 110mm (reconstructed)
Right-facing fish-shaped shield applique in two pieces; copper-alloy with gilt body and silver applique head and fan-shaped tail. Decoration and form are the same as SF. 4, but the silver applique on the head is complete and has, in addition to the punched circular eye, an inscribed line ending in a circular punch indicating the mount. On the reverse, part of the plate rivet for the head remains attached. This shield applique also has two additional iron rivets which pierce through the front: one halfway along the head, and the other a third of the way along the body. These are likely to be later repairs.

SF. 204 Copper-alloy rivet
D: 12mm; H: 5mm
Copper-alloy disc-headed rivet, possibly associated with the shield.

SF. 206 Iron shield fitting (Fig. 24)
L: 54.5mm; W: 25.5mm (max.)
Lozenge-shaped iron shield fitting.

Burial 8 (Figs. 21, 25, Table 6)
Infant, 1 year (± 4 months) (SK130), W–E orientation. Eastern end of the burial truncated by modern intrusion. Grave cut 0.73m+ long, 0.36m wide and 0.1m deep. Three glass beads around the neck possibly indicate a female infant. A further two beads (SF. 198 and SF. 199) were recovered from a bulk soil sample

Table 6. Burial 8 Small Finds.

Small Find No.	Material	Description	Approximate Location
SF. 23	Glass	Bead	Upper body
SF. 35–36	Glass	Beads	Upper body
SF. 198–199	Glass	Beads	Recovered from sample
SF. 200	Ceramic	Pot sherd	Chest

taken from the grave fill; however, these are of different type and may relate to a separate item within the grave. A burnished pottery sherd (SF. 200) was found in a central position on the chest of the infant, and appears to constitute a deliberate placement.

Associated finds:
SF. 23, SF. 35–36, SF. 198–199 Glass beads (Plate 6: SF. 23)
Five opaque white beads. Three are barrel-shaped with circumferential crossing trails in ?blue glass, and one has a blue spiral circumferential trail; the other is a plain straight-sided cylindrical bead.

Finds not associated with in situ *burials:*
SF. 5 Silver coin
D: 16mm
Silver halfpenny of Edward III, 3rd (Florin) coinage (1344–51), London mint. Obverse with facing bust with simple crown and inscription +EDWARDVS REX. Reverse has a long cross dividing the legend with three pellets in each quarter, inscription reads CIVI/TAS/LON/DON.

SF. 6 Copper-alloy brooch (Fig. 26)
Part of the head of a trefoil-headed small-long brooch. Only two of the side projections remain. Parallel inscribed lines decorate the two remaining heads. Remains of pin-lug on reverse. Possibly burnt.

SF. 17 Copper-alloy brooch (Fig. 26)
L: 64mm
Small-long brooch with trefoil head. D-sectioned bow, fluted footplate with moulded decoration where the two meet. The central square panel of the head is demarcated with parallel incised lines. Pin-lug and catch-plate remain, and remnants of the iron pin still looped through the lug.

SF. 174 Iron pyramid
L: 51mm; W: 21mm
Square-sectioned iron pyramid.

SF. 176 Iron nail
L: 67mm
Square-sectioned iron nail. Tapering, with possible globular head.

SF. 177 Iron nail?
L: 22mm
Possibly a nail head and part of a nail shaft.

SF. 178 Iron and oak spearhead
L: 39mm
Part of iron spear split socket (C-shaped section) with remains of oak inside and one extant rivet.

SF. 179 Iron blade
L: 24.5mm
Fragment of iron blade.

SF. 181 Iron blade?
L: 45mm
Flat, pointed iron object, perhaps part of a blade.

SF. 185 Iron nail
L: 34mm

Square-sectioned curved and tapering iron nail.

Charnel Pits (Fig. 3)
Pit 171, located in the north-west corner of the excavation area, contained seven human sub-adult and adult bones. No chronologically diagnostic finds were present but the physical proximity and similarity of the feature to pits immediately to the south suggest a broadly contemporary early Anglo-Saxon date. Pit 139, located south-west of Burial 2 and cut by Ditches 120 and 115, contained 41 adult human bones and a single juvenile bone, representing the disarticulated remains of multiple individuals, probably from numerous disturbed burials. It cut Pit 167, which contained early Anglo-Saxon pottery.

Pit 180 was truncated by later Burial 3 (SK138), while an infant (SK136, Burial 4) had also been buried within the upper part of the feature (possibly in a separate grave cut, though this could not be discerned during excavation). In addition to these two partially-complete skeletons, disarticulated human skeletal material comprising fragments of cranial vault, mandible, maxilla, clavicle, ribs, cervical vertebrae, femur and calcaneus were found close to the bottom of the pit. The majority of the bones belong to an infant aged 2 years ± 8 months. Given their disarticulated nature and their location in the fill of a pit rather than a discrete grave, they are likely to represent a disturbed and redeposited inhumation.

Pit 132, located to the east of Pit 180 and cut by Burial 7, contained human remains including the partial remains of an infant (SK133, consisting of 22 bones from an individual aged 1–2 years old), which may represent a redeposited burial. A further thirteen infant bones (cranium fragments and clavicle), fourteen adult bones and five juvenile bones were also present.

Early Anglo-Saxon Pits (Fig. 3)
Thirteen other pits can be dated to the early Anglo-Saxon period on the basis of the associated pottery or stratigraphy: a cluster of six intercutting pits (157, 159, 193, 141, 143 and 147) was located immediately south of charnel Pit 171 and other pits were located individually (186) and in small groups (173 and 175, 149 and 151, and 167 and 189) towards the south and northeast of the excavation area. The pits were generally circular or oval in plan, up to *c.* 2.5m wide and 0.39m deep, though many were smaller and considerably shallower (0.10m deep), their upper portions having been removed by the past ground levelling. Ten of the pits contained small quantities of early Anglo-Saxon pottery; the similar composition and appearance of the pit fills also suggest that they were broadly contemporary with one another. Three pits (157, 147 and 167) contained disarticulated human bone. The largest assemblage, in Pit 157, consists of 43 adult fragments and one juvenile fragment. Nine vertebrae and 12 rib fragments found in close proximity suggest that they may represent a partially articulated adult; the other adult human bone could belong to the same individual. Five pits contained small amounts of

*Above: **Figure 25.** Burial 8, view from above.*
*Below: **Figure 26.** Small Finds from early Anglo-Saxon pits.*
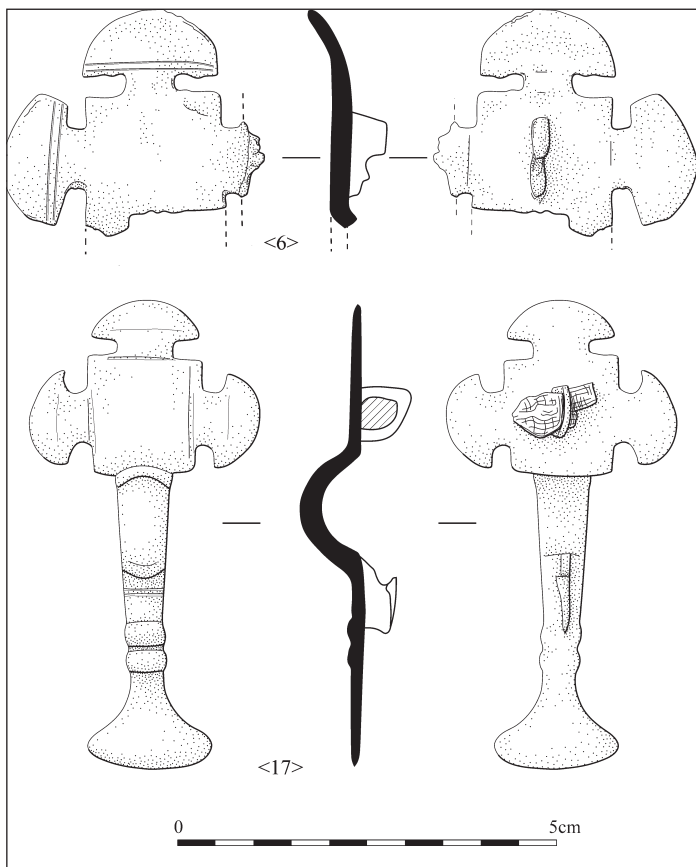
sheep/goat, cattle, horse and dog bone. The pits may originally have been dug to quarry for sand or gravel but the presence of animal bone and potsherds from cooking and storage vessels in their fills indicates domestic activity nearby. The fact that several of the pits contained disturbed charnel material suggests that the pit-digging was encroaching on an area that had formerly been part of the burial ground. A trefoil-headed brooch (SF. 17) and a fragment of another (SF. 6) (see Fig. 26), found in Pits 151 and 149 (respectively), may also be redeposited from disturbed graves. However, it is also possible that some of the pits and associated settlement debris predate some burials, as is suggested, for example, by the fifth-century date of some of the pottery decoration and vessel forms, and by the presence of occasional animal bones (13 fragments in total) in the graves, which suggest they may have truncated earlier rubbish pits. Nevertheless, the evidence tends toward there being an early Anglo-Saxon burial ground and broadly contemporary settlement located in close proximity to one another.

Other Features (Fig. 3)
Five pits in the centre and south of the excavation area (155, 163, 169, 165 and 116) were of late Saxon to medieval date. The largest (165) was rectangular in plan, 3.5m long, 3m wide and 0.21m deep, with a homogeneous fill of greyish-brown sandy silt which contained three sherds (24g) of handmade early Anglo-Saxon pottery, disarticulated human bone and a late-twelfth- to fourteenth-century coarseware sherd. In view of its morphology and the evidence for Anglo-Saxon settlement in the vicinity, it is possible that the medieval potsherd was intrusive and that the pit was actually the remains of a sunken-featured building. Pit 116, which extended beyond the southern limit of excavation, contained sherds of handmade pottery in igneous- and sand-and-sandstone-tempered fabrics, and a green-glazed Stamford ware sherd, suggesting a *c.* ninth- to tenth-century date.

Three post-medieval ditches (118, 120 and 115) defining land divisions were also identified; their alignments match the orientation of Hop Row and layout of extant property boundaries in the vicinity. Ditches 120 and 115 and a broadly contemporary pit in the north-east corner of the excavation (177) all contained disarticulated bone from disturbed graves; Ditch 120 also contained a residual silver halfpenny of Edward III (1344–51; SF. 5).

Osteology
Aileen Tierney

Introduction

Eight graves containing nine skeletons were uncovered as part of the 2014 excavations. The inhumations included two adult males with associated weapons, as well as a double burial. Some of the graves had

sustained various levels of truncation, while the presence of human remains in eighteen of the 26 non-burial features, including three redeposited partial skeletons, provided evidence for further graves and an indication that the cemetery had originally extended further south.

Methodology
The remains were excavated in accordance with CIfA guidelines (McKinley and Roberts 1993). The general methods used in the osteological evaluation of all human skeletal material were those of Buikstra and Ubelaker (1994). An assessment of age was based on the stages of dental development and eruption (Bass 1995) and epiphyseal union, and on the degree of dental attrition (Brothwell 1981). Cranial sutures were also consulted where applicable. The age categories used in this report are listed below (Table 7).

Table 7. *Age categories*
infant	0–4 years
juvenile	5–12 years
subadult	13–18 years
young adult	19–25 years
middle adult	26–44 years
mature adult	45 years+

There may be overlaps between categories or a broad category, such as adult, where insufficient evidence was present. In addition to these ageing criteria, degenerative diseases have been used to further age human remains and to suggest 'middle' or 'mature' as opposed to just identifying fused bone and stating 'adult'. The sex of adult individuals was ascertained where possible from sexually dimorphic traits of the skeleton (Buikstra and Ubelaker 1994) and metrical data. No attempt was made to sex immature individuals. Each element was identified macroscopically, which allowed for completeness of the skeleton to be ascertained. The minimum number of individuals (MNI) was determined for each of the non-burial features. The calculation for the MNI used in this report is the count of the most frequent element, within each age group, with the assumption that all left and right elements are pairs (Mays 2010). Stature estimates were carried out using standard formulae, including corrected stature for the older individuals (Cox 2010; Visser 1998).

Material

The inhumations are discussed in order of burial number and reference the associated skeleton and cut numbers (Table 8). The human remains from non-burial features are discussed separately.

Burial 1: SK184 [183]
Young adult female
This young adult's stature is estimated at about 163–165cm (5'4"–5'5"). She had been placed in a supine extended position, on a west–east orientation, with

Burial	Cut	SK	Fill	Orientation/ Burial Type	Stature	Burial position	Preservation	Completeness	Age	Sex	Pathology
Burial 1	183	184	185	W–E extended	163–165cm (5'4"–5'5")	Supine; hands together on chest; feet together	Good	<90%	Young adult (19–25)	F	
Burial 2	111	127	110	W–E extended	159–160cm (5'3")	Supine; hands appear to be together; right hand on chest, left on pelvis	Good (ribs and vert fragile)	<90%	Adult	F	Schmorl's nodes and OPLL
	111	128	110	W–E extended	127cm (4'2")	Supine; upper left only	Long bones: good, ribs vert: poor	<70–80%	Juvenile (8–9 years)	N/A	
Burial 3	109	138	108	W–E extended	N/A	Supine; right arm, slight flex with hand by pelvis; left arm flexed and hand location by chest	Good	<80%	Infant (2–3 years)	N/A	
Burial 4	135	136	137	W–E presumed extended	N/A	Supine; Only partial skull, thorax and right arm; seems to be supine but highly truncated	Good (fragile due to size)	<50%	Infant (2–4 years)	N/A	
Burial 5	123	122	124	Unknown orientation, presumed extended	Unknown	Legs only; presumed similar to others	Good	<10%	Adult	?	Enthesophytes
Burial 6	107	106	105	W–E extended	173–175cm (5'8"–5'9")	Supine; left arm extended, right arm across lower chest	V. good	<80%	Middle mature adult (35–45 years)	M	Dental wear, dental caries, tooth resorption, calculus, Schmorl's nodes, eburnation, vertebral lipping, DJD, fused bone
Burial 7	104	103	102	W–E extended	171–174cm (5'7"–5'9")	Supine; right arm extended, left arm across lower chest	V. good	<80%	Middle adult (25–35 years)	M	Dental calculus, dental caries, ectocranial porosity, vertebral lipping, woven bone
Burial 8	129	130	131	W–E extended	N/A	On left side, arms possibly flexed, arms by face?	V. good	<90%	Infant (1 year ±4 months)	N/A	

Table 8. Osteological summary table (SK = Skeleton number).

hands overlapping on the lower chest and feet together. The skeleton is very well-preserved but truncation of the burial has resulted in the absence of the cranium and parts of the upper arms. She was buried with a number of items of personal ornaments and equipment. The greater sciatic notch indicates that the individual is female, aged as a young adult (19–25 years) on the basis of a corrugated pubic symphysis and lines of epiphyseal fusion of the iliac crest.

Burial 2: [111] Double burial
This grave contained two skeletons. SK127 has been identified as an adult female and SK128 as a juvenile. Both skeletons are poorly preserved. In addition, the grave was truncated by Ditch 115 and possibly by Ditch 120 and both skeletons have suffered some damage as a result of this truncation.

