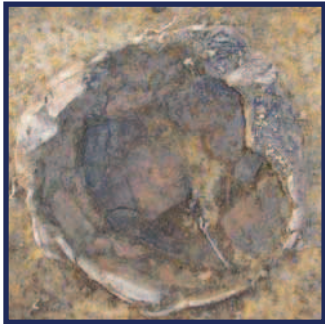


Piper's Way Swindon Wiltshire



Archaeological Publication Report



Oxford Archaeology

January 2010

Client: Places for People

Issue N^o: 2
OA Job N^o: 4454
NGR: SU 1620 8250

LATE IRON AGE, EARLY ROMAN, AND MEDIEVAL SETTLEMENT AT PIPER'S WAY SWINDON, WILTSHIRE

by Cynthia Poole and Alan Hardy

with contributions by Edward Biddulph, Paul Blinkhorn, Dana Challinor, John Cotter, Ian Scott, Ruth Shaffrey, Wendy Smith, Lena Strid

Summary

Two phases of activity were revealed, the earlier relating to the late Iron Age-early Roman and the second to the early medieval periods. In the first period an area of settlement was identified in the south-west sector (Area 2/3) of the site defined by ditches and areas of possible quarrying. Contemporary field boundary ditches had been identified in the evaluation trenches across the southern part of the development and part of the field system was exposed in the excavation of area 1 in the south-east sector. Following a long period of abandonment the settlement site was re-occupied probably in the late 11th or early 12th century in the form of a small farmstead defined by a rectangular ditched enclosure with associated ditched paddocks or fields to the north and east. This settlement lasted until possibly the 13th century, after which time the site reverted to agricultural land.

INTRODUCTION AND BACKGROUND

Between May 2004 and March 2009 Oxford Archaeology carried out a programme of evaluation and excavation on land at Piper's Way, Swindon, Wiltshire (NGR SU162 825) on behalf of Wakefield Properties Limited, in respect of a planning condition (Planning Application S/05/1720/IH) for the construction of a series of housing units and a nursing home.

A brief was provided by Roy Canham of Wiltshire County Council Archaeological Service (WCCAS), who initially monitored the project. His role was taken over by Melanie Pomeroy-Kellinger of WCCAS on behalf of Swindon Borough Council. Ownership changes of parts of the site resulted in the outstanding archaeological programmes, including the post-excavation and publication of the results being completed for Lucy Biddle of RPS Consulting, on behalf of the current developer Places for People.

Topography and Geology

The development is situated on the southern edge of Swindon in the grounds of Wakefield house (formerly Burmah House) between Piper's Way and the disused railway track alongside Broome Manor Lane (Fig. 1). The site lies at approximately 130 m to 110 m OD, on the south-facing slope of the valley of the River Ray, which separates Swindon from Burderop Down and beyond, the Marlborough Downs, to the south. The underlying geology is the Kimmeridge Clay Formation (Area 2/3), which outcrops on the lower slopes but is overlain by sand, either a horizon within the Kimmeridge Formation or Lower Greensand on the higher areas (Area 1). Sarsen stones were found, naturally embedded in the surface of the solid geology. Sarsens appear on the Ordnance Survey map in fields to the south suggesting that these may have been a more common feature of the landscape in previous periods.

Historical and Archaeological Background (Fig.1)

The earliest archaeological evidence in the area possibly dates to the Neolithic in the form of a scatter of flint implements [1] found during development *c* 500m to the north-west, with later activity represented by a Bronze Age flint arrowhead [2] found during the construction of Burmah House. A standing stone [3] to the east in Broome village was described by Aubrey and another *c* 1 km to the south-east at Nightingale Farm [4], suggest foci for prehistoric ceremonial activity.

Iron Age activity is lacking though undated earthworks and field systems [5] may be of this date, but could relate to the more abundant evidence for Roman activity. Both artefactual, including pottery, building material and coins, and structural evidence in the form of walls and a well concentrated to the north-east of Broome village may indicate the site of a villa [6]. A second Roman settlement [7] was recorded during construction of the M4 directly south of Area 2/3, *c* 1 km across the valley. Further east is the small town of Durocornovium (Wanborough) on the Roman road from Cirencester to Silchester.

Early medieval material is sparsely represented by two find spots - [8] and [9] - of pottery to the north-east of Broome. Swindon is mentioned in Domesday, but the main focus of medieval settlement close to the site is Broome Manor, approximately 350 m south-east of Area 2/3. The manor is first mentioned in the 12th century (VCH IX, 1970, 122) and may have formed part of a larger settlement [10] as earthworks to the south-east of it would support the contention of Beresford and Hurst (1989, 206) that the area is the site of a deserted medieval village.

The area of the current development remained as agricultural land throughout the post-medieval period, although the 1st edition OS map shows 'ancient foundations' under what is now an artificial mound immediately west of Area 2/3 (see Figure 2). The expansion of Swindon did not affect the site until the later 20th century. During the early 1970s Burmah House (now Wakefield House) was built in the northern part of the development area while the southern part was landscaped to provide an expanse of parkland. At about the same time the Broome Manor golf course was constructed immediately to the south of the site.

Summary of evaluation results (Fig. 2)

The evaluation trenches excavated by OA during 2004 (see Figure 2) revealed evidence of ditches, interpreted as late Iron Age - early Roman field boundaries in the south-east part of the development area, and a possible focus of Iron Age and Roman settlement in the south-west, albeit apparently disturbed by modern landscaping (OA 2004). Elsewhere - to the north of Wakefield House and to its immediate south - the same landscaping associated with the 1970s development had either left nothing of archaeological significance, or buried it under considerable overburden.

The Excavations (Fig.2)

Two areas were designated as having potential for further investigation, an area of intersecting and possibly multi-period field boundaries (Area 1), and a small area of

possible surviving settlement remains, close to a stream channel along the south-west edge of the site (Area 2/3). This area was subsequently enlarged to the north (Area 3).

Methodology

Three phases of excavation took place focussing on two distinct areas within the development. Area 1 was situated in the south-east of the development and covered 2500 sq. m. while Areas 2 and 3 were contiguous and situated in the SW area of the development and encompassed 3450 sq. m, with excavation concentrated in an area of *c* 1050 sq m. The excavation of Area 2/3 was constrained by a large mound of redeposited material, generated by the ground clearance of the site of Wakefield House in the 1970s. The archaeological deposits continued under this material but could not be excavated because of the depth of overburden. As this area is not to be levelled completely by the current development, the archaeological deposits (which could include the 'ancient foundations' marked on the 1st edition OS map (see Figure 2) should survive in situ.

In the designated areas, the overburden was removed under close archaeological supervision by a 360° mechanical excavator fitted with a toothless bucket down to the top of the highest significant archaeological horizon. Archaeological features were cleaned by hand and the revealed features were sampled to determine their extent and nature. All archaeological features were planned and where excavated their sections drawn at scales of 1:20. All features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OAU Fieldwork Manual* (Wilkinson 1992).

Site conditions

It was clear that the extensive landscaping in the 1970s had caused significant damage to the archaeological deposits, most apparently in the Area 2/3 excavation, resulting in complete truncation on the east side of the trench. Also, the general passage of heavy machinery in the area left numerous wheel and dumper ruts cutting through the archaeological deposits.

The surviving archaeological deposits extended northwards from a former small stream bed or watercourse (2210), that appears as a field boundary on pre-1970 OS maps (see Fig. 2). It had been at least partly culverted in the 20th century and during the landscaping in the 1970s was infilled with dumps of subsoil, rubble and modern rubbish, capped with redeposited natural clay and sand. The area south of the watercourse was largely devoid of features, which may imply that the watercourse formed a natural (southern) boundary to the settlement.

The phasing

Apart from the modern landscaping, two main chronological phases of settlement have been identified: Late Iron Age-early Roman and early medieval. This interpretation is based on the recorded stratigraphy and spatial relationships, supplemented by the dating of artefacts. Area 2/3 provided the most complex archaeological sequence, and the basis for the phasing detailed below. Area 1 also displayed sparse but (probably) multi-period activity, but its lack of detailed dating evidence means that its phasing is of necessity more derivative and conjectural.

Phase 1: Prehistoric

Phase 2: Late Iron Age (1st century BC - AD43) - middle Roman (2nd century AD)

Phase 3: Late Roman - early medieval

Phase 4: Medieval (late 11th century-13th century)

Phase 5: Late and post-medieval (14th-19th century)

Phase 6: Modern (20th century)

ARCHAEOLOGICAL DESCRIPTION

Area 2/3 (Figure 3)

Phase 1: Prehistoric Activity

No features were identified that could be associated with prehistoric occupation. However a scatter of eighteen flints were found residually in later deposits across both excavation areas and the evaluation trenches. The assemblage suggests casual loss, forming a background scatter of prehistoric activity. This is consistent with the sparse finds of flint found in the locality, which include a Bronze Age flint arrowhead found during the construction of Burmah House (SMR SU18SE155), and a flint scatter of possibly Neolithic date found during development to the west of West Piper's Way (SMR SU18SE116).

Phase 2: The late Iron Age - mid Roman settlement

The late Iron Age - early Roman activity dates from the 1st century BC through to the 2nd century AD and is characterised by a network of irregular enclosures typical of the late Iron Age, succeeded by a more orderly layout of rectangular early Roman enclosures. All of these features were disturbed or truncated to varying degrees by modern landscaping.

Late Iron Age

Only a single discrete feature (2383) contained exclusively LIA pottery, but the majority of the features are dated on the basis of pottery to the 1st century AD with both Iron Age and Roman forms present. The earliest feature identified in this phase is ditch (2554) running roughly east-west, turning to continue a more southerly trajectory (2544) at its east end. This may have originally been continuous, but ditch 2554 had been recut along the west half possibly forming a terminal at its east end to create access between enclosures to north and south. The ditches varied between a shallow curving concave profile and a flat base with steep straight sides, and measured in total *c* 30 m long by up to 0.5 m wide and on average 0.15 m deep. The fill was a natural accumulation of dark brownish grey silty or fine sandy clay soil with occasional evidence of slumped clay natural, probably eroded from the ditch sides, though possibly indicating the presence of a bank alongside the ditch.

Late Iron Age - early Roman

Broadly contemporary with this was a more extensive arrangement of ditches that could define several enclosures. To the north of 2554 rectilinear ditch 2545 terminated just to the north of the west end of 2554 leaving a narrow gap and ran to

the north-east for at least 17 m. It became very shallow at its north-east end and appeared to return to the south-east for 10 m. This defined an enclosure along the north side of 2554 measuring 23 m long by 11 m wide. To the south ditch 2543 ran NNE-SSW for 15 m at right angles to 2544 leaving a gap of approximately 4 m. This may represent an entrance between a western enclosure and an eastern one bounded on its south by ditch 2352, which ran roughly at right angles eastwards from 2543. This arrangement would have created sub-rectangular enclosures to the south of ditch 2554 of uncertain extent.

The fills of all the ditches were very similar: a dark brownish grey silty clay loam containing occasional small pebbles, fragments of sarsen or charcoal flecks. All contained some pottery, though rarely in large quantities. The greatest concentrations were in ditch 2554 and in the eastern length of 2545. The ditches varied in profile from fairly rounded to more commonly 'V' shaped or flat bottomed with straight sloping sides (see Fig. 7, section 2203). Ditch 2545 measured between 0.4 m and 1.0 m wide by 0.2 m deep, while the others averaged 0.6-0.8 m wide by 0.15-0.25 m deep.