SK127 [111] Adult female
This adult female's stature is estimated at about 159–160cm (5'3"). She had been placed in a supine extended position, on a west–east orientation. The cranium was absent due to truncation by Ditch 115. In addition to this, the upper right arm, part of the lower left arm, a large proportion of the upper vertebrae and some ribs are absent. This may be a result of animal burrowing. The greater sciatic notch indicates that the individual is female, aged as middle adult (25–35 years) using epiphyseal fusion data. The skeleton has varying levels of preservation, with the overall preservation being described as poor. Despite this, the entire right leg and most of the left leg (excluding the femoral head) are in very good condition.

The vertebrae display three instances of Schmorl's nodes on the inferior body of the second lumbar vertebra and on both the superior and inferior body of the third lumbar vertebra. As none of the other vertebral bodies survive, the prevalence of Schmorl's nodes could have been higher. Schmorl's nodes occur following the herniation of the nucleus pulposus, an event common in mature individuals, but can also occur following an episode of trauma.

A number of interesting lesions were noted on the posterior aspect of the lower thoracic vertebral bodies. Three of the four vertebrae which have a surviving body display a void, with the fourth exhibiting a bony growth. This bony growth appears to represent an ossified ligament; its location would suggest the posterior longitudinal ligament. This ossification would result in the compression of the spinal cord, with resulting damage of the grey matter and the associated venous congestion. In animal models, the herniation of the nucleus pulposus has been reported as a local factor which initiates OPLL (ossification of the posterior longitudinal ligament). It appears that this is the early stages of ossification, as it is only visible on one vertebra; symptoms would probably consist of mild pain, numbness in the hands and clumsiness (Choi, Song and Chang 2011). Had this ossification continued, the individual's gait would have been affected. There is no further evidence of degenerative change on the bones of this individual; therefore, it can be suggested that this is not a mature adult, but that she may instead have taken part in heavy lifting or suffered some form of trauma through physical exercise. Both activities can result in the herniation of the nucleus pulposus at a younger age. It is these herniations which may have caused the OPLL and the associated pain and stiffness.

Skeleton 127 was associated with three copper-alloy lace tags, two copper-alloy wrist clasps and an iron buckle. A fourth copper-alloy lace tag was located by SK128. Sixty-four beads were also retrieved from the head and chest area of SK127. It is likely that the lace tag currently associated with SK128 originally belonged to SK127 and had been displaced during the period of time between deposition and excavation.

SK128 [111] Juvenile
This juvenile's stature is estimated at about 127cm (4'2"). The individual had been placed in a supine extended position, on a west–east orientation, immediately north of SK127. The cranium was absent due to the truncation of the grave by Ditch 115. In addition to this, this individual's right arm, part of the lower left arm, the majority of the ribs, all the vertebrae and the right innominate are absent, which may be the result of animal burrowing. This individual has been aged at 8–9 years ±24 months using epiphyseal fusion and metrical data. Bones which were collected from above SK127 have been aged as 8–9 years old ±24 months and are also likely to be part of the disturbed remains of SK128. They consist of rib fragments and part of the right mandible with three teeth still present in the alveolar bone. This highlights the disturbance sustained, but also potentially shows the recognition of human skeletal elements by the ditch diggers and the subsequent disposal of these elements into the upper fill of the grave.

It would appear that both these individuals were placed in this grave at the same time, evident through the spatial relationship of the bodies and the grave goods associated with both individuals. It is therefore suggested that they are family members.

Burial 3: SK138 [109]
Infant
This infant had been placed in a supine extended position with slight flex on the right arm and the left arm bending back onto the thorax, on an east–west orientation. The absence of the right scapula, upper cervical vertebrae and upper right ribs can be explained by burrowing; this disturbance was visible during excavation. This individual has been aged at 2–3 years (±12 months) using dental eruption data, epiphyseal fusion and metrical data. A small piece of worked bone (SF. 22) and a small sherd of glass (SF. 189) were recovered from close to this burial, representing possible grave goods.

Burial 4: SK136 [180]
Infant
This infant was partially disturbed but appears to

have been placed in a supine position, perhaps lying slightly on its left side, on an east–west orientation. The individual has been aged at 2–4 years based on epiphyseal fusion and metrical data. There were no grave goods; however, a stone close to the skull may have been deliberately placed there and could have served as a grave marker. This grave appears to have either been cut into the top of Pit 180 or buried in the pit before it had completely filled in.

Burial 5: SK122 [123]
Adult
Two feet were recovered from this very truncated grave. Both calcanei display enthesophytes at the location of the Achilles tendon attachment, which can be due to repeated or acute trauma of this tendon. This partial skeleton can be aged as adult but cannot be sexed.

Burial 6: SK106 [107]
Middle/mature adult male
This adult male's stature is estimated at about 173–175cm (5′8″–5′9″). The skeleton was in a supine extended position on a west–east orientation. It is very well preserved, with the majority of skeletal elements present, although the grave was truncated by Burial 7 and so the tibiae, fibulae and feet of this individual were absent. Sexually diagnostic features in the subpubic region and the greater sciatic notch, supported by cranial morphology, indicate that this individual is male. Dentition, in addition to other pathological lesions, gives an age of middle/mature adult (35–45 years old). A spearhead (SF. 7 and 18) and a bone comb (SF. 188) were found in the grave. The lower dental arcade displays poor dental hygiene with severe dental calculus, two instances of dental caries and a significant level of wear. The first and second cervical vertebrae display eburnation on both the right and left inferior articular facets and the right and left superior articular facets, respectively. The practice of consistently carrying loads on the head can generate substantial axial strain which can result in eburnation of the upper cervical vertebrae. The majority of vertebrae show some sign of marginal lipping, with a number of the cervical and thoracic vertebrae displaying osteophytes. The level of severity and the number of vertebrae affected increases further down the vertebral column. The vertebrae also display five instances of Schmorl's nodes on the inferior body of the tenth thoracic vertebra, on both the superior and inferior body of the eleventh thoracic vertebra and the superior body of the twelfth thoracic vertebra and the second lumbar vertebra. Schmorl's nodes occur following the herniation of the nucleus pulposus, an event common in mature individuals. From the evidence of the vertebrae alone, this individual suffered from degenerative joint disease (DJD) and was in the later years of his life (middle/mature adult). Eburnation of both shoulder joints, on the acromion process of the scapula and the distal end of the clavicle, supports this theory. The eburnation also suggests a repetitive action such as heavy

repetitive manual labour or the wielding of weapons. Four of this individual's right ribs display the marks of healed fractures. These healed injuries and the evidence of repetitive actions suggest that this individual could have been involved in violence or combat, although accidental injury in the context of manual labour is also a possible cause. That he had the time and resources to heal suggests he was a valued member of the community.

Burial 7: SK103 [104]
Middle adult male
This adult male's stature is estimated at about 171–174cm (5′7″–5′9″). The skeleton was placed in a supine extended position on a west–east orientation. It is very well preserved, the majority of skeletal elements being present apart from the seven cervical vertebrae. The lower legs extended beyond the limit of excavation, so the tibiae, fibulae and feet were left in situ. The greater sciatic notch, supported by cranial morphology, enables this individual to be identified as male. Dental wear, in addition to pathological changes on the bone, age this individual as middle adult (25–35 years old). This individual suffered from extreme calculus and one instance of dental caries, with a low level of dental wear. All seven cervical vertebrae are absent, most likely as a result of animal burrowing. Thoracic and lumbar vertebrae show slight evidence of marginal lipping. The superior surface of the right clavicle displays woven bone, as does the corocoid and acromion process of the left scapula, the left ulna, radius and distal humerus, and right distal radius. Both innominates show woven bone on the illiac blade, with porosity visible on both illiac crests. The woven bone or pathologic bone is a result of inflamed tissue, a reaction by the bone to some repetitive action or trauma. While this individual does exhibit vertebral lipping, this pathology may not be solely age-related and may be a result of physical activity undertaken throughout his life. The same can be said for the inflamed bone. This individual was laid on his shield and was accompanied by a spearhead and a knife. The average age of death of an Anglo-Saxon male was 34.7 years so this individual would have been a senior member of the community.

Burial 8: SK130 [129]
Infant
While this infant burial had been partially disturbed, the majority of skeletal elements were present. The body appears to have been placed in a supine position, perhaps lying slightly on its left side. This individual was aged at 1 year ± 4 months using dental eruption data, epiphyseal fusion and metrical data. A sherd of pottery was found apparently laid on the chest and five beads were found in the neck area.

Human bone from non-grave contexts

From the 26 non-burial features excavated at the site, eighteen features (three ditches and fifteen pits) contained human remains. These features were located

across the site and were not solely concentrated in the burial area in the north-east of the excavation area. Analysis of this material was carried out in order to attempt to ascertain the original size of the cemetery and to evaluate how much truncation had occurred during the period after it went out of use. The results of this analysis are presented here as a discussion, with reference to the main non-burial features. Table 9 details the minimum number of individuals (MNI), age and sex information, and any pathologies or other skeletal information which may be relevant to this cemetery and the population as a whole. Of these non-burial features, a number are worthy of further discussion due to the presence of partially articulated and potentially redeposited human remains.

Pit 132

The upper fill of Pit 132 contained the partial remains of an infant, SK133 (22 bones). This individual was not allocated a cut, and therefore does not have an individual burial number. The pars basilaris and pars lateralis of the occipital, arms (partial humerus and two radii), thorax (ribs and vertebrae) and a partial fibula were found in partial articulation and therefore can be interpreted as a deliberate deposition of human remains. Using metrical data, these skeletal elements age this individual at 1–2 years old. During excavation of the pit, a further thirteen infant bones (cranium fragments and clavicle), fourteen adult bones and five juvenile bones were retrieved. It is likely that the infant remains found during excavation of the pit

are associated with the partial infant SK133.

Pit 157

Despite only a small portion of Pit 157 being available within the excavation area, 43 adult fragments and one juvenile bone were retrieved from the fill (158) of this feature. The presence of nine vertebrae and twelve rib fragments, found in close proximity, suggests that they may represent a partially articulated adult and therefore the redeposition of a disturbed inhumation. Indeed, the other adult human bone may belong to the same individual. Three of the vertebrae have Schmorl's nodes (present on the inferior and superior surface of T11, T12 and L1) but none of the vertebrae display any other age-related pathologies and therefore it can be said that this individual suffered from a period of trauma or a fall from height, resulting in the herniation of the nucleus pulposus. A healed fracture was also noted on a right rib fragment, which may be the result of the same trauma or evidence of interpersonal violence, a trait noted in two of the complete inhumations examined.

Pit 180

Pit 180 had two burials (SK136 [135] and SK138 [109]) either cut into it, or placed in it before it had entirely filled in. One adult bone, one juvenile bone (approx. 6 years) and thirty infant bones were identified at the base of the pit. The thirty bones (twenty of which are cranial vault fragments) most likely all belong to an infant aged 2 years ± 8 months. In view of the incom-

Table 9. *Summary table of human skeletal material from non-burial contexts.*

Cut	Fill	Feature	Period	Adult	Subadult	Juvenile	Infant	MNI	Sex	Pathology
	100	Topsoil		3			2	x		
	101	Subsoil		55	2	5		x		
115	114	Ditch	Post-medieval	3				2		
118	119	Ditch	Post-medieval	1			1	2		
120	121	Ditch	Post-medieval	1		1		2		
132	134	Pit	Saxon? Charnel	14		5	35	3		
139	140	Pit	Saxon? Charnel	40		2		3		
141	142	Pit	Early Saxon	5		3		2		
143	144	Pit	Early Saxon	1				1		
147	148	Pit	Early Saxon	2				1		
149	150	Pit	Early Saxon	1		1		2		
157	158	Pit	Early Saxon	43		1		2		Schmorls nodes on superior and inferior bodies of 2 thoracic vert and one lumber vert; congenital foramen in sternal body; healed rib fracture.
159	160	Pit	Early Saxon	5				1		
165	166	Pit	Early Medieval	6				1	?F	Schmorls nodes
167	168	Pit	Early Saxon	18				2	F	
171	172	Pit	Saxon? Charnel	6		1		2	F	Premature suture closure
173	174	Pit	Early Saxon	2				1		
175	176	Pit	Early Saxon	2				1		
177	178	Pit	Post-medieval	1				1		
180	179	Pit	Saxon? Charnel	1		1	30	3		

plete state of the infant and its location in a large pit rather than a grave, it is likely to represent a disturbed and redeposited inhumation. The incomplete nature of this skeleton has resulted in this individual not having a skeleton number or burial number allocated.

Of the 18 non-burial features which contained human remains, the MNI varied between one and three. This shows that the cemetery originally extended beyond the small group of inhumations excavated, with residual evidence for other graves across the excavation area. The existing graves demonstrate the clustered nature of burial, which may have extended south in a similar concentration.

Discussion

Nine inhumations were recovered during this excavation, in addition to three probable partially articulated redeposited skeletons and a significant quantity of disarticulated human skeletal remains found in the topsoil, subsoil, and a number of other features, most of which post-dated the cemetery and therefore represent probable truncated graves. In the cemetery area, there were three infants, one juvenile, one young adult, one middle adult, one middle/mature adult and two individuals broadly aged as adults. Within the adult group, two males and two females were identified, ranging in height from 5'3" to 5'10". The stature estimates for the individuals from this excavation are similar to the average stature of Anglo-Saxon individuals; males would have stood at around 5'8" and females at 5'3", only slightly shorter than modern-day averages. The results have been presented as a summary table including any observed pathologies (Table 9). A further two partial infants and one partial adult, from three separate pits, have also been identified. Despite the high level of truncation on the site, the overall preservation of human remains is very good, with the fragile bones of infants and juveniles surviving well. Human remains which were disturbed through truncation and redeposition have also survived quite well.

This small group of burials was located in the north-eastern part of the excavation area. Grouped closely together, there does not appear to be any deliberate separation of sex or age groupings. Previous excavations carried out directly to the north of this site in 1989–1990 resulted in the discovery of five burials, the proximity of which to burials found in the 2014 excavation indicates that they are part of the same cemetery (Robinson and Duhig 1990). The presence of human bone in the majority of features on this site implies that this cemetery originally extended further south. The 1989–1990 excavations found that graves were well spaced, with no evidence of any of the graves intercutting one another. Therefore, it was suggested that the graves had markers or that the cemetery was only in use for a short period of time (Robinson and Duhig 1990, 32). However, the current excavation revealed evidence for several intercutting graves, together with human remains recovered from Pits 132 and 180. This suggests that this area of the cemetery, if not the entire cemetery, was in use for a longer period of time than previously assumed.

In the Anglo-Saxon period, causes of death included violence, accident, disease and famine. Infant mortality was high, with average life expectancy in the thirties, although there are many examples of older individuals. These individuals provide evidence of injury and frequent infant burials within a small area.

Four of the nine skeletons display pathological changes on the bone. SK103 and SK106 show the highest level of pathologies, both in terms of dental disease and the associated changes, and in relation to degenerative diseases of the vertebral column. Both these males suffered from extreme dental wear, mild to extreme calculus, and dental caries, and, as a result, some cases of alveolar bone resorption. The remainder of the skeletons do not have surviving skulls and, therefore, any evidence of dental disease is absent.

Both males also display vertebral marginal lipping, with SK106 showing additional eburnation and evidence of degenerative joint disease (DJD). In view of this evidence, both males seem to have led lives which involved some form of intensive manual labour, which greatly affected their bones.

SK106 also has Schmorl's nodes on a number of his vertebrae, which occur as a result of the herniation of the nucleus pulposus, and are further proof of the level of physical activity carried out by this individual throughout his life. In addition to this, he has four healed rib fractures. This injury and the subsequent recovery of this individual, together with the various other pathologies of both SK103 and SK106, show that both men had probably experienced both manual labour and violence. The weapons buried with them also indicate warrior status. The partial adult remains from Pit 157 also display Schmorl's nodes and a healed rib fracture. While the vertebrae do not show any signs of degeneration, the healed fracture demonstrates that the individual survived at least one episode of interpersonal violence or accidental injury.

SK127, the female from the double burial, also has Schmorl's nodes on her vertebrae, but the presence of the potential ossified posterior longitudinal ligament (OPLL) and the absence of other bony manifestations, show that they are not a result of degenerative change, but instead result from an episode of trauma.

Most of the graves contained grave goods, with the exception of Burials 4 (SK136) and 5 (SK122). In the case of SK122, the grave was so severely truncated that we cannot say whether or not it originally contained any grave goods. Two pieces of possibly worked bone and a small fragment of glass were recovered from the fill of [109], which contained SK138, but they may not be directly associated with the inhumation. A right first metacarpal from Pit 139 was green in colour, showing that at some point it had been in contact with a copper object and therefore had originally been from a furnished grave.

It seems the location of the non-burial features on this site bears no relation to the quantity of bone recovered, with the majority of the features (81.3%) on the site containing at least one fragment of human bone, despite some of these features not appearing to be associated with the existing cemetery group. This is the norm for disturbed cemetery sites such as this one, with the topsoil and subsoil also containing a significant quantity of human bone. The MNI of features within the concentrated inhumations is similar to that of features located further south on this site and this constant figure shows that this part of the site probably contained more Anglo-Saxon graves, destroyed during the past levelling activity. Examination of the material from the pits and ditches surrounding the inhumations did not result in further elements of those inhumations being found. The presence of additional individuals, regardless of the varying levels of truncation, suggests that this was the location of a large Anglo-Saxon cemetery and not just a small family burial plot.

The Metalwork and other Grave Goods
Dr Rosie Weetch

Introduction

Of the eight burials excavated during the excavation, six were associated with grave goods, which are listed in the Burial Inventory. A range of dress accessories usually associated with females, including wrist clasps, brooches, a girdle-hanger and beads, were recovered from two burials (Burials 1 and 2). War gear in the form of a shield boss, shield fittings and a spearhead were associated with Burial 7, suggesting a male. The remaining three burials (Burials 3, 6, 8) were less well furnished, although Burial 6 contained the remains of a decorated bone comb. A number of objects were found outside burial contexts, which must in some cases represent finds from disturbed graves. The grave goods indicate a sixth-century date for the burials and, overall, these finds are fairly consistent with the range of artefacts recovered from contemporary cemeteries across Anglo-Saxon England. A number of the finds and features of the site are interesting and fairly unusual, especially those relating to the two female burials, Burial 1 and Burial 2, and the male 'warrior' burial, Burial 7.

Dress Accessories

Brooches (Figs. 7, 26; Plate 1)
Three brooches were recovered from the site, one found within Burial 1 (SF. 25; Fig. 7, Plate 1), and the other two found in pits and not associated with human remains (SF. 6, SF. 17; Fig. 26). The latter two brooches are similar in form, both Anglo-Saxon small-long brooches with trefoil-shaped heads. SF. 6 is fragmentary and the footplate no longer survives, but SF. 17 is more complete, with a fluted or fan-shaped footplate. The possible traces of burning noted on SF. 6 might be evidence for cremation burials at Haddenham. Small-long brooches are amongst the most common forms of early Anglo-Saxon dress accessories, known from both cemetery excavations and, more recently, metal-detecting. They are found throughout East Anglia and the East Midlands, with a concentration in Cambridgeshire (Leeds 1945, 79; Dickinson 1977, 174). They are often found in pairs worn at the shoulders, together with other brooches, such as cruciform and great square-headed brooches (Dickinson 1977, 174). Despite their ubiquity across the eastern areas of England, they have yet to be the subject of detailed typological and chronological study. Leeds' 1945 typology is still in use, and the two Haddenham examples both fall within his trefoil-headed type (Leeds 1945, 79). Small-long brooches were included in an analysis of four cemeteries in East Anglia, where the trefoil-headed and plain rectangular headed types were assigned to Phase FA1, late fifth/very early sixth century (Penn and Brugmann 2007, fig. 5.22). Evidence for their manufacture in England comes from a mis-cast example from Winterton, South Humberside (Leahy 2003, 141).

The brooch from Burial 1 (SF. 25) is perhaps the most significant find from the site. It is an asymmetric strap-pendant from a horse bridle, converted into a brooch with a riveted pin-fitting on the reverse. It was found at the left-hand shoulder, indicating where it would have been worn. Anglo-Saxon strap-pendants are rare finds, and until very recently they were often misidentified as shield mounts or belt fittings (Fern 2005, 50). Most examples have a face mask at the junction of the head and/or at the foot, with a lozenge-shaped central section. The head and foot terminals are always asymmetric, and are usually rectangular, fluted, or notched as on the Haddenham example. All are copper-alloy, and a number of the finer examples have elements of the design highlighted in gilding. A small number of examples, including Haddenham SF. 25, also have thin silver appliques adhering to the terminals. The use of red glass/enamel inlays is unique to Haddenham SF. 25, but is a feature found on other early Anglo-Saxon objects, such as cruciform brooches (Martin 2015, 142–143).

Examples of strap-pendants come from three contexts: horse burials (often accompanying a male human burial), non-horse burials, and as stray/metal-detected finds. In Anglo-Saxon horse-burials, strap-pendants are found as part of elaborate horse-harnesses, for example, the two found at Eriswell 104 (Lakenheath), Suffolk, in grave 4116 (Fern 2005, fig. 5.1).

The Haddenham asymmetric strap-pendant was not found in a horse-burial, nor was it found with any other horse-harness fittings. A number of other asymmetric strap-pendants have been found in burials without horses, including two fragmentary examples, one from Bifrons, Kent, with a similar helmeted face mask (Hawkes 2000, 61), and a plainer one from Finglesham (Hawkes and Grainger 2006, 145). Both were found in female burials, but unlike

the Haddenham example, neither have evidence of being converted into brooches. They were broken in antiquity, and were therefore buried as fragments. The broken Finglesham strap-pendant was found at the left hip, amongst a collection of other artefacts interpreted as representing the contents of a bag or pouch suspended from a belt (Hawkes and Grainger 2006, 144). This seems also to be the context for pieces of harness fittings recently found in seventh-century burials at Exning (pers. comm. A. Peachey). Even once these harness fittings had broken and were unable to perform their primary function they were kept safe and buried with the dead. This suggests that such objects were afforded a special significance, perhaps kept as amulets or curated items. The possible implications and interpretations to be drawn from this practice will be explored in more detail below.

Horse fittings are not just included in female burials as curiosities or amulets, but also as part of the female dress (Fern 2005, 46). There are only a handful of examples of asymmetric strap-pendants being used in this way. One, complete with two opposing face masks, was found in Grave 180 at Butler's Field, Gloucestershire (Boyle *et al*. 1998, 130–131). Although this example has no evidence for the addition of pin fittings on the reverse, it was found at the left shoulder (Boyle *et al*. 1998, 184), suggesting that it was probably attached by other means to the costume at the appropriate location for a brooch. A pair of asymmetric strap-pendants with opposing facemasks was found across the centre of the abdomen between two saucer brooches in Grave 639 at Mucking, Essex (Hirst and Clark 2009, 107–109). Again these lacked secondary pin fittings, but from their location on the body appear to have been incorporated into the costume of the female, perhaps still used as strap fittings (Hirst and Clark 2009, 536). In Grave 767 at Mucking, a similar pair were found at the shoulders of a female with the remains of additional spring pin fittings very similar to those associated with Haddenham SF. 25. A further example converted into a brooch was the only object buried in a probable female inhumation in Cemetery B at Beckford, Worcestershire (Evison and Hill 1996, 10 and fig. 20). It was converted to use as a brooch through the addition of a spring holder on the reverse (the spring no longer survives).

A growing number of asymmetric strap-pendants are being recorded as metal-detected finds on the Portable Antiquities Scheme database. As these do not come from known burial contexts it is impossible to ascertain whether any of these examples are from horse-burials, female-burials, or accidental losses; however, none of the recorded examples appear to have any secondary pin fittings attached to them.

The date of the asymmetric strap-pendant from Haddenham can be ascertained through examining its decoration. The face masks with curled sidelocks or helmets on these objects are part of Salin's Style I decoration. Similar helmed faces are found on Martin's Group 4, or 'florid', cruciform brooches (Martin 2015, 64), which have been dated to the period AD 525–560/70. A similar date for the asymmetric strap-pendant from Haddenham seems probable, and this ties in with the dating offered for the two pairs from Mucking (Hirst and Clark 2009, 537). As this strap-pendant was re-purposed as a brooch, presumably some time after it had been used on the horse-harness, it may be the case that it was already quite old when it was deposited in the burial.

Buckles (Figs. 7, 8, 13, 24)
Four buckles were recovered, all from burial contexts. Three of these are very simple, oval iron buckle frames of Marzinzik Type I.11a-i (equivalent to Hines and Bayliss BU8), two with their square-sectioned tongue remaining (SF. 53, SF. 186; Figs. 13 and 24) and one without the tongue (SF. 26). This form of buckle is very commonly found in Anglo-Saxon burials, and appears to have been worn throughout the period AD 450–700 (Marzinzik 2003, 33). The fourth buckle (SF. 32) is a copper-alloy plate brooch of Marzinzik Type II.17. This type is less common: Marzinzik noted only seven examples from England (Marzinzik 2003, 45). This form of buckle is found in female burials containing other buckles, in connection with pouches, girdle-hangers and tool-sets (Marzinzik 2003, 45). This is true of the Haddenham example, found in Burial 1, which also contained buckle SF. 26, found at the left hip, close to the tool-set and girdle-hanger (SF. 33), and the pierced bone ring (SF. 31). This indicates that the female in Burial 1 was interred with a small purse or pouch which was closed using this small copper-alloy buckle. Based on associated grave goods, this form of buckle has been dated to the sixth century (Marzinzik 2003, 45).

Wrist clasps (Figs. 8, 9, 12, 13)
Both Burial 1 and Burial 2 contained sets of wrist clasps associated with the lower arms on both right and left hand sides. In Burial 1 both wrist clasp sets (SF. 28, and the fragmentary SF. 34; Figs. 8 and 9) belong to Hines Type B7, a simple form with limited repoussé and stamped decoration that would have been sewn on to the garment through the perforated holes at the corners (Hines 1993, 39). Two of the wrist clasp sets in Burial 2 (SF. 19 and SF. 20; SF. 21 and SF. 180; Fig. 13) are also of this type. They are very common, being found across Norfolk, Cambridgeshire, Northamptonshire, Leicestershire, Nottinghamshire and East Yorkshire (Hines 1993, fig. 79). Hines has dated this wrist clasp type to the sixth century, although he notes a small handful of examples that may come from late-fifth-century contexts (Hines 1993, 41). In the East Anglian chronology, B7 wrist clasps are assigned to phase FA2A, late fifth/early sixth century AD (Penn and Brugmann 2007, fig. 5.22). The final wrist clasp set (SF. 10; Fig. 12) was also found in Burial 2, but belongs to Hines Type B14b, which are rectangular clasps with attachment lugs and applied decoration in the form of thin plates with repoussé ornament. This type is not often encountered, but examples are known from the cemeteries at Barrington B (Hooper's Field) and Haslingfield, both in Cambridgeshire, *c.* 20 miles south of Haddenham

(Hines 1993, 56).

Lace tags (Fig. 12)

The identification of the function of the four straight, rolled copper-alloy tubes in Burial 2 is not straightforward, and it is clear from other examples that the role of such tubes within Anglo-Saxon burials was not consistent. Some have been identified as handles for cosmetic brushes or other elements of toilet sets (Hills and Lucy 2013, 64–6). The first clues for the function of the Haddenham examples come from their location within the burial: two (SF. 11 and SF. 12) at the ankle and foot of the right leg; and two (SF. 15 and SF. 16) at the lower left leg (SF. 16 was probably displaced from this location to the shin of SK128). This suggests they may have been lace tags, clenched onto either end of a thong that was worn around the shoes/feet or laced up the calves. Lace tags have been identified in seventh-century burials, but these are different in form to the Haddenham examples, either narrow and flat or conical with one open end (Geake 1997, 64–65, fig. 4.21). Clear examples of lace tags from sixth-century burials and in a similar form to the Haddenham examples are not common. In Grave 117 at West Heslerton, three lengths of copper-alloy tube with sets of incised linear decoration were also found in the area of the legs of a female skeleton (Haughton and Powlesland 1999, 194). The excavators suggest that they belong to a purse mount as they enclose matted flax/hemp and other non-plant fibre (Haughton and Powlesland 1999, 194). However, this association with organic material does not preclude them from being used as tags for laces.

Most examples, however, are located at the hip (most often right-hand side) of female skeletons, associated with purse assemblages, and interpreted as purse mounts or bindings. The clearest evidence of this comes from at least five graves at West Heslerton, East Yorkshire (Haughton and Powlesland 1999, 117–118), where lengths of copper-alloy tubing with leather remains inside were found in association with purse assemblages, often incorporating ivory purse rings (as in Grave 107) or suspended tool-sets (as in Grave 8, Grave 43, Grave 86, Grave 132). In West Heslerton Grave 107 the copper-alloy tubing encloses a copper-alloy purse lid (Haughton and Powlesland 1999, 176). Those from other graves in the cemetery contain remnants of leather or textile, suggesting they were attached to thongs or bags. The use of copper-alloy tubes in purse construction can be found in a handful of other female Anglo-Saxon burials. In Grave 86 at Morning Thorpe Anglo-Saxon cemetery in Norfolk, one short length of copper-alloy tube with sets of transverse linear ornament was found in the area of the hip of a female skeleton wearing two annular brooches and two bucket pendants (Green *et al.* 1987, 225). Three examples from Grave 151 at Sleaford, Lincolnshire, were also associated with the hip area (Thomas 1887, 398–9), as were the two in Grave 91 at Empingham, Rutland (Timby 1996, 120, fig. 142).

A further possible function for these objects is seen in Inhumation 46 at Spong Hill (Hills *et al.* 1984, 100,

fig. 101). The copper-alloy tubes in this burial were associated with wrist clasps, from which they had become detached. Hines' wrist clasp Type B13b can be distinguished by the addition of soldered copper-alloy tubes, often with sets of incised transverse lines (Hines 1993, 50–51). As evidenced at Spong Hill, these tubes often become detached from the clasp and therefore look very similar to lace tags. The lengths of the Haddenham examples suggest that they could not have been attached to the wrist clasps also found within the burial.

A set of four lace tags very similar to the Haddenham examples is part of the so-called 'cunning woman's' burial at Bidford-on-Avon, Warwickshire (Dickinson 1993). The location of these in the region of the neck of the skeleton raises yet another possibility for the function of these artefacts. Dickinson argued that these were the lace ends for thongs that tied a bib or bag around the neck, onto which 12 bucket pendants were sewn.

A pair of copper-alloy tubes also came from the disturbed double Grave 60/61 at Broughton Lodge, Nottinghamshire (Kinsley 1993, 44, 143). Although we do not know the position of the tubes in the burial, it is interesting to note that it also contained bucket pendants, like Burial 2 at Haddenham, Bidford-on-Avon, and Grave 86 at Morning Thorpe. The combination of these two rare artefact types in four separate burials raises interesting questions about what these artefacts meant, and whether they constitute a specific form of costume that related to the status and role of these females.