A rectangular enclosure 2548 cut ditch 2544. It was defined by a straight narrow ditch on the west, south and east sides, but no northern edge was observed, which may have been masked or truncated by later activity. The enclosure measured 7.5 m by 15 m and the ditch measured 0.6 m wide by up to 0.3 m deep. It had a U shaped profile and was filled with a firm light greyish brown homogenous silty clay with occasional small rounded pebbles and rare charcoal. Its regularity and size may indicate the position of a structure or building though no structural evidence survived within the enclosure. Only one undated feature occurred within it, and may be contemporary, the base of a possible pit (2367), which had an irregular base and steep shallow sides and measured 0.8 m x 0.7 m by 0.1 m deep.

Early-middle Roman

This enclosure was cut on the west by linear ditch 2387, which may form part of the latest modification in this phase. A large subrectangular enclosure delineated on the north and east sides by ditch 2555 and 2387 contained pottery of early-mid 2nd century AD date. Ditch 2555 appeared to replace at least one, and possibly two earlier boundaries at this point; ditch 2440, which also produced pottery of mid-2nd century date, and possibly feature 2452, (see Fig. 6, section 2257). This enclosure measured over 17 m by c 22 m with a possible entrance gap of c 3 m width on its east side. These ditches varied in profile from a flat base and steep straight sides or a V-shaped in 2555 to a more rounded concave profile in 2387. They measured 0.5 - 1 m wide and 0.2 - 0.5 m deep.

Related to this enclosure were ditches 2483 and 2556, on the same alignment to 2555, possibly defining additional enclosures to the east and north. On the eastern side of the site, an extensive complex of irregular hollows (2542) may have originated as Roman quarrying as the lowest layers contained only Roman pottery.

Phase 3: Late Roman - Early medieval

There is no evidence to suggest the site was occupied beyond the 2nd century, though a very corroded bronze disc, which may be a coin of mid-late 3rd century date, could

indicate that some casual or intermittent use of the area continued. No evidence of Anglo-Saxon activity was found.

Phase 4: The medieval settlement (Areas 2 and 3) (Fig. 4)

The medieval settlement dates mainly to the late 11th century with evidence of continued use into the 12th and 13th centuries. It was represented by at least two rectangular enclosures defined by ditches 2550/2, 2546/7 and 2473 aligned broadly on a north-south and east-west alignment. The main eastern boundary was N-S ditch 2552, while to the west the ditches continue beyond the excavation. It is unclear whether the area to the east of 2552 was enclosed, though some hint of contemporary ditches on the same alignment in the very heavily truncated areas were noted, but not investigated in detail.

The main southern enclosure measured 15 m N-S by at least 20 m W-E. and the northern (apparently additional) enclosure was approximately 10 m wide. The southern enclosure was defined on the south and east by ditch 2550, and on the north by ditch 2546. The ditches were relatively large, being 0.7-1.5 m wide by 0.3-0.5 m deep and both 2550 and 2546 had been recut at least twice. An addition to the original enclosure entailed the extension of 2550 to the north (as ditch 2552 - see Figure 7, section 2253), and additional W-E ditches 2547 and 2473. All the ditches had rounded concave profiles with curving bases and sloping sides and were filled with dark grey sandy clay fills sometimes containing inclusions of redeposited natural clay.

The southern enclosure was subdivided later in its use with the cutting of ditch 2551 to form a western boundary thus creating a smaller enclosure 10 m by 17 m. Its junction with 2550 coincided with an area of modern disturbance, but on the north there was a series of terminals slightly inturned eastwards, indicative of recutting. The most northerly of these (see Figure 7, section 2212) contained most of a large pot, broken in half and with the two parts set inside one another. The pot is a Gloucester-type Oolitic Ware jar of late 11th- to 12th-century date. Ditch 2551 cut across the silted fill of ditch 2546, which therefore may have been replaced by ditch 2547 cut about three metres further north.

Some short linear features cut across the northern boundary ditch 2473, at the western edge of the site. They were smaller, averaging 0.4-0.6 m wide by 0.2-0.4 m deep, with curving concave profiles and rounded terminals. Some were relatively short, and their function in this context is uncertain. They may be associated with the main N-S enclosure ditch 2550, but given the degree of disturbance by modern landscaping they could in fact be wheel ruts.

The main evidence for occupation was concentrated within the extended southern enclosure. This was centred on a shallow hollow (2230) *c* 7 m diameter. Where excavated on the west there were possible shallow stakeholes along the edge, and a posthole (2234), features which suggest some structural elements were associated with hollow 2230. A large sarsen block was also noted, but whether it was structurally related was unclear. On the north edge of hollow 2230 was a possible hearth with a charcoal lens (2295), and nearby a small pit (2227) which had a complete pot set into it upside down (see Figure 7, section 2200). The vessel fitted very tightly to the sides of the pit and there was no evidence that it had contained anything; the base had

slumped inside the walls under the weight of overlying soil. The pot (2221) was also a Gloucester-type Oolitic Ware jar of late 11th/12th century. A number of other shallow hollows or small pits were also associated including a conical pit (2286) 1.5 m wide and 0.4 m deep lined with a layer of grey clay.

Extending from the southern edge of hollow was a curving gully (2340) of unknown function, which appeared to cut into the upper fill of enclosure ditch 2550. It contained a few sherds of 11th-century pottery, but might - by its stratigraphy - belong to the later medieval period. A spread (2212) of occupation soil (possibly the remains of a midden?) of similar date was recorded about 10 m to the north-east of the enclosure.

Outside the main occupation area, and situated 8 m east of the southern enclosure was the remains of a crop drying oven represented by a pit (2319) filled with large quantities of burnt material (Fig. 6, section 2233). The main pit was sub-rectangular, measuring 1.7 by 1.4 m and 0.7 m deep. The southern edge of it just cut the W-E Iron Age ditch 2548 (cut 2323). Extending from the northern and eastern edges were two shallower slots, each with a shallow rounded profile. The northern slot measured 1.2 m long, 0.65-0.8 m wide by 0.1-0.2 m deep, while the eastern slot measured 1 m long by 0.3-0.5 m wide and 0.1 m deep. Within the main pit were alternating and interleaved layers of cinders and fragments of clay structure. The primary fill was a thick layer of charcoal (2362) with pieces of burnt clay representing a primary accumulation of debris and wall lining flaked off the structure, presumably the result of repeated usage of the drier. This was overlain by succeeding thinner layers of ash and charcoal in varying proportions, also containing fragments of orange, red and black fired clay and unfired yellow clay. The layers became increasingly ashy from base to top suggesting combustion in the lower layers was less complete resulting in a greater quantity of larger charcoal, compared to the upper layers consisting of mainly ash and containing a greater quantity of fired clay oven lining. The feature was capped by a thick layer of mixed burnt red and orange and unburnt yellow clay, which probably represents the demolished superstructure.

The analysis of the carbonized plant remains suggest that this feature functioned as a corn-drier for the parching of free threshing wheat (see Smith, below) with crop waste and small branch-wood from managed woodlands used for fuel (see Challinor, below). It is clear from the fired clay that only the surface of the structure was fired to a sufficient degree to survive and that much of the structure remained unfired.

No other medieval feature was identified in this eastern sector outside the enclosures. However layers of occupation containing medieval pottery of 11th –12th century continued to accumulate within the possible quarry hollows and were overlain by a deposit of sarsen rubble c. 200-300 mm in a silty-sandy clay soil. It was difficult to gauge whether this rubble resulted from 20th-century landscaping or was an ancient deposit disturbed by the landscaping. If ancient, the stones may represent a period of clearance of sarsens to enable fields to be used for arable agriculture. Large sarsen boulders had also been dumped in several ditches of both Roman and medieval date.

A final stage of activity was recorded in this hollow, which was subsequently overlaid with a dark humic soil (2209) containing frequent pottery of 12th- and 13th-century date. This soil is interpreted as an accumulation of occupation debris over the hollow.

Further material of this date (2318) was recorded overlying the infilled corn-drier (2319) and in the general overburden in this area.

Phases 5 and 6 - Post-medieval-modern

Following the abandonment of the medieval settlement in Areas 2/3 no further occupation took place on the site. Ridge and furrow is visible in some of the neighbouring fields on air photographs and the area is shown as agricultural fields on early maps, with allotments related to the expansion of Swindon beginning to encroach on the northern fringes of development in the 20th century. Major changes occurred with the construction of Burmah House, and the associated landscaping, which is responsible for much of the modern disturbance and truncation in the vicinity of Area 2/3, and the obliteration of earlier field boundaries and earthworks.

Area 1 (Fig. 5)

This area lies *c* 0.5 km to the east of Area 2/3 and exposed two phases of field boundary ditches, which may be contemporary with the settlements in Area 2/3. The quantity of artefacts associated with the ditches is very small and dating of the features is therefore speculative.

Three phases of activity can be proposed on the basis of the limited stratigraphic and artefactual evidence. The earliest phase is represented by the very small shallow ditches 2135, 2137 and 2139, averaging 0.4 m wide x 0.1 m deep. By their modest profile and length they may have an Iron Age origin. Probably later - and possibly Romano-British in date - could be the W-E oriented ditch 2140. This is clearly cut by two phases of 12th-13th century NW-SE field ditches and recuts 2141/2142 (which also cuts 2137). Associated ditches 2113 and (slightly later) 2143 suggest modifications of medieval field boundaries, and the two ditches on the west of the site (2125 and 2127). All have similar concave rounded profiles with gently or moderately sloping sides and a dished base. Fills were similar consisting of loose, dark yellowish or reddish brown silty sand, occasionally differentiated by inclusions of small stones, sarsen rubble (2125) or a lower layer of green mottled eroded natural (2141) derived from the Greensand. A very small quantity of 12th -13th century pottery was recovered from the medieval phase of activity.

A number of large sarsen boulders were also found, together with at least more than twenty sub-circular shallow scoops apparently concentrated between ditches 2141/2 and 2125/7. The scoops probably represent the position of former sarsens. Conceivably the two field-ditch pairs 2125/7 and 2141/2 may have separated off a 'sarsen field' between them, containing sarsens cleared from fields to either side.

ARTEFACTUAL AND ECOFACTUAL EVIDENCE

Flint

by David Mullin

A total of 28 worked flints weighing 412 g was recovered, all from secondary contexts. The assemblage comprises core trimming flakes, secondary and tertiary flakes, including a retouched flake and unworked burnt flints. The only tool was a broken scraper possibly of Mesolithic date. The material is entirely residual and not particularly diagnostic and as such has little potential to add to the understanding of the chronology or sequence of the site.

Iron Age and Roman pottery

by Edward Biddulph

Over 600 sherds of Iron Age and Roman pottery, weighing some 8 kg, were recovered from the site (Table 1). A quarter of the pottery by estimated vessel equivalent or EVE (which measures the proportion of a rim that survives) belonged to the category of (typically handmade) Iron Age or early Roman fabrics (E wares). These comprised fabrics defined by their principal inclusions (limestone, grog, flint, shell and sand), and were in use during the middle or late Iron Age and continued to lesser or greater extents into the second half of the 1st century AD. Evidence from Thornhill Farm and other sites in the region suggests that grog largely replaced limestone and shell as the principal filler by the early first century AD (Timby 2004, 107). Flint was in use during the late Iron Age, though was never common (cf. Timby 1999, 322). The pottery from Piper's Way is consistent with this pattern; the strong showing of grog-tempered pottery at Piper's Way gives this group of fabrics – and deposition – an emphasis in the late Iron Age or 1st century AD. Forms were dominated by bead-rimmed and globular jars, which were recorded in grog-tempered, limestone-tempered and sand-tempered fabrics. Forms in grog-tempered fabrics additionally comprised high-shouldered necked jars, jars with everted rims, beakers, and necked bowls (Table 2).