Other examples are known from contexts that do not aid further interpretation of their function. A straight, rolled lace tag, but with no decoration, a rivet hole, and which is much thinner and shorter than the Haddenham examples, was an unstratified find at the Anglo-Saxon cemetery at Castledyke South, Barton-on-Humber (Drinkall and Foreman 1998, 209). A single example from Frilford, Oxfordshire (British Museum 1986, 0204.15) is an antiquarian find and it is not possible to reconstruct its location within the burial. Eight fragments of copper-alloy tube of varying diameters and lengths come from the Anglo-Saxon cemetery in Kempston, Bedfordshire, excavated in the 1860s (British Museum 1891.0624.166, 170–173, 186–188). Unfortunately, the grave groups became disorganised in the nineteenth century and we are unable to determine whether they come from the same or different burials. The presence of tubes of different diameter, some over 10mm, suggests that these would not necessarily all have been used for the same purpose. In Grave 50 at Sleaford, Lincolnshire, a single fragmentary example remains (British Museum 1883, 0401.100), but it is not clear from the original grave report where this was found in the burial (Thomas 1887, 391). Two incomplete examples were found with fifth-century cremations at Spong Hill, both associated with adults, one of whom was probably female (Hills and Lucy 2013, 255). Three examples of a similar size and form, and with decoration similar to the Haddenham ones, are recorded on

the Portable Antiquities Scheme database: Snetterton, Norfolk (NMS-3B92C5); Wickham Skeith, Suffolk (SF-85EA31); and Barton in Fabis, Nottinghamshire (DENO-299306).

All the examples definitely associated with purses have an open C-shaped section, suggesting that they acted as bindings along the edge of the seam of a purse/bag or along the edge of a purse lid. The four from Haddenham have a closed edge-to-edge seam which could not function in this way, and must have completely encircled an organic substance rather than just edging it. This closed-tube form of the Haddenham examples makes it likely they were clenched around thongs or laces, as suggested for the Bidford-on-Avon examples, that were wrapped around the legs as part of the female's costume.

Strap-mounts (Figs. 7, 8, 9)
The three mounts from Burial 1 (SF. 27, SF. 30 and SF. 88; Figs. 7, 8 and 9), two of which have punched decoration, are likely to have been attached to a leather strap. A similar suite of belt fittings with punched decoration was found in Grave 1336 at Alwalton, Cambridgeshire (Crummy 2007, 270, fig. 17), some of which were tongue-shaped like Haddenham SF. 30. One rectangular, punched mount and three tongue-shaped mounts were also associated with a purse assemblage in Grave 98B at Empingham II, Rutland (Timby 1996, 123, fig. 149). At Edix Hill (Barrington A), Cambridgeshire, similar fittings were found in Graves 69 and 79 in association with a purse assemblages (Malim and Hines 1998, 71, fig. 3.18 and fig. 3.55; 79, fig. 3.19 and fig. 3.57). The position of the 12 examples from Grave 79 at Edix Hill, at the right hip amongst the purse assemblage and along the body, led to them being interpreted as mounts for a purse strap that hung from the right shoulder (Meaney 1998, 269). The locations of the two Haddenham mounts in Burial 1 support a similar interpretation. SF. 27 was found over the right shoulder, and SF. 88 was found next to the left hip below the suspected purse assemblage with its copper-alloy buckle (SF. 32). This suggests that, unlike in Edix Hill Grave 79, the strap was worn across the body. The small mount (SF. 30) with single rivet hole may also be related to this strap — perhaps as a strap-end — but its location in the burial far off the right hip makes it difficult to see how it fits in with the suggested reconstruction of the strap.

Necklace suites
Beads
A total of 142 beads were recovered from the excavated area, all from three burial contexts (Burials 1, 2 and 8). A wide range of forms and materials are represented in the Haddenham bead corpus (Table 10). The most common are amber beads, which account for 87% of the beads found. Glass beads occur as blue or white; as polychrome white with blue glass trails; or as gold-in-glass beads.

The necklaces in Burials 1 and 2 are remarkably similar, not just in the combination of types of beads, but also in the different proportions of each bead type as part of the whole necklace (summarised in Table 10). This is especially interesting given the inclusion of unusual bead types, such as the cylindrical 'chalk' or bone/ivory beads. It is not possible to reconstruct the sequence of beads within the necklaces, so we cannot know whether the two were also strung in the same order. This similarity may be explained by the position and role of these women within their communities.

Amber
A total of 123 amber beads were recorded, all associated with the two adult females (Burial 1 and Burial 2). Most of these beads are irregular globular-shaped, displaying only limited reworking of the natural shape of the amber other than the flattening of the perforated ends. Some show more regularity, being either cylindrical or barrel-shaped. A range of sizes are present, with a diameter range of between 5mm and 14mm. Amber is generally thought to have been imported into Anglo-Saxon England from the Baltic, although a number of local sources along the east coast of Britain may have been exploited (Huggett 1988, 64–66). Amber beads dominate Brugmann's Phase A2, dated AD 480–580, where they are often combined with gold-in-glass beads (Brugmann 2004, 71), as they are in both Burial 1 and Burial 2 at Haddenham.

'Chalk' or bone/ivory
The two white chalky cylindrical beads from Burial 1 (SF. 164) and Burial 2 (SF. 55) are identical in size and form. They are made of an enigmatic white material that is often described as 'chalk' (Brugmann 2012 118). Chemical analysis of the Haddenham examples has revealed that they are made of calcium phosphate, perhaps a much-degraded form of bone or ivory. Examples of these have been recovered from a number of burials, including Grave 377, Grave 425, and

Table 10. The incidence of different types of bead by burial.

| | Number of beads | Amber | 'Chalk' or bone/ivory | Bone | Monochrome glass | | | Polychrome glass | |
					Blue	White	Dark with metallic finish	Gold-in-glass	White/blue
Burial 1	76	68	1	1	1		2	3	
Burial 2	61	55	1	1			2	2	
Burial 8	5					1			4
Totals	**142**	**123**	**2**	**2**	**1**	**1**	**4**	**5**	**4**

Grave 296 at Buckland, Dover (Parfitt and Anderson 2012).

Bone
A total of two bone beads or spacers were recovered, one from each of Burial 1 (SF. 162) and Burial 2 (SF. 84). Their forms are very similar: hollowed cylinders of bone. A similar pair of bone beads or spacers are known from the sixth-century Grave 111 at Long Wittenham, Oxfordshire (British Museum 1875, 0310.300 and 301).

Glass
Glass beads occurred in all burials where beads were recorded, totalling 15. The two adult females (Burial 1 and Burial 2) were buried with only a small number of monochrome and gold-in-glass beads, whereas the infant Burial 8 contained one monochrome bead and four polychrome beads.

There are six monochrome glass beads: one short, white cylinder bead (Brugmann Type CylRound) from Burial 8 (SF. 198), a type that belongs to Brugmann's Phase B, AD 555–650 (Brugmann 2004, 70); a pale blue melon bead from Burial 1 (SF. 96); and four thin tubular beads (Brugmann Type ConCyl) of a dark glass, with some metallic finishing on the surface (Burial 1, SF. 95, SF. 207; Burial 2, SF. 173, SF. 83). These tubular beads belong to Brugmann's Phase A2, dating to AD 480–580 (Brugmann 2004, 70).

All four of the polychrome glass beads are from infant Burial 8. They are all white with pale blue trails (Brugmann Type Koch34Bl). Three have narrow-crossing wave trails (SF. 199, SF. 23 (Plate 6), SF. 35), while one (SF. 36) has a spiral trail. These types of bead belong to Brugmann's Phase B2, which dates to AD 580–650 (Brugmann 2004, 70).
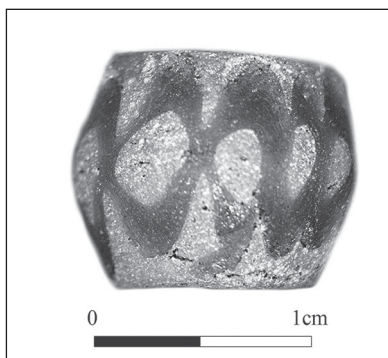
Monochrome Plate 6. *SF23 White glass bead with blue glass crossing trail.*

The remaining five are gold-in-glass or imitation gold-in-glass-type beads. True gold-in-glass beads are made by drawing a glass bubble into a tube, layering gold foil onto its surface, which is then covered in a further layer of glass. This tube is then stretched, threaded onto wire, reheated, and crimped to give a segmented appearance of conjoined globular beads (Hirst 2006, 26). These segmented tubes could then be cut down into single beads (as in SF. 89 and SF. 90) or into lengths of two (SF. 91), three (SF. 65) or four

(SF. 87 (Plate 7)) conjoined beads (Brugmann Type ConSeg). Brugmann's study of Anglo-Saxon beads suggests that they usually occur in burials dated between the late fifth and late sixth century (Brugmann 2004, 75), often in association with amber beads, as they do in the Haddenham burials.

Monochrome Plate 7. *SF87 Segmented gold-in-glass bead.*

Pendants and copper-alloy beads (Fig. 9)
A number of copper-alloy fragments, tubes, loops, and sheet were discovered in Burial 1 around the neck of the skeleton. It is not straightforwardly clear which pieces are associated with the copper-alloy parts of the secondary pin fittings attached to the asymmetric strap-pendant (SF. 25) and which are part of the necklace suite. Those pieces that have extant features that enable them to be strung onto a necklace will be considered here as part of the necklace suite. Two fragmentary finds appear to be suspension loops for pendants (SF. 160 and SF. 165; Fig. 9); both are copper-alloy folded to create a loop with a projection or tab. SF. 165 has the best evidence for being a pendant, as wear has thinned the metal at the top of the loop, indicating that it had once been suspended. On this pendant, the small projecting tab has the remains of solder, suggesting a decorative pendant would have been applied, perhaps a disc or scutiform pendant. From Burial 1 also comes a small length of copper-alloy tube (SF. 163), probably used as a bead.

The only other pendants recovered during the excavations are the two bucket pendants in Burial 2 (SF. 54; Fig. 13). These are small, composite objects made by soldering three copper-alloy sheets — a disc for the bottom, a rolled rectangle for the body, and curved strip for the handle — to construct a bucket-like shape. Bucket pendants are first encountered on the Continent as early as the first century AD, but become increasingly popular in the late second to third century (Eckardt 2014, 41). At this date they have a wide distribution, stretching from the Black Sea to the Baltic, and are usually found in burial or ritual deposits, the latter being especially true in Scandinavia (Eckardt 2014, fig. 2.3). Other than four iron examples found in a Roman cemetery context in Brougham, Cumbria (Cool 2004, 464–466), all examples from England come from sixth-century contexts (Hines 1984, 13; Meaney 1981, 166; Walton Rogers 2012, 106). Hines argued that the appearance of this

very distinctive form of pendant in England should be seen as the result of influence from the Schleswig Holstein/southern Denmark area between the late fourth and the early sixth century (Hines 1984, 13). However, this is not the only possible source, given the long history and wide distribution of this type of pendant, and their presence in Romano-British contexts. Bucket pendants of Anglo-Saxon types usually appear in the burials of females, singly or in multiples, suspended from necklaces, attached to veils (Sherlock and Welch 1992, 44), sewn onto pouches or bibs (Dickinson 1993; Owen-Crocker 1986, 88), or kept in bags (Meaney 1981, 166). The two examples from Haddenham were probably suspended from a necklace due to their location within the burial amongst the amber and glass beads. These small objects have often been attributed an amuletic function and associated with so-called 'cunning women' (Meaney 1981, 166; Dickinson 1993; Walton Rogers 2012, 170).

Weapons

Spearheads (Figs. 20, 22)

Two spearheads were recovered from two male graves, Burials 6 and 7. The spearhead in Burial 7 (SF. 1 and SF. 2; Fig. 22) is the longer of the two and belongs to Swanton's Type C2: those with slender, leaf-shaped blades where the broadest part is in the lower half of the blade, with a short, solid neck separating the blade from the cleft socket (Swanton 1973, 51). These are the most common form of leaf-shaped spearheads known from Anglo-Saxon England, with a wide distribution and chronology, with examples dating between the fifth and seventh centuries (Swanton 1973, 51). The smaller spearhead from Burial 6 (SF. 7 and SF. 18; Fig. 20) was possibly originally laid along the left-hand side of the skeleton, where the socket (SF. 7) was found, although the blade (SF. 18) was recovered from close to the waist; it may have been displaced from its original position when Burial 7 was cut through the grave. It belongs to Swanton's Type C1, a simple form of spearhead with a short overall length, which again has a broad distribution. These are likely to date to the sixth century (Swanton 1973, 50–51).

The Shield (Figs. 23, 24, 27; Plates 4 and 5)

Burial 7 was also equipped with a shield. Only the metal fittings survive, including the shield boss (SF. 3; Fig. 23, Plate 4), handle (SF. 3; Fig. 23), and decorative elements (SF. 4, SF. 14, SF. 8, SF. 206 (Fig. 24, Plate 5)). The shield was placed in the burial face down, and the individual laid on top so that his head and left shoulder rested on the shield. Mineralized wood on the rivets is probably oak and there are traces of leather on the grip. Oak is only rarely recorded for shield boards: alder and willow are the most commonly recorded woods (Dickinson and Härke 1992, table 13). The surface of the shield boss has impressions of mineralized grass or straw, suggesting that the shield, and possibly the body, were laid on a bed/lining of grass or straw in the grave. The length of

the shafts of the applique attachments vary from 7 to 9mm, which would be consistent with the 6–8mm most frequent range of thickness for shield boards (Dickinson and Härke 1992, fig. 35). From the position of the fittings it is possible to suggest a reconstruction of the appearance of the shield (Fig. 27).
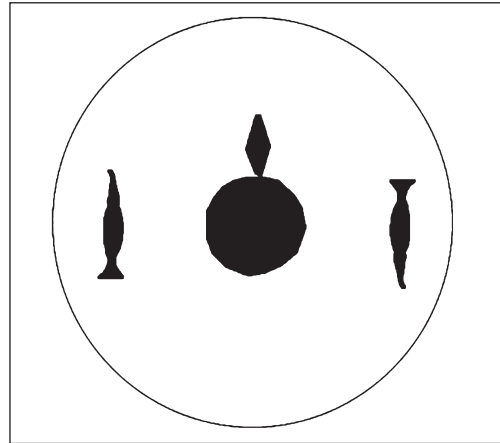
Figure 27. *Diagram to show the arrangement of fittings on the shield.*

The iron shield boss with five white-metal plated rivets (SF. 3) belongs to Dickinson and Härke's Group 3 (five flange rivets, straight wall profile and convex cone profile). Recent chronologies place this type in the middle decades of the sixth century (Penn and Brugmann 2007, fig. 5.27; Hines/Bayliss 2013, 334). They are common in the south-east, where they are especially prevalent in Kent, Essex and East Anglia (Dickinson and Härke 1992, 15). A similar Group 3 shield boss was found with a spearhead in Burial 3 at the adjacent Three Kings Haddenham site (Robinson and Duhig 1992, 21). The shield grip is short and flat with expanded terminals and thus belongs to Dickinson and Härke's Type Ia1, dating to the fifth to seventh centuries (Dickinson and Härke 1992, 26). The face of the shield was decorated with three fittings that would have been riveted to the wooden board of the shield. The simplest of these is the iron lozenge-shaped plate (SF. 206; Fig. 24). These are not a common form of shield fitting, and are mainly found in southern England, where most cases of single examples come from Wessex, in burials of the late fifth to late sixth/early seventh century (Dickinson and Härke 1992, 27). However, examples have also been found in fifth-century cremations at Spong Hill (Hills and Lucy 2013, 75, fig. 2.20). Dickinson and Härke speculated whether they might be precursors to fish-shaped shield mounts, but given that their distribution only partly overlaps, they concluded this was unlikely (Dickinson and Härke 1992, 27). However, both mount types appear on the same shield at Haddenham and both occur, in different graves, at Spong Hill. There is evidence that this form of fitting may have been used as repair strips (Dickinson and Härke 1992, 52), but the fact that the Haddenham ex-

ample does not have two attachment rivets suggests that in this case the lozenge-shaped fitting was purely decorative.

The other two shield fittings are more elaborate (SF. 4 and SF. 14, and SF. 8; Fig. 24), being fish-shaped and decorated with silver appliques, gilding and punches. These are Dickinson Type 1 shield mounts (aquatic creatures) of the middle sixth century, of which Dickinson records 14 examples (Dickinson 2005, 130). These fish-shaped mounts can be further grouped, and the Haddenham examples belong to Sub-Type 1b (large aquatic creatures with both gilding and silver appliques), of which there are 10 examples listed by Dickinson (Dickinson 2005, 130). A further two examples are recorded on the Portable Antiquities Scheme, from Hindringham, Norfolk (PAS NMS-E2B508), and from Ashton Cantlow, Warwickshire (PAS WAW-57AB0A). There are no direct parallels for the overall form of the Haddenham fittings. Their lack of fins makes them quite unusual, but a number of the mounts' features can be observed in other examples. Fan-shaped tails are seen on a number of examples, such as Hindringham, Norfolk (PAS NMS-E2B508), Eriswell, Suffolk (Grave 104, Dickinson 2005, fig. 10), and Kenninghall, Norfolk (British Museum 1883, 0702.22). The elongated, pointed head shape is seen on examples from Sheffield's Hill, Lincolnshire (Grave 115, Dickinson 2005, fig. 10); Barnes, Middlesex (Museum of London 78.107/2); and Spong Hill, Norfolk (Inhumation 31, Hills *et al*. 1984, fig. 87, pl. XVIII). On all examples, except the Spong Hill pair, the gilding is reserved for the body of the fish, and silver appliques for the head and tail. In cases where the species of fish can be identified they are usually predatory freshwater species, such as pike, transformed into otherworldly underwater monsters (Dickinson 2005, 154, 156). The long heads of the Haddenham examples, which are similar to other 1b appliques and also the 1a pair from Spong Hill Grave 31, could imply that these too were intended to represent pike.

The combination of these two types of shield fittings on a single shield has not been noted before. The distributions of these two mount types mostly do not overlap (Dickinson and Härke 1992, 27). The fish-shaped mounts are part of a series found in Kent, the Thames Valley, East Anglia and Lincolnshire (Dickinson 2005, fig. 15), whereas the lozenge-shaped mounts are generally found in Wessex (Dickinson and Härke 1992, 27). There are, however, also the examples from Spong Hill noted above.

Personal possessions

Bone combs (Fig. 20)
The fragmentary bone comb from Burial 6 (SF. 188) is part of a barred zoomorphic comb. The fragments which survive are the central tooth plate/handle with part of an attached semi-cylindrical bar, together with part of the flat back plate. Both the mushroom-shaped handle and the flat plate have concentric circle decoration, while the bar has groups of transverse

incised lines. These details of form and decoration can all be paralleled on other examples of this type of comb, which have been reviewed in the context of those found in cremations at Spong Hill, Norfolk (Hills 1981; Riddler and Trzaska-Nartowski 2013). Remains of 45 barred combs and seven barred comb cases were found at Spong Hill. They occur mainly in phases A and B at Spong Hill, dating therefore to the early to middle decades of the fifth century AD. At Spong Hill they are found with cremations of all ages, and with both sexes, but there is a tendency towards adult females (Riddler and Trzaska-Nartowski 2013, 121–122). Other examples of barred combs and cases come mainly from cremations in the eastern part of England. There are also examples from settlement sites, but this is the first well-recorded example of such a comb associated with an inhumation. Combs are probably underrepresented from inhumations, because of poor organic preservation in some soils. At Haddenham the skeletal material is generally well preserved, allowing for the preservation of at least part of this comb. The Haddenham comb was found near the waist of Burial 6 together with a spearhead. Later disturbance to the site could have caused the breakage to the comb or, alternatively, it could have been a valued heirloom fragment when buried. Certainly it is the earliest item known from this group of burials, possibly as much as a century older than most of the other artefacts.

The two small fragments of worked bone in Burial 3 (SF. 201) are too small to identify, but perhaps come from a comb. They could be displaced fragments of SF. 188.

Girdle-hanger (Fig. 8; Plates 2 and 3)
The girdle-hanger in Burial 1 (SF. 33; Fig. 8, Plates 2 and 3) is a particularly fine example of the type. Although girdle-hangers have long been a recognised feature of early Anglo-Saxon material culture, they have only very recently been the subject of a full and systematic study (Felder 2014). This study catalogued over 600 examples and proposes a new typology of the artefact. According to this, the Haddenham girdle-hanger SF. 33 has a Felder Type A2c terminal (open, straight prongs with outward-facing rounded closed lobes) with a Type IIIa shank neck (cast with narrow, densely set transverse ribs) (Felder 2014, 77, 86). While these individual types of terminal and shank neck are common across the corpus of girdle-hangers, the combination of both is only known in nine examples. The Haddenham girdle-hanger has two additional features that make it especially distinctive. The side lappets that project either side of the shank are known on a handful of examples, but there is only one parallel for the mushroom-shaped ones seen on the Haddenham girdle-hanger: a fragmentary metal-detected find from Carthorpe, North Yorkshire (Felder 2014, pl. 72, PAS NCL-A45A87). The mushroom-shaped lobe that projects from the base of the Haddenham girdle-hanger is typical of the Cambridgeshire region, although they usually feature a central indentation similar to whale-flukes (Felder

2014, 95, 299). This type of projection occurs on other jewellery types found in the Cambridgeshire region, such as small-long brooches, revealing how different design elements were utilised by local smiths for different objects (Felder 2014, 104–5). The combination of these features suggests that the Haddenham girdle-hanger dates between the early and mid-sixth century (Felder 2014, 255–260).

The girdle-hanger's position within the burial, at the left-hand hip associated with a girdle bag is typical: 82% of examples are found on the left side, and 66% are associated with bags (Felder 2014, 235–236). Evidence from other Anglo-Saxon burials suggests that girdle-hangers were most often deposited within bags, rather than on open display hung from a belt (Felder 2014, 235). However, the Haddenham example has impressions of the grass/straw matting that was used to line the burial (as in Burial 7), suggesting that it must have been outside the bag when deposited in the burial.

Girdle-hangers are often found with tool-sets and latch-lifters, as is the case in Haddenham Burial 1. The iron set of tools is difficult to identify as they are in a poor and fragmentary condition. There appear to be three latch-lifters attached to the suspension ring, but as the terminals of all of them are missing, it is not possible to identify their form. Their position in the burial and their association with a purse/bag and a girdle-hanger is comparable to other Anglo-Saxon burials (Hines 1998, 218).

Antler ring (Fig. 8)
The antler ring (SF. 31; Fig. 8) was found with the tool-set and purse fittings in Burial 1. The inclusion of antler rings in Anglo-Saxon burials is not common, but a number of examples can be noted in both inhumations and cremations, including 41 examples from cremations at Spong Hill, Norfolk, where they were associated predominantly with adult females and dated to phases A and B, the early to late fifth century AD (Riddler and Trzaska-Nartowski 2013, 99–103). Antler rings were associated with bag assemblages in Grave 1263 at Alwalton, Cambridgeshire (Crummy 2007, 272, fig. 14), Grave 98B at Empingham, Rutland (Timby 1996, 62, fig. 149), and Grave 83 at Edix Hill (Barrington A), Cambridgeshire (Meaney 1998, 269). The last two of these were both associated with metal rings, to which the antler rings may have been tied, and the iron staining on the Haddenham example may hint at a similar construction (Meaney 1998, 269). It is difficult to identify a function for these objects. The rings are all too small for a hand to pass through, so they could not have been bracelets or bag rings, and they are too large to have been used as spindle whorls. In the case of Haddenham, Edix Hill, Alwalton and Empingham they appear to have been kept inside the bags, perhaps suggesting they were amulets. Riddler and Trzaska-Nartowski also suggest the Spong Hill examples had amuletic significance.

Knife (Fig. 24)
Knives are amongst the most common finds recov-

ered from early Anglo-Saxon burials, appearing in around 45–50% of inhumations (Härke 1989, 144). The typology of knives is usually based on a combination of the shape of the back of the blade (Hines 1998, 217), combined with its length (Härke 1989, 144). The single example from a burial at Haddenham (Burial 7, SF. 9; Fig. 24) has a curved back (Type A) and a blade length less than 99mm (Group 1). This form of knife is the most common encountered in Anglo-Saxon burials, found in contexts dating from the fifth to seventh century (Härke 1989, 144; Hines 1998, 217; Evison 1987, 113).

Grave Goods Discussion

Special women at Haddenham

Anglo-Saxon women buried with unusual collections of artefacts and dress accessories have long been identified as a distinctive group of individuals, who may have held a special or high status within their local communities (Dickinson 1993; Meaney 1981; Felder 2014). This is due to the identification of many of the objects found in such assemblages, including bucket pendants, beads, bag assemblages, fossils, natural materials, and curated items, as amulets (Meaney 1998). Those women who have an exceptional abundance of such apotropaic items have been singled out and identified as so-called 'cunning women', ritual specialists associated with healing and magic (Dickinson 1993; Meaney 1981; Felder 2014). The array of bucket pendants and lace tags, as well as the bag assemblage and the long knife buried with a woman in Grave HB2 at Bidford-on-Avon, led Tania Dickinson to identify her as one of these 'cunning women' (Dickinson 1993). Recently, Kathrin Meents (née Felder) has argued that, as burials with girdle-hangers share various features such as bag assemblages and amulets, they represent a "less amplified" version of 'cunning women' burials. Further, she has interpreted the girdle-hangers as amulets and part of the toolkit of medical and ritual specialists (Felder 2014, 329). The combination of objects found with the two adult females excavated at Haddenham (Burials 1 and 2) place them within this group of female community ritual specialists or practitioners.

In particular, the four lace tags (SF. 11, 12, 15 and 16) and the two bucket pendants (SF. 54) in Burial 2 are both objects that occur in a number of burials recognised as 'cunning women'. Although these artefact types are rare amongst Anglo-Saxon grave goods, there are a number of instances where they occur in combination. In addition to Burial 2 at Haddenham, this combination of lace tags and bucket pendants is also present in Grave HB2 at Bidford-on-Avon (Dickinson 1993), Grave 60/61 at Broughton Lodge (Kinsley 1993, 44, 143), and Grave 86 at Morning Thorpe (Green *et al*. 1987, 225). Although the lace tags in all four of these burials appear to have functioned in slightly different ways, they are a distinctive fea-

ture of these women's dress and paraphernalia. The bucket pendants (SF. 54) are also distinctive, having been found in only a small number of Anglo-Saxon burials (see for example Eckardt 2014, appendix 1). These female-only objects, often strung on necklaces as in Burial 2 at Haddenham, have often been assumed to hold a symbolic function (Meaney 1981, 168; Dickinson 1993, 363). Their form appears to identify them as miniature versions of wooden buckets, perhaps intended to symbolise the ritual and social use of alcohol, and women's role in dispensing or providing this liquid (Meaney 1981, 168; Dickinson 1993, 365). Such an interpretation could be supported by the fact that bucket pendants are sometimes found alongside possible bucket mounts and other drinking paraphernalia (Dickinson 1993, 365–366). Perhaps those buried with these miniature buckets were themselves responsible for this ritual serving of alcohol? These pendants are also thought to have an amuletic function, acting to protect their wearers. Austin Mason has argued that their protective qualities may have been drawn from their association to actual buckets. He noted that many buckets buried in Anglo-Saxon burials were made of yew, a wood that has long been associated with death and known for its poisonous and toxic qualities (Mason 2008,16–18). Through referencing the form of wooden buckets and their material, perhaps bucket pendants acquired similar associations, making them potentially potent amulets against harm. Other wood was also used for buckets, however, including pine (Cook 2004, 31), and the bucket from Spong Hill inhumation 40 was identified as buckthorn (Hills *et al*. 1984, 93). The earlier Continental history of bucket pendants might offer alternative interpretations. The combination of lace tags and the bucket pendants in Burial 2 does suggest that the interred woman not only looked different from most of her female contemporaries, but also had a different status or role within her community.

Burial 1 at Haddenham contains a much more complex grave assemblage. Her girdle-hanger (SF. 33), purse assemblage containing an antler ring (SF. 31), unusual pendants and beads, as well as the repurposed asymmetric horse-harness strap-pendant (SF. 25), appear to confirm that this woman also held a special or ritual status amongst her community.

The presence of girdle-hangers in female burials has long been considered an identifier of female high status due to their symbolic association with keys. But the meaning of these items, as well as their combination with other objects, shows a much more complex picture. This has recently been examined in detail by Kathrin Meents, who ascertained that only around one woman per 'household unit' would have worn girdle-hangers at any one time (Felder 2014, 304), and that these were part of a recognisable group that not only wore girdle-hangers but also a range of other related accessories, such as bags/purses and other amulets (Felder 2014, 316). This is certainly evident in Burial 1. Alongside the girdle-hanger, which should be seen as some kind of amulet in itself, other items interred in the grave could also be interpreted

as having an amuletic function. The antler ring (SF. 31) has no discernible practical function and was most likely kept inside the bag that was hung over the woman's right shoulder to rest at her left hip. In folk medical practices, ring-shapes are often worn on the body of pregnant women in passing-through rituals, to release or let life through (Felder 2014, 330; Meaney 1981, 170–178). Other items in Burial 1 may also be amulets with a function related to birth and pregnancy — one of her beads is made of chalk or bone (SF. 164, as is SF. 55 in Burial 2), materials associated with fertility (Felder 2014, 331; Meaney 1981, 72 and 98). The other items in Burial 1 can be argued to have a more general protective role: the copper-alloy pendant suspension-loops are probably related to the variety of disc-shaped and scutiform pendants known from Anglo-Saxon burials, that are often described as amulets (Felder 2014, 331); and perhaps the small roundels (SF. 25 and 166) of unknown function also acted in a similar way.

Other aspects of Meents' analysis of girdle-hanger graves also hold true for Burial 1 at Haddenham. Often, elements of the construction of the grave itself are unusual or special (Felder 2014, 316). In Burial 1, impressions on the girdle-hanger (Plate 3) suggest that the grave cut was lined with straw or grass matting. Burial 7 also has impressions of grass/straw, in this case on the shield boss (SF. 3). The incidence of this feature in burials is difficult to ascertain due to the poor survival of organic remains, but it has been recorded elsewhere. At Flixton Park Quarry, Suffolk, a number of spears, knives and shield bosses have grass and other plant impressions on one side, probably reflecting a layer or covering, and a number of other examples are listed in the discussion of those at Flixton (Fell and Watson 2007; Walton Rogers 2012, 92–3). These examples relate more to male than female burials, but this may just be due to the fact that plant impressions are more readily preserved on large iron surfaces, which are not a feature of most female burials.