Table 1: Iron Age and Roman pottery – fabric quantification. Fabric nomenclature follows standard OA guidelines (Booth nd); MV = minimum number of vessels based on rim count, EVE = estimated vessel equivalents based on percentage of surviving rim.

Fabrics	Sherds	Weight (g)	MV	EVE
B10 – Handmade black-burnished ware, category 1	2	15	1	0.06
B30 – Wheel-thrown imitation black-burnished ware	5	46	2	0.15
C20 – Miscellaneous limestone-tempered wares	6	58		
E20 – Iron Age/early Roman fine sand-tempered fabrics	7	55	1	0.05
E30 – Iron Age/early Roman coarse sand-tempered fabrics	3	13		
E40 – Iron Age/early Roman shelly fabrics	1	83		
E50 – Iron Age/early Roman limestone-tempered fabrics	32	270	3	0.29
E60 – Iron Age/early Roman flint-tempered fabrics	23	581		
E80 – Iron Age/early Roman grog-tempered fabrics	64	557	4	0.89
E810 – Iron Age/early Roman grog- and sand-tempered fabrics	109	1228	4	0.91
O10 – Miscellaneous fine oxidised wares	7	15		
O20 – Miscellaneous sandy oxidised wares	8	50		
O40 – Severn Valley oxidised ware	1	3		
O80 – Coarse-tempered oxidised fabric	1	7		
R10 – Miscellaneous fine grey wares	58	302	4	1.11
R20 – Miscellaneous coarse sandy grey wares	20	179	1	0.3
R30 – Miscellaneous medium sandy grey wares	47	981	12	1.81
R35 – North Wiltshire sandy grey wares	51	463	1	0.29
R50 – Miscellaneous black-surfaced wares	84	833	2	0.76
R90 – Coarse-tempered reduced (storage jar) fabrics	26	644	5	0.64
R95 – Savernake grog-tempered ware	54	1676	9	1.16
S20 – South Gaulish samian ware	1	2		
S30 – Central Gaulish samian ware	2	4	1	0.1
W20 – Miscellaneous sandy white ware	1	23		
W40 – Miscellaneous fine white ware	1	3		
TOTALS	614	8091	50	8.52

Table 2: Iron Age and Roman pottery – assemblage composition

Fabric	Beaker	Bowl	Cup	Dish	Jar	Lid	Total EVE	0%
B10					0.06		0.06	0%
B30				0.15			0.15	2%
E20					0.05		0.05	1%
E50	0.11				0.18		0.29	3%
E80					0.89		0.89	10%
E810		0.08			0.83		0.91	11%
R10	0.25	0.36			0.5		1.11	13%
R20	0.3						0.3	4%
R30	0.22				1.06	0.53	1.81	21%
R35					0.29		0.29	3%
R50					0.76		0.76	9%
R90					0.64		0.64	8%
R95					1.16		1.16	14%
S30			0.1				0.1	1%
Total EVE	0.88	0.44	0.1	0.15	6.42	0.53	8.52	-
0%	10%	5%	1%	2%	75%	6%	-	-

Wheel-made reduced wares (R wares) took the largest share of the entire assemblage, some 70% by EVE. Most sherds, presumably locally produced, were assigned to miscellaneous categories, including fine grey wares, medium sand grey wares, and black-surfaced wares. Forms recorded in these fabrics indicate an early Roman emphasis and a degree of continuity from Iron Age tradition. Bead-rimmed/ globular jars and high-shouldered necked jars remained important, though were joined by medium-mouthed, oval-bodied, necked jars. A globular beaker and carinated bowl were recorded in fine grey ware. North Wiltshire grey ware were less important in this mainly early Roman assemblage, although this should be expected, since the ware is better associated with mid and late Roman contexts (Anderson 1979). Forms were confined to medium-mouthed necked jars. By comparison, Savernake ware, dating from the mid 1st to early 2nd century, found a more significant place in the

assemblage. Storage jars and bead-rimmed jars were represented. Oxidised wares, apparently oxidised versions of the reduced wares, were poorly-represented. The exception was Severn Valley ware, which could well have arrived during the early Roman period.

A small amount of pottery attested to limited deposition in the mid Roman period, probably the 2nd century. A black-burnished ware cooking pot was dated to the mid 2nd century, and Wiltshire-made plain-rimmed dishes in imitation black-burnished ware are likely to share this date. Deposition in the 2nd century is supported by a Drag. 27 cup in Central Gaulish samian ware, which dates no later than AD 150.

With jars dominating the assemblage, and the low proportion of wares like samian, the assemblage points to relatively low-status occupation. However, it should be noted that a number of context groups also contained medieval pottery. The Roman material in these groups must therefore be residual. The effects of redeposition inevitably reduces the reliability of the pottery as a determinant of site status, although as a chronological indicator, the assemblage seems to be reasonably consistent.

The medieval pottery from Area 1

by John Cotter

The assemblage comprises a total of 17 sherds of pottery weighing 223 g and consists of sherds of three types of mainly medieval wares and two unstratified joining sherds of a probable 16th-century ware. The medieval wares consist mainly of Minety ware (OXBB), a limestone-tempered ware from Wiltshire produced between the 12th and early 16th century, and a few sherds of (so-called) Late Saxon and Early medieval South-West Oxfordshire ware which was, again, probably produced in east Wiltshire between the 9th and the 13th century. Both industries were long-lived but on the basis of rim typology the dating emphasis here probably lies in the 12th-13th or 12th-14th centuries. Two joining sherds of an unidentified medieval coarseware (context 2110) are also broadly compatible with this dating.

The medieval pottery from Area 2/3

by Paul Blinkhorn

The pottery assemblage comprised 851 sherds with a total weight of 11,752 g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 3.28. The bulk of the assemblage was of earlier medieval (late 11th-14th century) date, although a fairly large assemblage of mainly residual Romano-British material was also present. The presence of a single base sherd from a Brill/Boarstall chafing dish in a late medieval fabric is evidence of probable high-status activity in the later 15th century, but it is the only sherd which can be dated to that time with confidence. The medieval assemblage was dominated by flint-gritted Newbury-type wares typical of the region, but oolitic limestone tempered pottery, from the Cotswolds region and similar to wares known from Gloucester, was also present, mainly in the form of two near-complete large jars.

Fabrics

The following were noted:

F200: **Gloucester-type Oolitic ware.** Early 11th - late 12th century. Brown fabric, quite hard and well-fired with moderate oolitic limestone temper. Vince's Gloucester type TF41B (ibid. 1984), 256 sherds, 3958 g, EVE = 1.37.

F202: **Newbury 'A/B' - type ware.** Late 11th - late 14th century (Mephram 1997, 51-2). A range of sand-, flint- and limestone-tempered wares. Sparse to moderate limestone up to 2mm, rounded white or clear quartz up to 0.5mm, moderate to dense angular fragments of white, grey or black flint. Jars, bowls and pitchers. 331 sherds, 4390 g, EVE = 1.86.

F300: **Medieval Sandy ware.** Late 11th - 14th century? Dense sub-rounded white, grey and clear quartz up to 0.5 mm. 20 sherds, 213 g, EVE = 0.

F301: **Micaceous sandy ware.** Late 11th - 13th C? Soft, fine fabric with rare limestone and angular flint up to 2mm, moderate fine silver mica, moderate, burnt-out organic material up to 5mm. Similar to Bath B/D ware (Vince unpub.). 14 sherds, 202 g, EVE = 0.05.

F324: **Brill/Boarstall Ware.** c AD1200-?1600 (Mellor 1994). Wheel-thrown. Hard buff, orange, pale pink, or yellow-grey fabric, sometimes with fine 'pimpley' surface. Rare to common sub-angular to sub-rounded orange, clear and grey quartzite up to 0.5mm, rare sub-rounded to sub-angular red ironstone up to 1mm. Mottled pale to dark glossy green exterior glaze, often with copper filings. 3 sherds, 224 g, EVE = 0.

F325: **Laverstock ware** (Musty *et al.* 1969). 13th - 14th century. Hard, grey fabric with sub-rounded quartz up to 2 mm, most less than 1 mm, ironstone up to 1mm, rare flint. 1 sherd, 91 g, EVE = 0.

F326: **Late Medieval Brill/Boarstall ware** (Mellor 1994, 117). Late 15th - 16th century. Smooth fabric with few visible inclusions apart from sub-angular ironstone up to 2mm, and sparse flecks of silver mica. Classified by Mellor as Oxford fabric OXBX. 1 sherd, 206 g, EVE = 0.

F355: **Minety-type ware.** Mid-12th - 16th century. Grey to brown fabric, moderate sub-rounded quartz up to 1mm, sparse to moderate red and black iron ore up to 0.5 mm, sparse to moderate oolitic limestone up to 2mm. Poor quality green glaze, jugs, jars (Mellor 1994, 100). 12 sherds, 265 g, EVE = 0.

F425: **Glazed Red Earthenwares:** Mid 16th - 19th century. Fine sandy earthenware, usually with a brown or green glaze, occurring in a range of utilitarian forms. 1 sherd, 5 g.

F1000: **Miscellaneous 19th and 20th century wares.** Mass-produced white earthenwares, stonewares etc. 6 sherds, 100 g.

The range of fabric types is fairly typical of sites in the region, being dominated by oolitic limestone-tempered Cotswolds-type wares, probably of the same type known from Gloucester, and flint-tempered wares typical of north Wiltshire and south-west Oxfordshire, and very similar to Newbury A and B wares, which are now generally known as 'Kennett Valley Ware' (L Mephram pers. comm.). In the case of the Cotswolds wares, in nearly all cases, the calcareous inclusions have leached out,

making precise identification impossible, but the feature sherds indicate that they are typical of the Cotswolds tradition.

The micaceous fabric F301 does not appear to be a local ware, but appears very similar to Bath fabric B/D (Vince unpub.), although with an higher organic content, and is somewhat softer. It may be a fabric version of the same material. The Sandy Coarsewares, F300, encompasses a range of similar fabrics. Early medieval pottery types similar to this are found along a considerable length of the middle Thames Valley and its hinterland, and the problem of differentiating between the numerous different wares has been noted in the past (Mellor 1994, 84). A base from a 'West Country'-type jar was present, and is probably from a source to the south-west of the site, most probably Nash Hill, Lacock (McCarthy and Brooks 1988, 340).

Chronology and quantitative Analysis

Each context-specific assemblage was given a pottery phase-date based on the range of fabric types present, which were then checked against the stratigraphic matrix to confirm their veracity. The scheme for the medieval period, along with the amount of pottery present, is shown in Table 3.