Meents also noted that girdle-hanger burials are usually situated close to other amulet-bearing women and sometimes near children (Felder 2014, 316, 336). Both these features are realised at Haddenham. Burial 1 is around 1.2m away from Burial 2, a woman who was buried with a number of unusual objects and interred with a juvenile. South-east of Burial 2 are four infant burials (Burials 3, 4, 5 and 8). It is this combination of artefacts, special consideration over the burial rite, and spatial positioning, that has led Meents to argue that women in such graves were 'authorities in the domains of spiritual knowledge' (Felder 2014, 315) and were medical and ritual specialists within their communities, perhaps with a role in pregnancy and birth akin to midwives (Felder 2014, 366).

The asymmetric strap-pendant that has been converted into a brooch (SF. 25), worn by the woman in Burial 1, can also be placed within Meents' interpretation of girdle-hanger wearers as holding a special role within their communities. The rare occurrence of Anglo-Saxon horse equipment in burials and their

decoration with elite art-styles is indicative of the high social value of equestrianism at this time (Fern 2005, 67). Such artefacts were restricted to elite burials, and Chris Fern has interpreted this as a 'deliberate act intended to signal and at the same time preserve elite privileges' (Fern 2005, 43). These social values may have continued to be activated when SF. 25 ceased to be part of a horse-harness and was transformed into an item of female dress. In wearing this item of jewellery did the woman in Burial 1 become a bearer of this elite equestrian culture? Perhaps she inherited the object from an older family member or her husband as a way of preserving certain elite privileges within her family unit? Or did this associated male status disappear through the process of transforming it into a female item of dress? In this case perhaps it served a similar function to other elite Anglo-Saxon brooches, such as large cruciform and great square-headed brooches. In either scenario, or others, this woman is likely to have been the only person in her community, or even further afield, to have worn a repurposed horse strap-pendant. In association with her necklace, girdle-hanger and bag, we can see that this woman had access to a different set of possessions compared to her female contemporaries. We can understand these as part of her 'toolkit' as a ritual specialist, either in enabling her to carry out her work or through projecting this status through her dress.

Both the adult women at Haddenham seem to have fulfilled certain ritual or specialist roles within their community, roles restricted to women and requiring specific sets of objects. That these women may both have held similar roles may be the reason behind their remarkably similar necklaces, which not only feature the same types of beads but also similar proportions of different bead types.

The burials at both the Three Kings sites can be dated broadly to the mid- to late sixth century AD based on the grave goods. More precision has been given to some categories of artefact in recent analyses (Penn and Brugmann 2007; Hines and Bayliss 2013). The finds from Haddenham have a date range longer than might be expected from such a small group of burials, from the mid-fifth to mid-sixth century or later. A few artefacts date to the fifth century: the bone comb from Burial 6, possibly some of the decorated pottery, and the carinated bowl from the 1989–90 excavations (Robinson and Duhig 1992, fig. 7). The comb may have been fragmentary when buried, perhaps some time after its manufacture and use. Other items were clearly not new when buried: the girdle-hanger shows signs of wear and the harness brooch is by definition repurposed.

As only two small areas of the cemetery have been excavated, detailed spatial or chronological analysis is not possible, and it cannot be estimated how large the community it served was, nor how long it was in use. Anglo-Saxon settlement in the immediate area has previously only been identified, either historically or archaeologically, from the seventh century. However, the early Anglo-Saxon rubbish pits at the Three Kings site provide evidence for settlement as

well as burial. Recent finds recovered by metal-detectorists and recorded on the Portable Antiquities Scheme (PAS) database also broaden the evidence for earlier-sixth-century Anglo-Saxon activity in the area: in fields to the east of Haddenham an Anglo-Saxon spearhead (PAS: CAM-1A6A98), a wrist clasp (PAS: CAM-93B41D) and a small-long brooch (CAM-A26623) have been recorded. These finds may represent casual losses or disturbed Anglo-Saxon burials.

Textiles
Sue Harrington

Methods

All of the metalwork finds from this site were examined post-conservation, initially by 15x magnification hand lens in natural light. The fragments were recorded using the notation defined by Walton and Eastwood (1988). A photographic record was made for further reference, using a Digiscope AM-413T at 35–50x magnification and a Pentax Lumix DMC-F27, on a tripod for optimum lighting. Selected images, enhanced using Adobe Photoshop, are used to illustrate the catalogue and to act as a reference for future research. Images were taken against a 1mm x 1mm grid.

Although metals preservation on this site can be generally classed as poor, a total of six small finds, from two burials, retain a total of twelve fragments of textile, all of which are mineral-preserved (mp). No extant fibre survives for analysis.

Burial 1
A fine open plain weave is present on both the girdle-hanger (SF. 33) and the strap-mount (SF. 27). The strap-pendant converted to a brooch (SF. 25) has a more closely woven plain weave. A coarser twill weave incorporating s spun threads is also present on SF. 33. The cloths have survived as clumps or multiple layers, indicating something of the volume of material deposited in a burial. These cloths are most likely the residue of clothing overlying these dress fitments, although they may be from cloths covering the body — it is not possible to differentiate between these two uses of cloth in this particular burial.

SF. 33 Girdle-hanger complex (Fig. 28):
TF1 Detached fragment of Fe key. On outer curve. 14 x 8mm. ?Plain weave. No recordable features. Single layer.
TF2 Detached fragment of Fe key. Along one edge of shank. 15 x 7mm. Multiple layers of cloth. No recordable features.
TF3 Girdle-hanger (Figs. 29 and 30). On face to one side (grass/rush remains to obverse). Overall area 65 x 35mm discontinuous. Possibly several layers of very fine, open weave cloth.
TF4 Girdle-hanger. Overlies TF3 on recurved arm. 10 x 10mm. 10/10 (estimate). Unspun/s. ?Twill. Coarser weave than TF3.
TF5 Ring and three key rods. Possible leather to one face and possible fine woven fabric to other face, but no record-

able features.

SF. 28 Wrist clasp:
Mineralised random fibres on exterior face of wrist clasp. No determinable structure or spin.

SF. 27 Strap-mount (Fig. 31): All TFs are on the outer, decorated face of the artefact.
TF1 Detached fragment, perforated (Fig. 32). 12 x 8mm. 12 (6 on 5mm)/12 (6 on 5mm). z/z. Plain weave. Slightly open weave, effectively finer than count indicates. Two layers and a fold indicating pliable cloth. Animal fibre?
TF2 Detached fragment. 14 x 11mm. 5mm thick. As for TF1. Double layer with fold and indent.
TF3 Detached fragment (Fig. 33). To one corner. 16 x 13mm. As for TF1
TF4 Detached fragment. 24 x 19mm. Two or three layers as for TF1.

SF. 25 Strap-pendant:
All fragments are now detached from the host object but were originally lying across the decorated face. The conservation residue includes fragments of leather.
TF1 10 x 10mm. Clump of cloth, possibly fine, no recordable features.
TF2 12 x 8mm. Clump of medium weight cloth, originally recorded by conservator as 10/10 z/z plain weave.
TF3 6 x 7mm. Clump of medium weight cloth, ?plain weave, degraded surface to threads.
TF4 8 x 13mm. 14 (4 on 3mm)/?; z/?. Plain. Clump of closely woven cloth. Probably same as TF2.
TF5 8 x 14mm. Degraded clump of cloth, no recordable features.
TF6 10 x 9mm. z/z. Clump of closely woven cloth, variable thread sizes.
TF7 6 x 8mm. 16/10. z/z. Clump of closely woven cloth, variable thread sizes.

Burial 2
A finely woven twill incorporating s spun threads is present in two locations in the burial. It may be residual from the clothing of either body, as the wrist clasp was situated between them, or from a cloth laid underneath the pair of bodies.

SF. 53 Fe buckle:
TF1 (Fig. 34) On outer edge of buckle loop, 18 x 8mm. ?Twill. No recordable features, but visually similar to SF. 21 TF1.

SF. 21 Wrist clasp:
TF1 (Fig. 35) On outer face of hinged clasp. 20 x 14mm. 18 (9 on 5mm)/ 18 (9 on 5mm); ?/s; 2/2 Twill. Single layer of fine cloth, reverse impression.

Textile discussion

Anglian costume of the sixth century is dominated by twill weaves, with a much reduced frequency of plain weave — this latter becomes more used in the course of the seventh century (Crowfoot 2000, 89). Thus, the prevalence of plain weaves in Burial 1 is to be noted, but these fragments are few and may not

necessarily be diagnostic. However, modern techniques allow for the recording of relatively fine cloths and these are increasingly being represented in the corpus. The 2/2 twill, ?/s is fine at 18/18 and presents as a soft and pliable single layer. A z/s twill was present on a wrist clasp from Barrington Edix Hill Grave 3, possibly contemporary with Burial 2 here, although textile fragments from wrist clasps are found very infrequently. The SF. 21 fragment is therefore quite a rare example, notable for the fineness of the weave.

Pottery
Berni Sudds

A total of 95 sherds of post-Roman pottery were recovered during excavation, weighing 1038g. Of these, the majority are of early Anglo-Saxon date (81 sherds), with a smaller quantity of late Saxon, medieval and post-medieval material. The following report focuses on the early Anglo-Saxon assemblage, although a brief discussion of the small group of later pottery can be found below and it is catalogued within the archive.

The early Anglo-Saxon pottery (Fig. 36, Table 11)

Fabric
As with any assemblage of handmade pottery, produced in a piecemeal fashion, there are difficulties associated with identifying fabric groupings. This is only exacerbated by the small size of the assemblage. In lieu of thin section or chemical provenance studies, seven groups have been identified on the basis of the major tempering agent, with some further division made possible by the incidence of other inclusions, whether naturally occurring in the clay or added. As observed elsewhere in the region, however, some overlap is evident between groups and the fabrics discussed below may simply represent variations within a smaller number of broader types (Hall 2004, 117).

Sand-tempered wares (SAND; SAND L):
SAND: Moderate to abundant, fine to medium, clear, white (opaque), sub-rounded to angular quartz sand (up to 0.6mm). Occasional large quartz, flint and organic inclusions.
SAND L: Abundant fine clear and white (opaque) sub-rounded to angular quartz sand (up to 0.5mm). Occasional to moderate limestone inclusions (up to 1mm but mostly less than 0.5mm) and rare rounded iron ore (brown). Vesiculated surfaces from dissolved limestone.

Sandstone-tempered wares:
SST: Hard fabric. Occasional medium to large sub-rounded white sandstone inclusions (up to 5mm) within a white matrix containing abundant small clear, white and red quartz and red and black iron ore. The fabric also contains occasional to moderate, fine to medium, clear, white (opaque) or red sub-rounded to angular quartz sand (up to 0.5mm) and iron ore, probably derived from the crushed
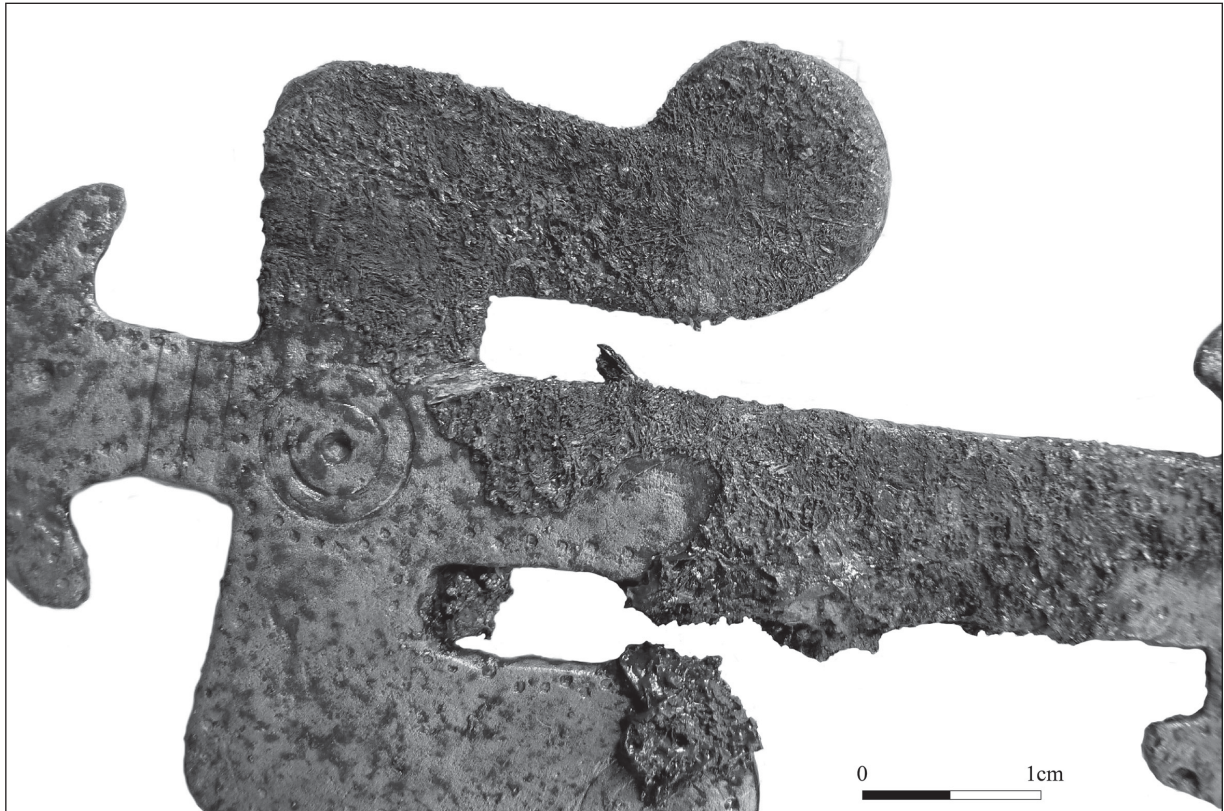
*Above: **Figure 28.** Girdle hanger SF. 33 showing mineralised textile. See also Plate 2.*
*Below: **Figure 29.** Girdle hanger SF. 33: Textile Fragment 3 (magnification 50x) showing evidence of s spin to fibres and crossing points of an unidentified weave structure.*
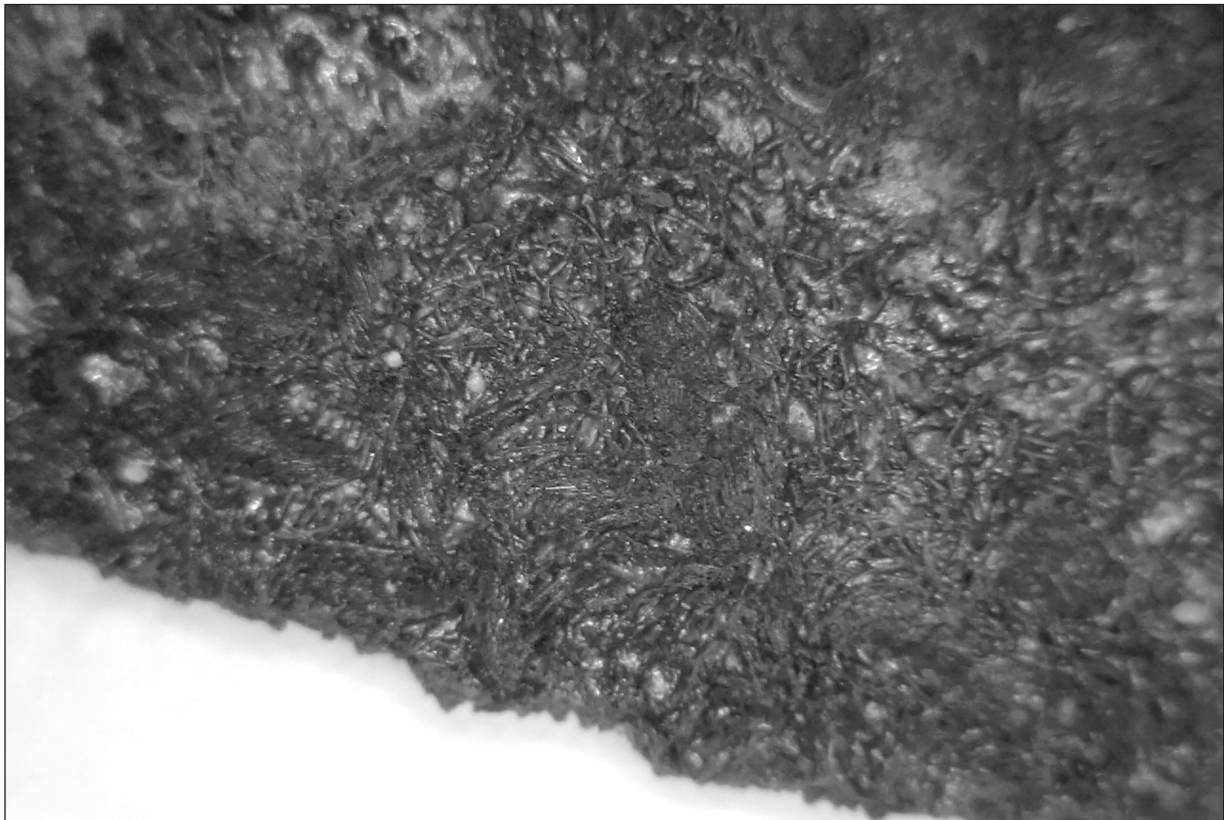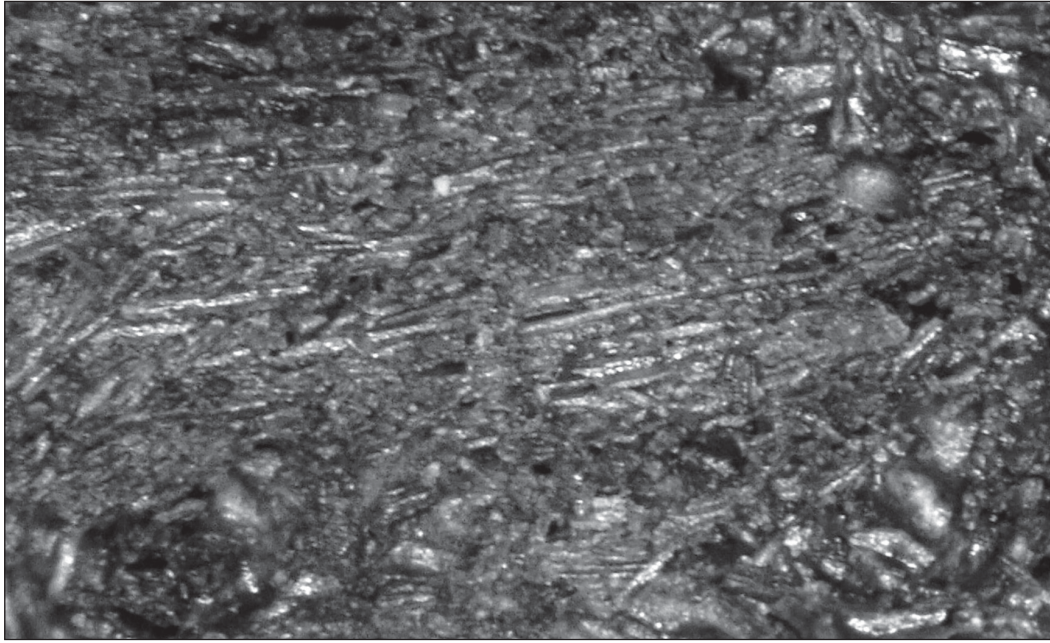
Figure 30. Girdle hanger SF. 33: Textile Fragment 3 (magnification 180x) showing rather straight fibres which may be from another type of organic, possibly fur.
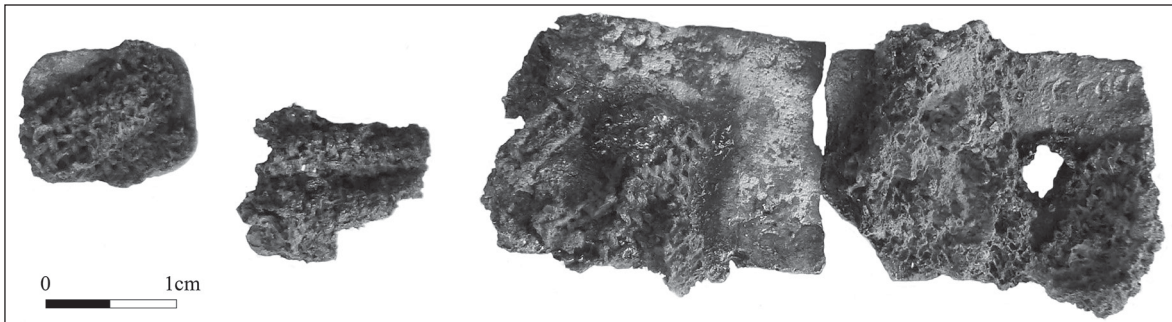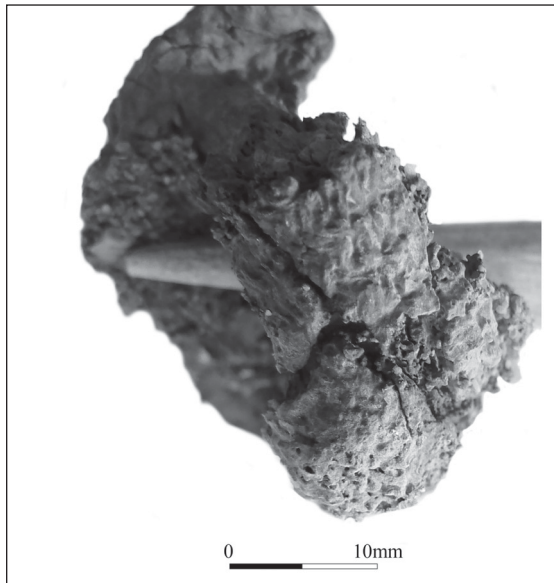

Above: **Figure 31.** *Strap mount SF. 27 showing textile fragments.*
Below left: **Figure 32.** *Strap mount SF. 27: Textile Fragment 1 (magnification 180x).*
Below right: **Figure 33.** *Strap mount SF. 27: Textile Fragment 3 (magnification 50x).*
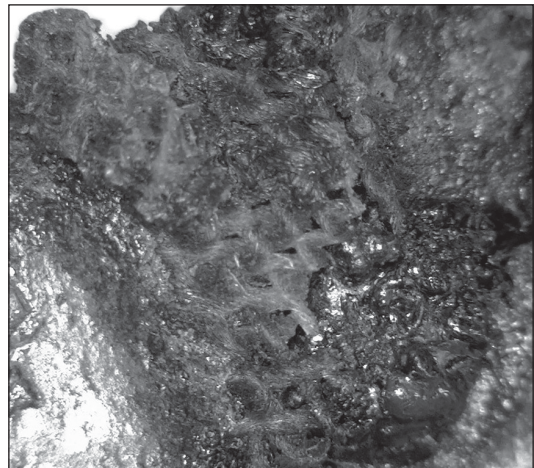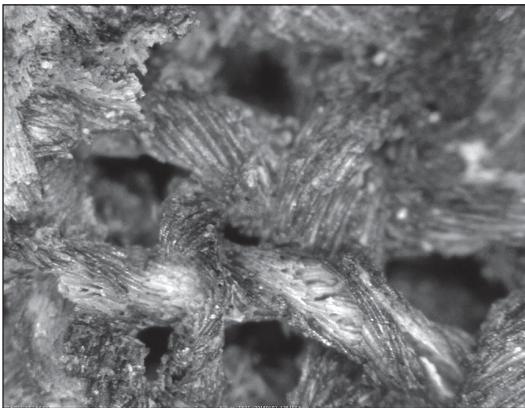
*Above: **Figure 34.** Fe buckle SF. 53: Textile Fragment 1.*
*Below: **Figure 35.** Wrist clasp SF. 21: Textile Fragment 1.*

sandstone.

SST ORG: As above, with the addition of moderate chaff temper.

SSST: As SST, with more abundant sand.

SSST OL: As SSST, with occasional voids/ oolitic limestone and igneous inclusions.

QSST: A fairly distinctive fabric characterised by abundant fine to medium sub-rounded to angular quartz sand and fragments of white, grey and orange/ brown to red quartz-sandstone with a sugary, angular structure. The latter are up to 3mm in size and are hard and crystalline, suggesting they are geologically old or could even be of igneous origin. Occasional black and red iron ore.

Igneous-tempered wares (IGN):

The fabrics containing igneous-derived granitic inclusions fall into two broad types. The first is characterized by medium to large quartz (up to 2mm), igneous inclusions (up to 4mm), plagioclase feldspar and dark mica, with some examples also containing occasional organics. The second group is sandy, containing abundant fine to medium clear, opaque and red/ orange quartz sand (up to 0.5mm) and occasional large igneous inclusions (up to 3mm). Igneous inclusions were also identified in combination with sandstone and oolitic limestone (see SSST OL).

Limestone-tempered ware (OLST):

Distinctive hard medium-grey fabric containing abundant crushed shelly-oolitic limestone (up to 2mm). Occasional to moderate fine quartz and red and black iron ore.

Shell-tempered wares (SHL):

Soapy fabric tempered with moderate fine shell, sometimes vesiculated to the surfaces where leached. Sparse fine quartz sand.

Grog-tempered (GROG):

A single sherd was identified in the assemblage with a mid to dark grey body and oxidised orange burnished surface, characterised by moderate medium to coarse inclusions of grog (up to 2mm). The latter are angular and predominantly oxidised, although occasionally reduced grey. The fabric also contains sparse fine to medium clear and opaque quartz up to 0.5mm and iron ore. Grog is rarely used as a tempering agent in Anglo-Saxon pottery, but it did occur at Spong Hill, as 5% of the pottery fabrics, and is found in similarly small quantities in northern

Suffolk (Hills and Lucy 2013, 227; Sudds 2017). Another parallel can be found in London, where crushed Roman tile was used, although in association with chaff temper (Blackmore 1988, 84; 1989, 74; 2003, 231–2; Sudds 2012, 128). The controlled firing evident in the grog fragments from the site would also suggest the reused ceramic is of Roman date, although the fragments are too small to determine whether this is likely to have been pottery or tile.

Chaff-tempered ware (ORG Q):

Eight sherds, from two vessels, were tempered with moderate chaff and occasional to moderate quartz up to 2mm. Sparse calcareous inclusions and flint are also present.

The assemblage encompasses a broad range of fabric types but is dominated by sandstone- and igneous-tempered wares (Table 11). Sand- and organic- (chaff-) tempered fabrics were also recorded in smaller numbers, as well as a few examples of limestone-, shell- and grog-tempered fabrics. A similar range of types can be paralleled in assemblages across Cambridgeshire and the region, but those closest in relative composition can be found in Peterborough and Hinxton (Wright 2006, 117; Sudds 2007, 255–7; Hall 2004, 117; Blinkhorn 2007, 139; Anderson and Tester 2001; Wilkinson and Young 1996, 46–9).

Recent work on the early and middle Anglo-Saxon fabrics of the Greater London region has demonstrated that the sandstone-tempered wares encountered there represent some of the earliest in use, dating to the fifth and early sixth century (Blackmore 2008, 152). Analysis has also demonstrated that chaff-tempered wares, although present during the fifth century, become increasingly significant during the sixth century and are the dominant type by the seventh century (ibid.), a finding mirrored on many sites in the broader region (Anderson 2003; Cotter 2000; Denham 1985a and b; Hall 2004; Hamerow 1987, 1993; Matthews and Chadwick-Hawkes 1985; Sudds 2005, 216; Wade 2009, 109). Indeed, there appears to be a broad range of fabric types represented in the very early period, largely replaced by chaff-tempered wares in the later sixth and seventh century. Analysis of the Spong Hill cremation vessels also suggests an increase in the use of organic temper from the fifth to the sixth century

Table 11. The early Anglo-Saxon pottery.

| Code	Expansion	Sherd count	Weight (g)
SAND	Sand tempered ware	6	52
SAND L	Sand and limestone tempered ware	4	21
SST	Sandstone tempered ware	7	53
SST ORG	Sandstone and chaff tempered ware	2	22
SSST	Sand and sandstone tempered ware	15	141
SSST OL	Sand, sandstone and oolitic limestone tempered ware	8	127
QSST	Quartz- sandstone tempered ware	14	204
IGN	Igneous tempered wares	12	135
OLST	Oolitic limestone tempered ware	2	28
SHL	Shell tempered ware	2	17
GROG	Grog tempered ware	1	6
ORG Q	Chaff and quartz tempered ware	8	95
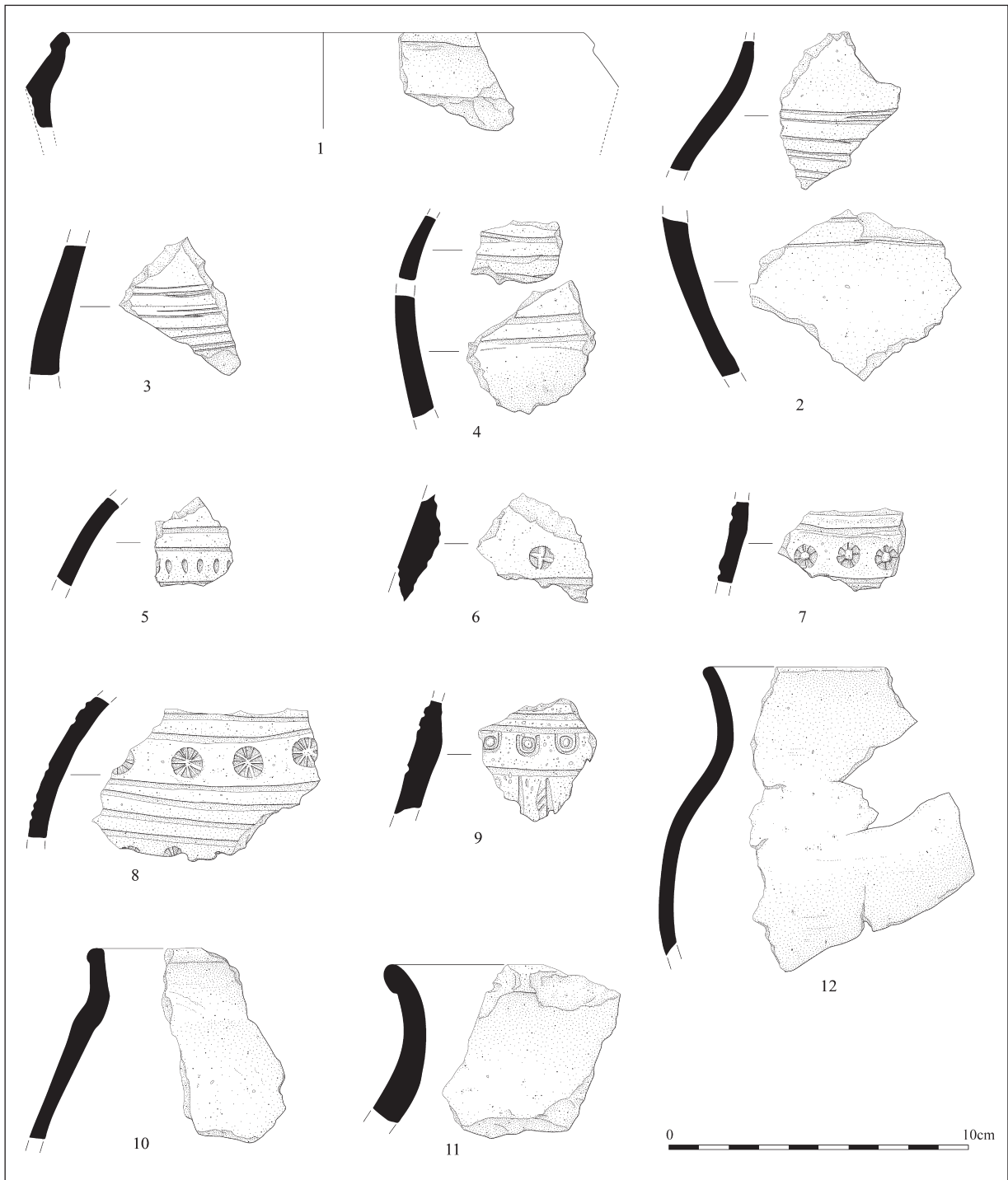
Figure 36. Anglo-Saxon pottery illustrations.