Table 3: Pottery Phase-dating Scheme and medieval pottery occurrence

Ceramic Phase (Stratigraphic Phase)	Date	Defining Wares	No Sherds	Wt (g)	EVE
CP1 (4)	E – L 11th C	F200	2	15	0
CP2 (4)	L 11th – M 12th C	F202, F300, F301	613	9105	2.82
CP3 (4)	M 12th – E 13th C	F355	74	828	0.20
CP4 (5)	E 13th – L15th C	F324, F325	127	1211	0.21
CP5 (5)	L 15th – M 16th C	F326	11	321	0.05
		Total	827	11480	3.28

The pottery occurrence by fabric type is shown in Table 4.

Table 4: Pottery Occurrence per Ceramic Phase, expressed as a total of the phase assemblage, by weight (in g)

CP	F200	F202	F300	F301	F355	F324	F325	F326	Total
CP1	100%	-	-	-	-	-	-	-	15
CP2	41.6%	39.7%	2.0%	1.3%	-	-	-	-	9105
CP3	11.8%	44.0%	0	2.4%	31.5%	-	-	-	828
CP4	4.0%	28.8%	2.9%	4.1%	0	1.5%	7.5%	-	1211
CP5	2.8%	13.1%	0	4.0%	1.2%	0	0	64.2%	321

The data in the tables show that the main period of post-Roman activity at the site was from immediately after the Norman Conquest until the 13th or 14th century. The relatively small amounts of Brill, Minety and Laverstock wares suggest that the former is the more likely end-date, but this may be due to the vagaries of the archaeological record combined with the fact that both sources of pottery are relatively distant from the site. Certainly, the chronology of the Newbury wares means that it is entirely feasible that activity at the site lasted well into the 14th century. A single feature produced a sherd of late-15th century material, and it appears to be refuse brought in from elsewhere to fill a quarry pit (see below).

The data in Table 4 shows a pattern of pottery consumption that is largely expected, with little residual medieval material, although very large quantities of Romano-British wares are present, showing that there was considerable disturbance of strata of

that date during the medieval period. The Gloucester-type Oolitic Ware is probably over-represented due to the presence of two near-complete vessels, one of which had completely disintegrated. The other was partially reconstructable (Fig. 8.1).

Illustrations

Fig. 8.1: Context 2221, fabric F200. Partly reconstructed, near-complete jar. Grey fabric with orange-brown surfaces. Outer of lower body is heavily sooted, outer surface of base-pad is scorched, and the centre of the inner surface is burnt. All the calcareous inclusions have leached out.

Fig. 8.2: Context 2503, fabric F202. Full profile of shallow bowl. Light grey fabric with variegated orange, brown and light grey surfaces.

Fig. 8.3: Context 2268, fabric F202. Full profile of shallow bowl. Grey fabric with brown surfaces. Patches of sooting on outer surface.

Fig. 8.4: Context 2268, fabric F202. Full profile of shallow bowl. Grey fabric with brown surfaces. Patches of sooting on outer surface.

Fig. 8.5: Context 2268, fabric F202. Full profile of shallow bowl. Grey fabric with brown surfaces. Patches of sooting on outer surface.

Fig. 8.6: Context 2268, fabric F202. Sharply angled base sherd from a 'West Country'-type jar. Orange-brown fabric with brown surfaces. Some sooting on the base angle.

Fig. 8.7: Context 2435, fabric F326. Base from a ?chafing dish. Smooth orange-red fabric.

Building material

by Cynthia Poole

A small quantity of ceramic and stone building material amounting to 23 fragments weighing 753 g was found both within the evaluation trenches and the area excavations. The assemblage was very mixed ranging in date from Roman to 20th century. Much of the post-Roman material, which included peg tile, pantile, roof slate, brick, field and sewer drain pipe, was found in the 20th century make-up deposits and has little relevance to the archaeology. The only certain Roman tile was a tegula and imbrex. Both were heavily abraded, suggesting they had been incorporated in deposits as a result of agricultural activity. The imbrex was found in a field boundary ditch and the tegula in deposits infilling the quarry hollow in Area 2/3.

Fired clay

by Cynthia Poole

A small assemblage of fired clay was recovered by hand excavation and sieving. The hand excavated material amounted to four objects (82 fragments) weighing 2082 g and was found in four features of Roman date. All the objects were very similar in form. Two were certainly fragments of oven plate with a smooth upper surface, burnt grey, a straight edge and rougher lower surface. One (Fig. 9) from ditch 2452 was subrectangular measuring 45 mm thick and over 150 mm long and may have been

pierced by a perforation *c* 50 mm diameter. It had a cut chamfered edge similar to the knife trimmed edges of Roman tile suggesting an influence from Roman tile production. It was made in a laminated clay fabric with coarse limestone grits, as had another similar object, suggesting that these had been imported perhaps from a tile production site from outside the immediate locality, probably coming from the Cotswolds to the north or west of Swindon. The two other objects were made in the local Kimmeridge Clay and had one well formed smooth surface burnt grey, but the underside was either missing or very irregular, suggesting these may have been hearth surface or oven lining.

The sieved material all came from the medieval crop drying oven and amounted to 3788 fragments weighing 1962 g. It was recovered from seven of the layers within the feature and all was clearly derived from the fired lining of the structure. Several thick layers of both fired and unfired Kimmeridge Clay were found in the feature clearly representing the demolished or collapsed superstructure. The absence of firing on some of the clay seen during excavation is indicative of low temperature activity and it is clear from the recovered fragments of fired clay that only the immediate surface in contact with the fire was actually fired.

Worked stone

by Ruth Shaffrey

A single whetstone was recovered from context 2209, part of the occupation layer 2230. This is made of a fine-grained, pale grey micaceous sandstone and has been well-used on the three surviving faces. Although its context was medieval, it could equally well be of Roman origin.

Metalwork

by Ian Scott

The small metalwork assemblage comprises 8 pieces of iron, 2 pieces of copper alloy and part of a silver finger ring (Table 5). Preservation of the ironwork is poor, with heavy build-up of corrosion products.

The ironwork includes two nails, one a modern wire nail (context 2437), bar fragments and some poorly preserved flat fragments. The copper alloy finds are a small fragment of wire or pin stem, and small very eroded coin, possibly Roman and dated to the mid to late 3rd century (2333) (information from Paul Booth).

The only other find is a fragment of a silver finger ring with a plain flat band expanded to accommodate the sub-rectangular setting. There is a very slight step or change of angle defining the panel for the setting. Little survives of the setting except a sub-rectangular panel with a slightly rough or irregular surface. The ring is quite small. It is not closely dateable but could be 2nd or 3rd century in date.

Table 5: Summary of metalwork assemblage

Context	coin	finger ring	nails	bar	wire fragt	flat frags	Totals
2201			1				1
2209				2		3	5
2318					1*		1
2333	1*						1
2437			1				1
2445		1**					1
2503				1			1
Totals	1	1	2	3	1	3	11

* Copper alloy, ** silver?

Animal bone

by Lena Strid

Introduction

The bones were recovered through hand collection during excavation and from wet sieving of bulk samples sieved to 0.5mm. The sieved fragments, all deriving from medieval contexts, constituted 33.3% of the total number of fragments, but only 0.6% of the total fragment weight. A full record of the assemblage can be found in the site archive, along with details of the analytical methodology; a summary is tabulated below (Tables 6 and 7).

The assemblage

The bones in the two phases were mainly in a good condition. Four bones in the medieval assemblage were burnt. No bones showed traces of animal gnawing. The two phases are dominated by domestic species but the number of species-identifiable bones recovered was too few to allow meaningful analysis. Suffice it to say that the bones derive mainly from butchery waste, and that the animals were present in the assemblage were sub-adult and/or adult at the time of death.

Table 6: Romano-British assemblage: Anatomical distribution of all species, including NISP and weight

	Cattle	Medium mammal	Indet
Mandible			
Loose teeth	3	1	
Metatarsal	1		
Indet			2
TOTAL	4	1	2
Weight (g)	34	2	0

Table 7: Medieval assemblage: Anatomical distribution of all species, including NISP and weight

	Cattle	Sheep/goat	Horse	Medium mammal	Large mammal	Indet
Horn core	1					
Mandible	1					
Loose teeth	1					
Rib					1	
Radius			2			
Carpal bones		1				
Longbone				2		
Indet						10
TOTAL	3	1	2	2	1	10
Weight (g)	97	0	187	2	12	12

Charred plant remains

Wendy Smith

In total, 18 samples associated with fills initially believed to be associated with a Roman corn-drier were collected during the course of excavations at Piper's Way, Swindon. The analytical methodology applied followed usual Oxford Archaeology procedures, details of which are included in the archive. Sample volumes were individually relatively small (ca. 10L); however, most layers were sampled 3 times and deposits were clearly quite rich, ranging from 224 to 852 seeds per litre of sediment sampled (see Table 8).

All of the samples from corn-drier 2319 produced abundant charred plant remains so one sample from each of the four main layers within the corn-drier and a discrete patch of ash to the side of the feature were selected for full analysis. A layer of unfired/ part-fired clay (context 2321), which most likely derives from the fabric of the corn-drier itself, sealed the uppermost deposit (context 2320) analysed. Preservation was remarkably good, but cereal grain was highly warped and extremely friable. The fragile condition of the cereal grain suggests that this deposit is unlikely to have been re-worked or moved since carbonisation, implying that this is indeed an *in situ* deposit from the operation of the corn-drier, rather than a dumped fill. However, due to the frequently poor preservation of cereal grain, identification to species, even genus, level often was not possible.

Table 8 presents a list of the taxa recovered from each deposit. Table 9 and Figure 10 present the relative proportion of plant remains recovered for all five samples studied. One sample (sample 3, context 2355) to the side of the feature was strongly dominated by tens of thousands of fragments of indeterminate rye/ wheat (*Secale cereale* L./ *Triticum* spp.) awns, and also contained hundreds of free-threshing wheat grains. It was not possible to quantify the awns, so this sample only was scanned and semi-quantified. All of the remaining samples produced abundant grain and rachis nodes of free-threshing wheat (*Triticum* spp. – see Plate 1). Unfortunately, all of the free-threshing wheat rachis nodes have broken above the abscission scar and, as a result, identification to species level was not possible. Small quantities of rye (*Secale cereale* L.) grain and chaff (see Plate 2) were recovered, as well as limited quantities of barley (*Hordeum* spp.) grains and rachis nodes and indeterminate cultivated/ wild oat (*Avena* spp.) caryopses. The weed/ wild plants from all samples are frequently recovered as weeds of crop and are consistent with other weeds of crop

found in corn-drier assemblages (e.g. slightly earlier Saxon corn-driers reported by Campbell 1994; Moffett 1994).

Although free-threshing wheat (Plate 1) and rye (Plate 2) are recovered from Roman deposits, to date these are not dominant crops in the period (e.g. Tomlinson and Hall 1996). On the basis of the plant assemblage and two sherds of 11th century pottery in the upper fill (2320) the feature has now been assigned a medieval date.

Using the ratio of all cereal grain: all cereal chaff (see Table 9), and excluding the awn-rich sample (sample 13, context 2355), it is clear that cereal grain is recovered in relatively equal proportions to cereal chaff in samples 3, 15 and 19, but cereal grain strongly dominates in sample 9 (context 2349). This ratio includes all grain types recovered (rye, barley and free-threshing wheat, all of which are free-threshing, but is likely to primarily reflect free-threshing wheat, which is dominant in samples 3 and 9 and strongly dominant in all other samples).

The fairly even proportions of grain: chaff in samples 3, 15 and 19 is not the expected proportion for free-threshing wheat where a minimum of 3-4 grains are produced per rachis node. Boardman and Jones (1990) have suggested that chaff of free-threshing cereals is less likely to survive charring than the grain or woodier elements, such as straw culm nodes. Cereal chaff forms a significant proportion of the assemblages encountered in corn-drier 2319 (see Table 9 and Figure 10) and the frequent recovery of cereal chaff in the upper and lower layers of the corn-drier (context 2320, 2356 and 2362) suggests a number of possibilities:

- cereal straw was used as fuel (e.g. Moffett 1994, 59; 1988). The recovery of thousands of awns in context 2355 (sample 13) may also suggest that lighter chaff elements (glumes/ lemmas) may also have been used as fuel.
- a layer of straw was used to line the parching floor (e.g. Campbell 1994, 69 and citing Markham 1681; Moffett 1994, 59; 1988). Straw is often used as a protective layer onto which cereal grain is laid out for parching (e.g. Peña-Chocarro 1996).
- the corn-drier may have been part-thatched (e.g. Moffett 1994, 61–2 discussing unpublished experimental work on replica medieval kilns), and certainly both rye and free-threshing wheat are frequently used in thatching of medieval buildings (e.g. Letts 1999).

Sufficient grain (especially free-threshing wheat grain) was preserved to establish that sprouted/ grooved grain was not present and embryos were frequently intact on the grain. It seems likely, therefore, that the corn-drier was used primarily for the drying/ parching of free-threshing wheat crops (possibly also rye) rather than malting in this case. Kiln drying grain would be an important stage before storage or milling, as damp grain can easily spoil in storage or turn to paste when milling.

Although the samples are relatively rich, 220 – 850 seeds per litre (see Tables 8 or 9), at minimum this is only equivalent to 20 complete ears of free-threshing wheat, which is by no means a ‘pure deposit’. In all cases ashy material and charcoal were noted in these deposits (see Challinor below). As a result, it seems likely that these deposits

represent charred debris accumulating in the undercroft (flue and firing chamber) of the corn-drier. The unexpectedly high presence of cereal chaff (*contra* experimental results of Boardman and Jones 1990) suggests that we are dealing with crop processing by-products used within the corn-drier for any number of reasons (fuel, thatch, protective layering, etc). Whether this represents the accumulation of several firings or a catastrophic failure of the corn-drier, however, is not clear. Certainly, context 2349, the second highest layer, produced an assemblage strongly dominated by cereal grain (N = 196 or 70%) and accompanying weeds of crop (N = 37 or 13.31%), which by ancient standards may well represent the accidentally charred remnants of a relatively pure assemblage of cereal grain.

Table 8: Possible medieval plant remains from corn-drier 2319

Context Number	<3>	<9>	<13>	<15>	<19>	
Sample Volume/ Weight (L/ Kg)	10	10	6	10	8	
Flot Volume (ml)	130 ml	95 ml	40 ml	130 ml	110 ml	
Proportion of flot analysed*	6.25%	12.50%	Sample	6.25%	25%	
Seeds/ Litre	702.4	222.4		852.8	303.5	
LATIN BINOMIAL						
Cereal Grain						
<i>Hordeum</i> sp. – hulled	2	1	-	-	-	barley
<i>Secale cereale</i> L.	14	14	-	-	-	rye
<i>Secale cereale</i> L./ <i>Triticum</i> spp.	62	-	-	-	-	indeterminate rye/ wheat
<i>Triticum</i> spp. – free-threshing type	35	32	++++	109	86	free-threshing wheat
Cereal – indeterminate	83 ^E	104 ^E	-	149 ^E	75	-
Cereal/ POACEAE – indeterminate caryopsis	30 ^E	40 ^E	-	30 ^E	50 ^E	cereal/ large grass
Detached Embryo/ Sprout						
Cereal/ POACEAE – indeterminate detached embryo	4 ^E	5	-	12	2	cereal/ large grass
Cereal Chaff						
<i>Hordeum</i> sp. – rachis node	1	-	-	-	2	barley
cf. <i>Hordeum</i> sp. – rachis internode	-	-	-	-	1	possible barley
<i>Secale cereale</i> L. – rachis node	25	-	-	1	1	rye
<i>Secale cereale</i> L./ <i>Triticum</i> spp. – awn [†]	++	++++	++++!!!	-	-	indeterminate rye/ wheat
<i>Triticum</i> spp. – free-threshing type rachis node	41 ^E	-	++	88	140	free-threshing wheat
<i>Triticum</i> spp. – glume	-	+++	-	-	-	indeterminate wheat
<i>Triticum</i> spp. – basal rachis node	-	-	-	7	-	indeterminate wheat
Cereal – indeterminate rachis internode	83	-	-	83 ^E	133 ^E	-
Cereal – indeterminate basal rachis node	-	-	-	-	10	-
Cereal/ POACEAE – indeterminate culm base	1	-	-	-	2	Cereal/ Large Grass
Cereal/ POACEAE – indeterminate culm node	4 ^E	1	-	6	5 ^E	Cereal/ Large Grass
Trees/ Shrubs						
<i>Prunus domestica</i> L. ssp. <i>insititia</i> (L.) Bonnier & Layens - stone	-	-	-	1	-	indet. plum/ bullace/ damson/ greengage
<i>Sambucus nigra</i> L.	-	1	-	-	-	elder
Weed/ Wild plants						
<i>Pteridium aquilinum</i> (L.) Kuhn agg. - pinnule	+++	++++	-	+	+	bracken
<i>Chenopodium</i> spp.	2	5	-	-	-	goosefoot
LLACEAE – indet internal stret	-	1	-	-	-	Goosefoot/ Pink Family
<i>Montia fontana</i> L.	1	-	-	-	-	blink
<i>Agrostemma githago</i> L.	-	2	-	2	-	corncockle
cf. <i>Agrostemma githago</i> L. – calyx tip	4 ^E	5 ^E	-	8 ^E	11 ^E	possible corncockle
cf. <i>Agrostemma githago</i> L. - highly fragmented seed coat	1 ^E	-	-	-	-	possible corncockle
CARYOPHYLLACEAE – indeterminate	2	-	-	-	-	pink family
<i>Persicaria</i> spp.	-	-	-	-	1	knotweed
<i>Polygonum aviculare</i> L.	-	4	-	-	-	knotgrass
<i>Polygonum</i> sp./ <i>Rumex</i> sp./ <i>Carex</i> sp. – internal structure	-	2	-	-	-	indet. knotgrass/ dock/ sedge
<i>Rumex</i> spp.	-	2	-	-	-	dock
<i>Rumex</i> cf. <i>acetosella</i> L.	-	2	-	1	-	possible sheep's sorrel
cf. <i>Brassica</i> spp./ <i>Sinapis</i> spp. – stalk	1	-	-	-	-	possible cabbage/ mustard
cf. <i>Brassica</i> spp./ <i>Sinapis</i> spp. – valve	1	-	-	-	-	possible cabbage/ mustard
<i>Raphanus raphanistrum</i> L. – capsule segment	4	3	-	2	1	wild radish
BRASSICACEAE - unidentified siliqua	-	-	-	-	1	Cabbage Family
cf. <i>Vicia sativa</i> L. - ?immature	-	2	-	-	-	possible common vetch
<i>Vicia</i> spp./ <i>Lathyrus</i> spp. – small-seeded	1	3	-	3	7	vetch/ vetchling
<i>Vicia</i> spp./ <i>Lathyrus</i> spp. – large-seeded	3	5	-	2	-	vetch/ vetchling
<i>Lotus</i> spp./ <i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	1	2	-	-	-	bird's-foot-trefoil/ melilot/ medick/ clover
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	-	1	-	-	-	melilot/ medick/ clover
FABACEAE – indeterminate, immature	1	2	-	-	-	Pea Family
FABACEAE – indeterminate detached hilum	-	-	-	-	1	Pea Family
APIACEAE – unidentified	-	-	-	-	1	Carrot Family
<i>Lithospermum arvense</i> L.	-	2 [†]	-	-	-	field gromwell
<i>Euphrasia</i> spp./ <i>Odontites</i> spp.	-	-	-	-	2	eyebright/ bartsia
<i>Galium</i> spp.	-	1	-	1	-	cleaver
cf. <i>Galium</i> spp. - seed coat fragmnet (estimate whole seed)	-	-	-	-	1 ^E	possible cleaver
<i>Centaurea</i> spp. - seed coat fragments (estimate whole seed)	-	1	-	-	1 ^E	knapweed
cf. <i>Centaurea</i> spp. - internal structure	-	-	-	-	2	possible knapweed
<i>Anthemis cotula</i> L.	5 ^E	11 ^E	-	12 ^E	25 ^E	stinking chamomile
<i>Anthemis</i> spp./ <i>Chrysanthemum</i> spp. – internal structure	-	-	-	2	-	chamomile/ crown daisy
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link)	-	1	-	-	-	common/ slender spike-rush
<i>Avena</i> sp. – rachilla	6	-	-	-	1	indeterminate wild/ cultivated oat
<i>Avena</i> sp. – floret base	1	-	-	-	-	indeterminate wild/ cultivated oat
<i>Avena</i> sp. – awn	+++	+	-	+	+	indeterminate wild/ cultivated oat
<i>Avena</i> sp./ <i>Bromus</i> sp. – type caryopsis	2	16	-	-	-	indet. wild/ cultivated oat or brome grass
POACEAE – indeterminate small caryopsis	1	-	-	1	-	Grass Family
POACEAE – indeterminate medium caryopsis	2	3 ^E	-	2	-	Grass Family
POACEAE – indeterminate large caryopsis	11	2	-	-	4 ^E	Grass Family
Unidentified - bud	-	-	-	-	1	-
Unidentified - calyx	-	-	-	-	1	-
Unidentified - stalk	2	-	-	-	-	-
Unidentified	2	2	-	5	19	-
Indeterminate	-	-	-	6	20	-
Other Environmental Remains						
Unidentified ashy concretion - mainly fine wood ash	-	(2)	-	-	-	-
Total	439	278	Not quantified	533	607	

Key: += <5 items, ++ = 5 - 10 items, +++ = 10 - 50 items, ++++ = 50 - 100 items and +++++ = >100 items. *Scores are **only** for that portion of flot sorted and are **NOT** factored back up to 100% of the flot. N^E = estimate count. N[†] = question as to whether plant remain is ancient or sub-fossil/ modern. Sample <13> contained tens of thousands of fragments of indeterminate rye/ wheat (*Secale cereale* L./ *Triticum* spp.) awns, as a result this particular flot was only scanned and scored subjectively on a semi-quantified scale. Nomenclature follows Stace (1997) for indigenous taxa and Zohary and Hopf (2000) for economic plants. †Indeterminate rye (*Secale cereale* L.)/ wheat (*Triticum* spp.) awn is most likely from free-threshing type wheat, since only traces of rye grain/ chaff were recovered in the samples; however, technically it is not possible to distinguish between the two.