(Hills and Lucy 2013, 227).

The evidence from dated sites in Cambridgeshire appears to broadly concur with this model, with fifth- and sixth-century assemblages, including those from Peterborough and Hinxton Quarry, demonstrating a range of types in which igneous- and sandstone-tempered wares feature most frequently (Walker 1978; Wright 2006, 117; Sudds 2007, 255–7; Anderson and Tester 2001; Wilkinson and Young 1996, 46–9). Assemblages dated to the sixth to seventh century or later, including Melbourn and the Cambridge Backs, contain a greater proportion of chaff-tempered wares, but also micaceous and shell-tempered wares (Slowikowski 2003, 130–2; Hall 2004, 116–7; Spoerry 1993, 40–2). This would suggest that the excavated assemblage is predominantly of fifth- and sixth-century date.

In the absence of further analytical research on the fabrics, it is impossible to be certain concerning the source of the granitic and sandstone inclusions within the pottery. The closest outcrop of igneous rock to the site is the Mountsorrel granodiorite in the Charnwood Forest area of Leicestershire, to the north-west. Thin section analysis has long since demonstrated a connection between some of the granitic pottery found in the Midlands and this particular parent rock, but from the outset, and increasingly since, the widespread distribution of pottery with granitic inclusions and the presence of other detrital minerals has indicated that some are likely to have been produced from glacial drift deposits containing igneous erratics, found much more widely in the region and further south and east (Walker 1978, 224–8; Williams and Vince 1997; Hall 2000; Anderson and Tester 2001; Sudds 2005, 220; Blackmore 2008, 178–9 and 2012, 246–7). This not only opens up the potential sources of parent rock, with candidates from further north in England, Scotland and Scandinavia, but also of potential production sites. Indeed, to the south, at Loves Farm, St Neots, the granitic pottery appears to derive from multiple sources, including material from glacial erratics, potentially indicating more localised production (P. Blinkhorn, pers. comm.). The variation in fabric observed at Haddenham may similarly suggest more than one source for the granitic pottery.

A potential source for the quartz-based sandstone inclusions also lies to the north/north-west, in the Upper Carboniferous deposits of Derbyshire and South Yorkshire, and sugary sandstones are evident in Lincolnshire (K. Hayward, pers. comm.; Wright 2006, 117; Blackmore 2012, 241). As with granitic material, the possibility exists that some of these inclusions were derived from glacial drift deposits. Millstone Grit-type sandstone was carried by glacial and fluvial action to the Midlands, East Anglia and Middlesex and appears to have been used extensively in early Anglo-Saxon pottery across southern England and in London (Blackmore and Vince 2007; Blackmore 2012, 241). Certainly, in lieu of thin section and ICP AES analysis, a provenance for the sherds from this site must remain open to question, but while it is possible that some vessels were traded over long distances,

more may have been produced closer to site than their inclusions would at first suggest.

The grog-tempered sherd is a rare find but not un-paralleled, also being recorded in small quantities at Spong Hill, in northern Suffolk, and also in London (Hills and Lucy 2013, 227; Sudds 2017; Blackmore 1988, 84; 1989, 74; 2003, 231–2; Sudds 2012, 128). Although early at Spong Hill, in London grog tempering occurs with chaff (CHFG), suggestive of a slightly later date. Chaff is not present in the example from Haddenham, but the sherd is non-diagnostic, and not closely datable.

Form and decoration

Due to high levels of fragmentation, it has not been possible to determine form in most instances, although the likelihood is that the majority of the Saxon sherds derive from jars or bowls. More diagnostic vessels include a SAND carinated bowl with a beaded rim from pit fill [116] (117) and a QSST carinated line-decorated jar from subsoil (101) (Fig. 36, Nos. 1 and 2). The rim and shoulder of two ORG Q jars were also recovered, one possibly biconical in profile, from pit fill [173] (174) (Fig. 36, No. 10), and the second with a more gently rounded, near-ovoid profile, from pit fill [149] (150) (Fig. 36, No. 12). Pronounced form-types, most notably carinated and biconical shapes, are indicative of an early fifth- or sixth-century date, prior to dilution into more slack profiles (Myres 1977; Hamerow 1993, 44; Sudds 2007). This would suggest the majority of the diagnostic vessels are early, although the slacker profile and organic temper of the jar from pit fill [149] (150) is more indicative of a late-sixth- or seventh-century date.

The majority of sherds demonstrate some form of surface finishing, either in the form of smoothing or burnishing, but nine vessels also demonstrate line, dot and stamp decoration. One line-and-dot-decorated quartz-sandstone-tempered vessel was recovered from pit fill [173] (174), with a horizontal row of impressed lozenge-shaped dots above two incised lines (Fig. 36, No. 5). Although relatively little survives, this possibly falls under the 'line and dot' style of decoration, attributed to the fifth and possibly early sixth century (Myres 1977; Hamerow 1993, 45). The Spong Hill chronology confirms a fifth-century date: sherd No. 5 could belong to phase A, early–mid fifth century (Hills and Lucy 2013, fig. 3.29). The same early date and association can be ascribed to four other quartz-sandstone- and sandstone-tempered vessels demonstrating horizontal line decoration, either on the shoulder, or over the carination (subsoil (101) and ditch fill [118] (119); Fig. 36, Nos. 2–4).

The remaining decorated vessels depict combinations of line and stamped motifs. Pit fill [116] (117) contained a small igneous-tempered sherd depicting a cross in circle stamp and horizontal incised lines (Fig. 36, No. 6). Two quartz-sandstone-tempered vessels from pit fill [149] (150) and pit fill [159] (160) depict a row or rows of segmented circle stamps separated or delineated by incised horizontal lines (Fig. 36, Nos. 7 and 8). Finally, an oolitic limestone-tempered ves-

sel from subsoil (101) has a fairly elaborate scheme consisting of a row of ring stamps framed by horizontal incised lines, below which pairs of vertical incised lines, containing diagonal slashes, run down the body (Fig. 36, No. 9). Stamped decoration has been argued to occur most frequently during the sixth century (Myres 1977; Hamerow 1993, 52), but at Spong Hill, particularly where associated with line decoration as in the current assemblage, is prevalent in phase B, the mid- to late fifth century (Hills and Lucy 2013, figs. 3.29–3.30). The stamp types can be well-paralleled on vessels in the region (Sudds 2007, fig. 41; Atkins 2010, fig. 6) and further afield, at Spong Hill (Hills *et al*. 1994, figs. 87–96).

Distribution, dating and function

Although intrinsically datable, it is difficult to determine a precise chronology for the features on site because the assemblage is distributed in small groups and is fragmentary and largely redeposited. For the same reasons, and given the overall small size of the assemblage, little can be determined about the nature of activity represented. Over half of the pottery (52 sherds) was retrieved from pit fills, with the majority of the remaining material from the fills of ditches. Just three sherds were recovered from burials, two of which are probably accidental inclusions within the backfills, with one, a burnished igneous-tempered sherd, appearing to be deliberately placed on the body of the child in Burial 8. Contemporary parallels for the placement of sherds can be found both at nearby Oakington, and also to the south at Barrington (Taylor *et al*. 1997, 66; Malim and Hines 1998, 223). These are often found in association with child burials, although not exclusively (Taylor *et al*. 1997, 66–8).

The fabrics, pronounced forms and line, dot and stamped decoration certainly suggest there is a significant fifth- to sixth-century element to the assemblage. The presence of a small quantity of chaff temper and at least one diluted form might indicate that activity continued into the late sixth and seventh century, although on the strength of current evidence this is by no means certain.

As found in close proximity to a group of contemporary burials, the possibility was considered that the material represents disturbed funerary pottery. Although the subject of much debate, there are often distinct differences between cemetery and settlement assemblages (Hills and Lucy 2013, 167; Sudds 2015). From a purely ceramic perspective, it can be very difficult to distinguish mortuary from domestic, as plain and decorated vessels of all shapes, sizes and finishes have been found in both contexts (Sudds 2005; 2007). Decorated pottery is certainly more prevalent in funerary assemblages than contemporary settlement assemblages, although this varies from region to region and over time. At Spong Hill in Norfolk over 80% of the vessels were decorated, while at Springfield Lyons in Essex 26% of the classifiable pots were decorated, although the latter cemetery was in use for longer, encompassing the period when decoration had fallen

out of use (Hills and Lucy 2013, 167; Tyler and Major 2005, 118–121). Even accepting this, the proportion of decorated pottery in contemporary settlement assemblages is much lower, typically at 10% or less (West 1985, 128; Hamerow 1993, 51–2; Sudds 2005, 218; Lucy *et al*. 2009, 209). Just over 16% of the current assemblage is decorated but, as fragmentary, the figures are not necessarily comparable.

The presence of residue and sooting suggest that some of the vessels on site are likely to have been used to prepare food or drink. With convincing evidence for the pre-use of funerary vessels from recent analysis on the cremation cemetery at Cleatham in Lincolnshire, however, it cannot be assumed that such deposits only occur on vessels derived directly from settlement activity, or for that matter, that they are solely indicative of general domestic use (Perry 2011). At Cleatham it was suggested that the pre-burial use of a vessel could determine if it was suitable for use as an urn or for a particular person (ibid.). Residue and sooting could also conceivably be deposited as part of the burial ritual itself.

On balance, the nature of deposition of the pottery, high ratio of vessels to sherd count, and relatively low number of decorated sherds given the early date, suggest a domestic origin is perhaps more likely. Indeed, to date, only one accessory vessel has been identified from the two areas of the cemetery excavated (Robinson and Duhig 1992, 21 and 26). Of course, even taking both excavations into consideration, only a small proportion of what could be a much larger cemetery has been uncovered, so it would be unwise to assume the sample is representative, but accessory vessels are also rare at nearby Oakington. This would place settlement in close proximity to the cemetery, as has previously been intimated but not proven, with the dating indicating they were in use concurrently (Robinson and Duhig 1992, 32–4).

Late Saxon, medieval and post-medieval pottery

The majority of the small late Saxon, medieval and post-medieval assemblage can be well-paralleled in the region and indicates the presence of contemporary activity in the immediate vicinity of the site. The medieval assemblage includes both local and regional coarsewares and glazed wares commonly identified in this part of Cambridgeshire, including Grimston-type wares, Stamford Ware and Medieval Ely Ware. The presence of a possible Dutch redware, dating to the fifteenth or sixteenth century, is of some interest. It is possible the vessel represents an East Anglian or Essex redware, given the similarity in fabric and form between these traditions, but if imported, is suggestive of a well-connected or affluent household in the vicinity.

Haddenham within its Regional Context

Haddenham sits in the east of the county, outside the main concentration of Anglo-Saxon cemeteries, which

is south of Cambridge along the River Cam and its tributaries (Malim and Hines 1998, 319–327, fig. 9.1). There are also several sites near Cambridge, including recent discoveries at Hatherdene Close, Cherry Hinton, and North Stowe, as well as Oakington.

The Haddenham cemetery is located on the high ground that forms the Isle of Ely, the largest island in the Fens. It sits at the junction of two spurs that lead to the causeways of Aldreth and Earith, two of the three routes onto the Isle at the time. Its prominent location perhaps explains the placement of a cemetery here. The eight burials discussed here would have been part of a larger cemetery, of which a number of additional burials were excavated in 1989–1990 (Robinson and Duhig 1992). The most striking feature of the 1990 excavation was the double burial of a male and female and their associated grave goods. The male was buried with a shield boss of the same type as CTKH14 SF. 3, and a socketed spearhead. Finds associated with the female skeleton included a small-long brooch —the same type as those found at CTKH14 (SF. 6, SF. 17), although with a rectangular rather than trefoil-shaped head— a spindle whorl, and amber and glass beads. There is also a double burial at the present site, and multiple burials also occur at other recently excavated cemeteries in the county, including Oakington and Hatherdene Close: this is a phenomenon which deserves further research.

Ely, six miles north-east of Haddenham, was a significant Anglo-Saxon religious centre from at least the seventh century, and several cemeteries of sixth- and seventh-century date have been excavated near Ely (Lucy *et al*. 2009). At Witchford aerodrome around 30 skeletons were discovered during 'urgent war-work'. The objects recovered include a sword, a number of saucer, annular, and great square-headed brooches, amber and glass beads, iron buckles, and a girdle-hanger (Cambridge Museum of Archaeology and Anthropology), which suggest a sixth-century date. Further Anglo-Saxon burials were excavated at Newbarns Road housing estate in 1959, including sixth-century finds such as shield bosses, and brooches (Fowler 1948, 70–6; Wilson and Hurst 1960, 134). Burials were apparently found somewhere in the parish of Willingham, less than 10km south-west of Haddenham at the other end of the Aldreth Causeway, as recently as 1993, together with evidence of early Anglo-Saxon settlement, but these cannot be verified (CCC report no. 783, CHER MCB17885). Other cemeteries have been excavated more recently at Littleport and just north of Ely. The artefact types at these sites suggest they were used by similar communities to that buried at Haddenham. The large cemetery of Oakington, 15km south of Haddenham, has been excavated most recently between 2010 and 2014. A total of 124 skeletons were recovered from 113 graves, which indicates the high incidence of multiple burials at this site. Finds include wrist clasps of similar types to those found at Haddenham, small-long brooches, combs, and cruciform brooches, as well as spearheads and shield bosses (Sayer *et al*. 2011, 21;

Schiffels *et al*. 2016). Together, these cemeteries show that although settlement evidence in the area is limited, there were a number of Anglo-Saxon communities in and around the Isle of Ely. The cemetery at Haddenham was just one of many that served this community in the sixth century. Questions which remain to be investigated are when Anglo-Saxon burial began in this region and also when furnished burial came to an end. The long date range of the artefacts from Haddenham, from mid-fifth- to later-sixth-century, suggests that a more extensive excavation of the cemetery might throw some light on these questions. So far we have seen only a small window onto part of a burial ground of unknown size and layout. In future, priority should be given to further properly-resourced archaeological investigations if any (re)development is planned in the immediate vicinity of the known early Saxon burials.

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