Table 9: Relative proportion of plant remains from corn-drier 2319

Context Number	2320	2349	2355*	2356	2362
Sample Number	<3>	<9>	<13>	<15>	<19>
Portion analysed†	6.25%	12.50%	Scan	6.25%	25%
Seeds/ Litre	702.4	222.4		852.8	303.5
Total Identification	N = 439	N = 278		N = 533	N = 607
Cereal Grain	226	196	ca. 150-250	300	213
Cereal Chaff	155	1	ca. 1000+	185	294
Trees/ Shrubs	0	1	-	1	0
Weed/ Wild	28	37	-	18	36
Unident/ Indet	4	2	-	11	41
Cereal Grain	51.48%	70.50%	25.00%	56.29%	35.09%
Cereal Chaff	35.31%	0.36%	75.00%	34.71%	48.43%
Trees/ Shrubs	0.00%	0.36%	0.00%	0.19%	0.00%
Weed/ Wild	6.38%	13.31%	0.00%	3.38%	5.93%
Unident/ Indet	0.91%	0.72%	0.00%	2.06%	6.75%
Proportion Grain: Chaff	1: 1.5	196: 1	1: 3	1: 1.16	1: 1.38

*Sample 2355 counts and proportions are only an estimation based on the rapid scan of this flot.

†The totals and proportions presented here are only for that portion of the flot sorted and are **not** calculated back up for 100% of the flot.

The wood charcoal by Dana Challinor

Four samples from corn-drier 2319, were analysed. Six taxa were positively identified; *Quercus* sp. (oak), *Corylus avellana* (hazel), *Populus/Salix* (poplar/willow), *Prunus avium* (wild cherry), *Prunus* sp. (cherry/blackthorn) and Maloideae (hawthorn, apple, pear, service). The assemblages were overwhelmingly dominated by roundwood fragments of small diameter.

Table 10: Results of the charcoal analysis from corn-drier 2319

	Context number	2356	2356	2362	2362
	Sample number	15	16	17	18
<i>Quercus</i> sp.	oak	7 (3r)	4 (2r)	9 (9r)	9 (4r)
<i>Corylus avellana</i> L.	hazel	6 (6r)	3 (3r)		
<i>Populus/Salix</i>	poplar/willow	1 (1r)	5 (4r)		
<i>Prunus avium</i> L.	wild cherry	6 (5r)	8 (7r)	1 (1r)	1 (1r)
<i>Prunus spinosa/domestica</i>	blackthorn/damson			3 (3r)	
<i>Prunus</i> sp.,	cherry type			6 (6r)	9 (8r)
Maloideae	hawthorn, group			1 (1r)	1 (1r)

r = roundwood

The range of taxa and the type of wood (i.e. narrow diameter branchwood) identified is consistent with the use of faggots of firewood supplied from locally managed woodlands. The species list is quite limited, but this may be due to the methodology of the analysis (identification of further fragments might have increased the species list) and the general paucity of charcoal in the samples. This is not necessarily unusual since the abundance of charred cereal remains in the samples suggests that the floor or undercroft of the corn-drier is represented, rather than the main stoke hole or fuelwood debris. There was no evidence for the use of larger logs, even amongst the

oak fragments. This is typical of firewood drawn from underwood coppice, with side branches of timber trees like oak, but differs from the charcoal assemblage from a medieval malting kiln in London which produced heartwood and trunkwood (Gale 2003).

The charred plant remains do not indicate malting, but might represent the accumulation of charred remains from several firings (Smith, this report). In the charcoal, the overall similarity in character of the individual pieces (i.e. preservation, origin from roundwood) suggests a common source for the whole deposit, rather than too gradual an accumulation of fuel debris from various events. At least a consistency in the selection of fuelwood is indicated.

DISCUSSION

The excavations have produced evidence for a late Iron Age-early Roman settlement and succeeding medieval settlement occupying the same position set within an agricultural landscape of fields defined by ditches. The settlements may have been situated just north of a small brook: a small watercourse is shown on early OS maps and this appears to be the channel found cutting across the excavations heavily disturbed by the 20th century development. The east-west course of the channel may have been the factor resulting in the alignment of the later enclosures. This source of water may have been the attraction of the site. In addition the site lies close to the boundary of Greensand which would have provided lighter soils more easily worked for arable agriculture, while the soils on the Kimmeridge clay would be more appropriate for pasture.

In both periods the settlements were parts of probably small individual farmsteads, though in the medieval period at least it may have been part of a small hamlet. The remains in Area 2/3 possibly formed part of a more extensive settlement represented by earthworks visible on air photographs and suggestive of house platforms typical of a deserted medieval village. Unfortunately no detailed survey or record of these earthworks nor an associated 'ancient building' that appears on early OS maps (see insert Figure 2) were made prior to their destruction during the landscaping of the 1970s.

The archaeology indicates a succession of late Iron Age to early Roman enclosures predominantly of 1st-2nd century AD date. The earliest phases of enclosure are irregular, typical of a native Iron Age settlement, and only partially exposed within the excavations, so that the overall pattern is difficult to discern. In the early Roman phase there appears to have been a re-organization with a more ordered layout.

The Roman ditches served probably both as boundary ditches and for drainage. Pottery was the only artefact to occur in any quantity although its distribution was very variable, with a few denser concentrations notably in ditches 2545 and 2555.

No internal features or structures were identified belonging to Phase 2, which may indicate these enclosures were peripheral to the main settlement, perhaps used as paddocks or small cultivation plots. However the absence of structural evidence of occupation during the late Iron Age - early Roman period may be entirely due to the heavy truncation suffered by the site.

The area of the site to the east of the main enclosures may have been subjected to quarrying. An extensive area of conjoined hollows, comprising irregular shallow rounded scoops blanketed much of this (2542). These have the appearance of the truncated basal remnants of what would originally have formed a single extensive quarry complex. They were filled with a dark brownish grey soil containing frequent pottery and occupation debris including glass and pieces of fired clay oven plate of LIA-early Roman type. However only the very lowest layers contained exclusively Roman pottery and the upper deposits contained a mix of Roman and medieval, though it is unclear to what degree mixing resulted from modern disturbance: tracked machine ruts were visible cutting through some areas. The features had probably originated in the digging of clay to obtain construction materials for daub or cob walls and from the density of pottery and occupation debris were subsequently used for the dumping of rubbish or middens.

The greater density of Roman pottery found in the more northerly part of the site may indicate that the core of the Roman settlement lay to the north and west. The complete absence of Roman ceramic and other building materials, together with the character of the pottery assemblage suggests this site is unlikely to be associated with a higher status settlement such as a villa, but was probably a small rural farmstead. The pottery is dominated by utilitarian forms, in locally made fabrics, especially Savernake ware with few examples of finer forms such as Samian.

The late Iron Age - early Roman site sits within a well-populated landscape. Though evidence for Iron Age sites is sparse in and around Swindon many of the Roman settlements have produced Iron Age finds suggesting an expansion of settlement originating in the late Iron Age after the hillforts of Barbury Castle and Liddington had been abandoned. Roman occupation is attested by a range of sites and artefact scatters identified within relatively short distances of Piper's Way (see Figure 1, nos 6 and 7). Excavations in Swindon Old Town in the vicinity of the Market Square (Butterworth and Seager Smith 1997) revealed features, infant burials and ceramics of 1st and 2nd century date indicative of a settlement.

To the south a small site of 2nd-century date was postulated for pits and metalled surfaces found at Nightingale Farm (Fowler and Walters 1979/80) found during construction of the M4 motorway (Fig. 1, no.7), which also revealed a possible minor Roman road to the south-west of Piper's Way. In West Swindon there is evidence of Roman occupation and pottery production, while to the east the small town of Durocornovium (Wanborough) was founded in the mid 1st century on Ermin Street.

A number of Roman villas may have existed (Fig. 1, no.6) in the area including a Roman building on Okus Hill (VCH 1957, 112) approximately 2 km north-west of the site, possible remains of buildings north of Broome and further east the villa at Badbury (Fowler and Walters 91-110), which may have been established as early as the mid 1st century. It was possibly the development of villas during the 2nd century and no doubt resulting changes in the management and farming of the landscape that brought about the abandonment of the Piper's Way site during the 2nd century. The enclosures may have been incorporated into later Roman field systems: ditches with associated 4th-century pottery were found during the construction of the golf course immediately south of the site.

There is no evidence to suggest anything other than agricultural use of the area until the medieval settlement was founded in the later 11th century. Its siting directly over the Roman settlement may be fortuitous, but it is possible that some vestige of the earlier occupation was fossilised in the landscape that may account for the similar alignment of the medieval enclosures to the later Roman phase. The medieval settlement produced slightly more definite evidence of occupation - an insubstantial structure within one of the enclosures, and a corn-drier outside the enclosure to the east.

The corn-drier is heavily truncated, but what survives suggests a fairly typical, if low-status design. The main pit is considerably deeper than the two shallow flues that extend from it. The pit would have been covered by a superstructure, possibly extending to form tunnels over the two flues. No evidence was noted of wattle impressions on the fired clay fragments, which suggests that the superstructure may not have been as elaborate as a fully enclosing framework of wattles covered with clay. A more basic alternative, given that lightly fired clay was recovered from the pit deposits, is that a clay wall surrounded the pit, and possibly covered the flues. The roof in this version may have been nothing more than a removable lid or cover - perhaps, as Smith suggests above, made of thatch.

It has been suggested that the term 'corn-drier' in the context of these structures is perhaps misleading (Moffett, 1994). To actually dry the entire crop of even a modest farmstead's size would be a impractical and long-winded task with such a facility. Moffett has suggested that a more realistic role for such a structure was as a parcher of a small amount of grain (1994,61). Parched (and consequently harder) grain is much easier and quicker to grind than unparched grain.

The grain to be parched would have been spread out on a cloth or straw covered wooden frame, which would have been suspended over the main pit at approximately ground level or slightly above. The heat required to dry or parch the grain was modest, so a small fire maintained at the end of either flue would be sufficient to achieve a steady convection of heat up through the grain.

The deposits within the pit itself seem to represent the debris from repeated usage in this way, including the deposited remains of fuel waste, swept into the pit after each session of use. However, although Challinor (above) has interpreted the charcoal as fuel, the small rods in the lowest layer could represent the remains of a burnt structure such as a hurdle used as a drying floor.

Smith suggests that the cereal remains within these deposits also represent both fuel, the platform layer, and the grain for drying. The interleaved layers of clay within the pit may attest to the need to repair the clay superstructure at times between drying sessions.

The settlement in its local context

The presence of this simple corn-drier is entirely consistent with the character of the settlement as probably a single modest farmstead, either isolated in the landscape or possibly (on account of the earthworks to the west) on the outskirts of a larger but still low status hamlet, practising a mixed farming regime. It seems most likely that it must have been associated with Broome Manor, although no physical connection was

evident in the form of a track or roadway linking the two. It is possible that an access to the site was from Marlborough Lane to the west, the old route from Swindon to Marlborough.

The site may have existed for little more than a century, coming into existence soon after the Conquest, and with the main period of occupation being the late 11th century - early 12th century. A significant quantity of 12th to 13th century pottery was recovered from general deposits over the 11th-century features, although no clearly associated structures or ditches of this date were found. The tentative explanation could be that this farmstead was abandoned or cleared, and new settlement developed outside the investigated area, with the abandoned area being used as a midden dump. It is tempting to suggest that the 'ancient foundations' marked on the 1st edition OS map, and apparently situated close by to the west of the excavated area, may be part of this later medieval activity, but their inaccessibility under a modern mound means that such speculation must remain -at least for now - untested.

Lewis' review of the patterns of settlement in the region (1994) identified the predominance of dispersed settlement in this part of Wiltshire, often characterised by strings of farmstead along winding lanes (*ibid.*, 176). The frequency of medieval settlements occupying the same sites as Roman settlements may also so where the template for the later settlement came from (*ibid.*, 191). The apparent agglomeration of dispersed settlements into more nucleated units into the 12th-13th centuries may have been related to the development of manorial control, and given the proximity of this site to Broome Manor, this may explain the settlements final abandonment.

However, it may have been abandoned for environmental reasons undetected in the archaeological record. It has been argued (Lewis *et al.* 2003, 188) that small rural settlements were ideas as well as objects. It is in the nature of archaeology that changes in material culture and environment can most easily be detected, and from that an economic or environmental reason for their demise can be suggested, but many other factors influenced their fate. External influences directly undetectable by the settlement's archaeological record, like demography and political developments, could play a part. Internal factors, like the health and psychology of the inhabitants could also be factors. The single farmstead is typically the most sensitive to these archaeologically invisible factors, and arguably the most likely to succumb to adverse circumstances. It should not be surprising therefore that an individual farmstead will not necessarily tell us why or how it either became established or ceased to be.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to Places for People, who funded the completion of the archaeological work, and the production and publication of this report. Appreciation is extended also to Lucy Biddle of RPS, and Melanie Pomeroy-Kellinger of WCCAS on behalf of Swindon Borough Council. for their advice and guidance throughout. The site team's sterling efforts in difficult conditions are also noted. Report illustrations are by Julia Moxham and Sophie Lamb.

Bibliography

- Anderson, A S, 1979 *The Roman pottery industry of north Wiltshire*, Swindon Archaeol Soc Rep **2**, Swindon
- Beresford, M, and Hurst, J G (eds), 1989 (reprint) *Deserted Medieval Villages*
- Boardman, S, and Jones, G, 1990 Experiments on the effects of charring on cereal plant components, *J Archaeol Sci* **17**, 1–11
- Gale, R, 2003 [Charcoal from 15th /16th -17th century deposits.](http://www.wessexarch.co.uk/projects/london/charter_quay/spirit/index.html)
http://www.wessexarch.co.uk/projects/london/charter_quay/spirit/index.html
- Letts, J, 1999 Smoke-Blackened Thatch: A Unique Source of Late Medieval Plant Remains from Southern England, London, The Ancient Monuments Laboratory, English Heritage
- Lewis, C, 1994, Patterns and processes in the Medieval Settlement of Wiltshire, in M Aston, and C Lewis, (eds) *The Medieval Landscape of Wessex*, Oxbow Monograph 46, Oxford, 171-93
- Lewis, C, Mitchell-Fox, P, and Dyer, C, 2001 *Village Hamlet and Field; Changing Medieval Settlements in Central England* Macclesfield
- Markham, G, 1681 *A Way to Get Wealth*
- McCarthy, M R, and Brooks, CM, 1988 *Medieval Pottery in Britain AD900-1600* Leicester
- Mellor, M, 1994 Oxford Pottery: A Synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford Region *Oxoniensia* **59**, 17-217
- Mephram, L, 1997 Pottery in A G Vince, S J Lobb, J C Richards and L Mephram, *Excavations in Newbury, Berkshire, 1979 – 1990* Wessex Archaeol Rep **13**, 45-67
- Moffett, L, 1994 Charred cereals from some ovens/kilns in Late Saxon Stafford and the botanical evidence for the pre - burh economy, in Rackham (ed) 1994, 55–64
- Musty, J, Algar, DJ and Ewence, P F, 1969 The Medieval Pottery Kilns at Laverstock, near Salisbury, Wiltshire *Archaeologia* **102**, 84-150
- OA, 2004 Pipers Way, Swindon, Wiltshire: Archaeological Evaluation Report (unpublished)
- Peña-Chocarro, L. 1996 In situ conservation of hulled wheat species: The case of Spain, in S. Padulosi, K. Hammer; and J. Heller (eds) *Hulled Wheat: Proceedings of the First International Workshop on Hulled Wheats 21–22 July 1995 Castelvecchio*

Pascoli, Tuscany, Italy, (Promoting the Conservation and Use of Underutilized and Neglected Crops No. 4), Rome, International Plant Genetic Resources Institute, 128–146

Rackham, J, (ed) 1994 *Environment and Economy in Anglo-Saxon England: A Review of Recent Work on the Environmental Archaeology of Rural and Urban Anglo-Saxon Settlements in England*, CBA Res Rep **89**, York

Timby, J, 1999 Later prehistoric and Roman pottery, in *Excavations alongside Roman Ermin Street, Gloucestershire and Wiltshire: the archaeology of the A419/A417 Swindon to Gloucester road scheme* (A Mudd, B J Williams, and A Lupton), Oxford Archaeological Unit, Oxford, 320-339

Timby, J, 2004 The pottery, in *Thornhill Farm, Fairford, Gloucestershire: An Iron Age and Roman pastoral site in the Upper Thames Valley* (D Jennings, J Muir, S Palmer, and A Smith), Oxford Archaeology Thames Landscapes Monograph **23**, Oxford, 90-108

Tomlinson, P, and Hall, A, 1996 A review of the archaeological evidence for food plants from the British Isles: an example of the use of the Archaeobotanical Computer Database (ABCD)

Internet Archaeology 1: http://intarch.ac.uk/journal/issue1/tomlinson_toc.html

Vince, A G, 1984 Late Saxon and Medieval Pottery in Gloucestershire, in A Saville (ed.) *Archaeology in Gloucestershire: Essays Dedicated to Helen O'Neill and the Late Elsie Clifford*, 248 – 75

Vince, A G, The Medieval Ceramic Industry of the Severn Valley, Unpublished PhD Thesis, University of Southampton, 1984

List of Figures

Figure 1. Site location

Figure 2: Trench location

Figure 3: Area 2/3 feature plan: Phase 2 Late Iron Age - Roman

Figure 4: Area 2/3 feature plan: Phase 4 Medieval

Figure 5: Area 1 feature plan

Figure 6: Selected sections

Figure 7: Selected sections

Figure 8: Pottery illustrations

Figure 9: Fired clay oven plate

Figure 10: Relative proportion of plant remains from corn-drier 2319

List of Plates

Plate 1: Sample 3 Free-threshing wheat rachis node

Plate 2: Sample 3 Rye rachis node

List of Tables

Table 1: Iron Age and Roman pottery – fabric quantification. Fabric nomenclature follows standard OA guidelines (Booth nd); MV = minimum number of vessels based on rim count, EVE = estimated vessel equivalents based on percentage of surviving rim.

Table 2: Iron Age and Roman pottery – assemblage composition

Table 3: Pottery Phase-dating Scheme and Medieval Pottery Occurrence

Table 4: Pottery Occurrence per Ceramic Phase, expressed as a total of the phase assemblage, by weight (in g)

Table 5: Summary of metalwork assemblage

Table 6: Romano-British assemblage: Anatomical distribution of all species, including NISP and weight

Table 7: Medieval assemblage: Anatomical distribution of all species, including NISP and weight

Table 8: Plant remains from corn-drier 2319

Table 9: Relative proportion of plant remains from corn-drier 2319

Table 10: Results of the charcoal analysis from medieval pit 2319

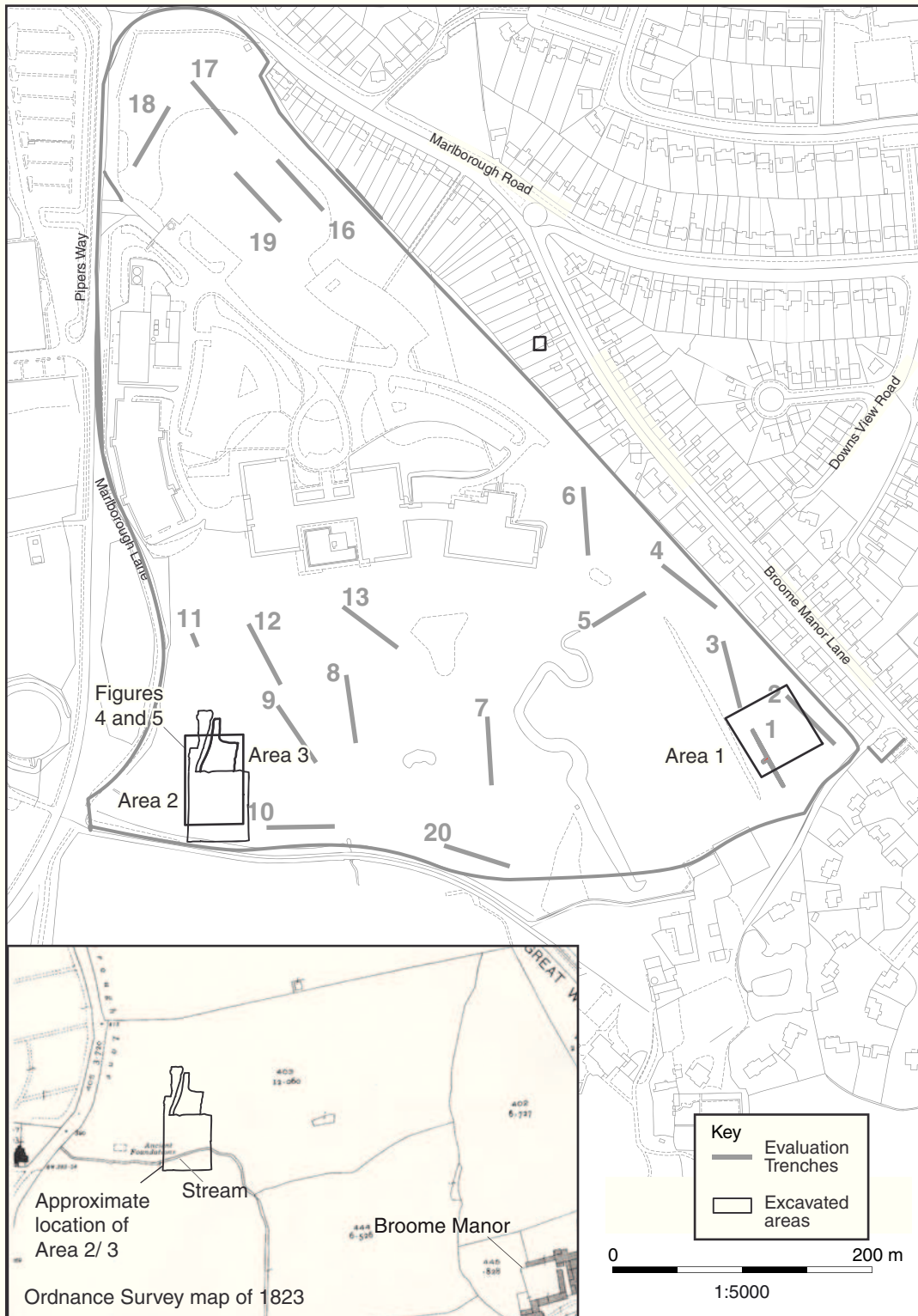


Figure 2: Trench location

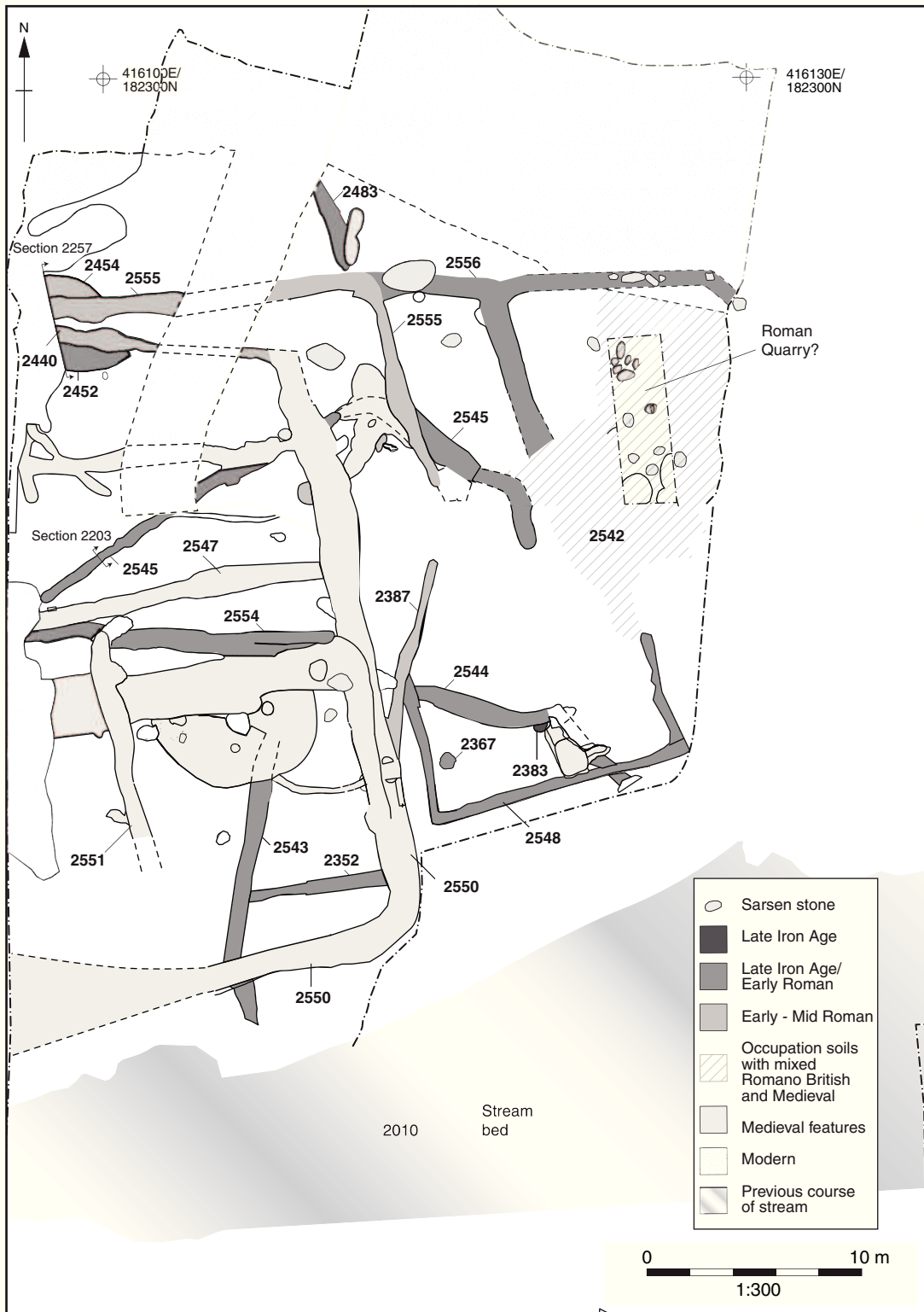


Figure 3: Area 2/3 feature plan: Phase 2 Late Iron Age - Roman

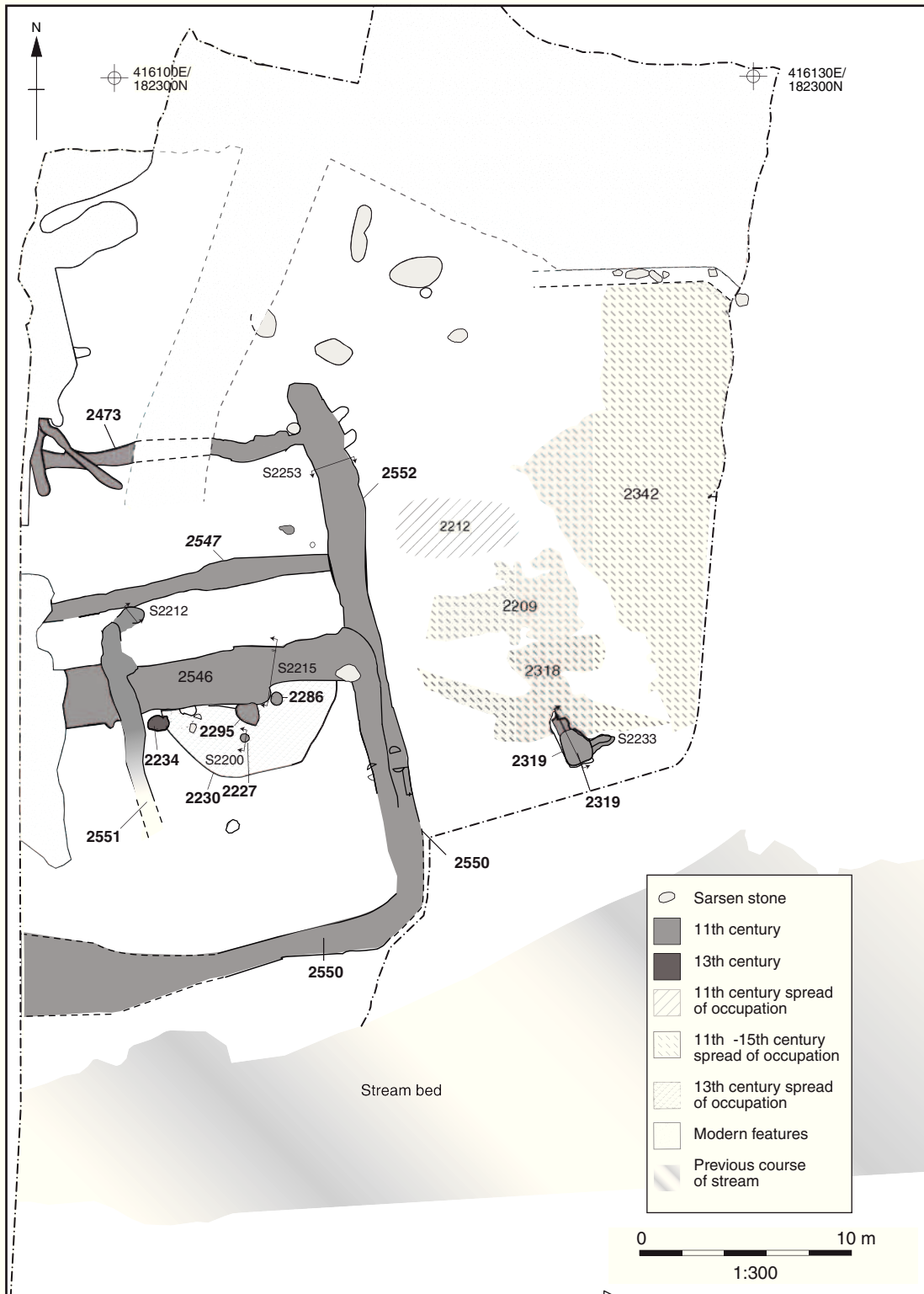


Figure 4: Area 2/3 feature plan: Phase 4 Medieval

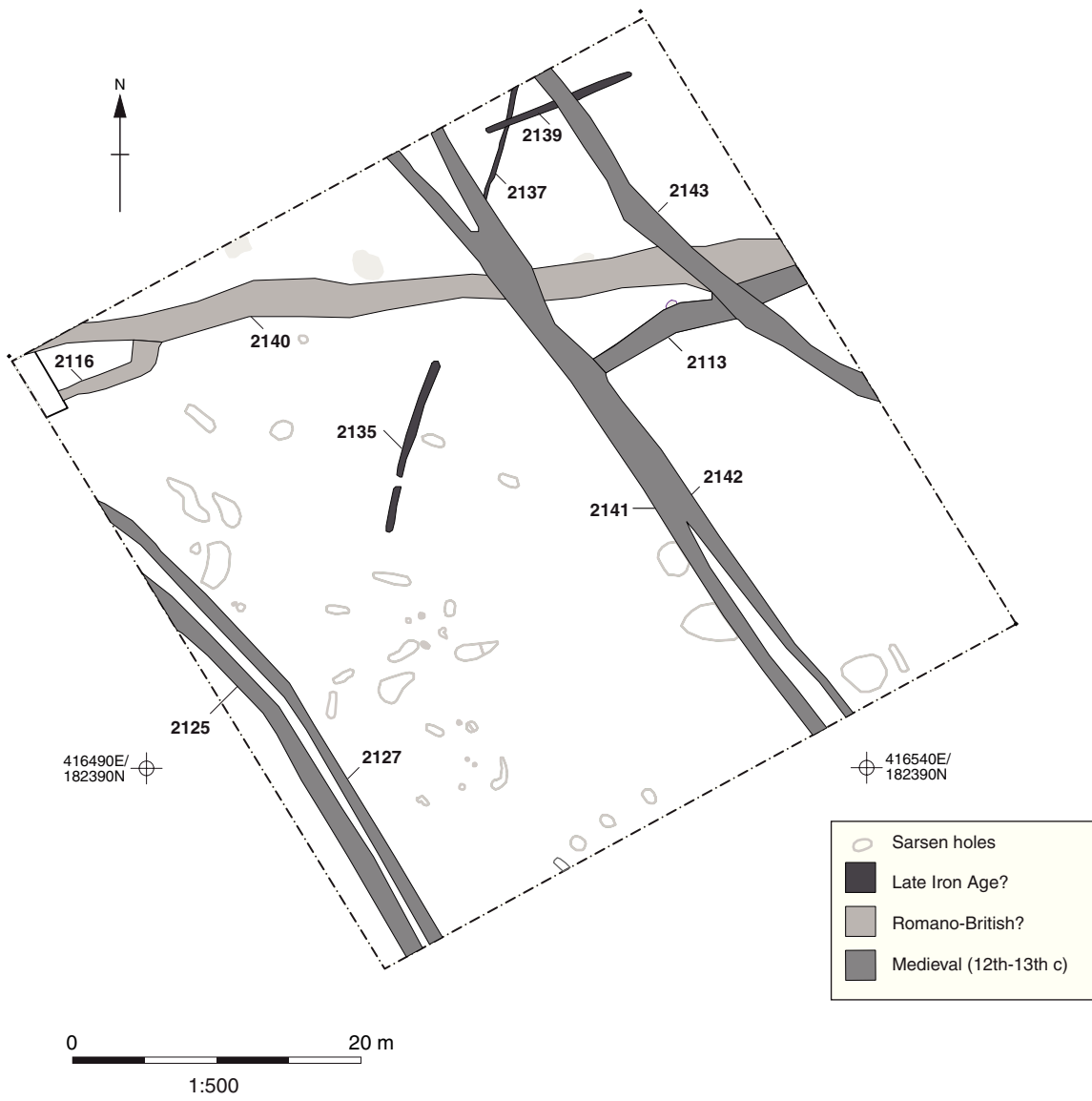


Figure 5: Area 1 feature plan

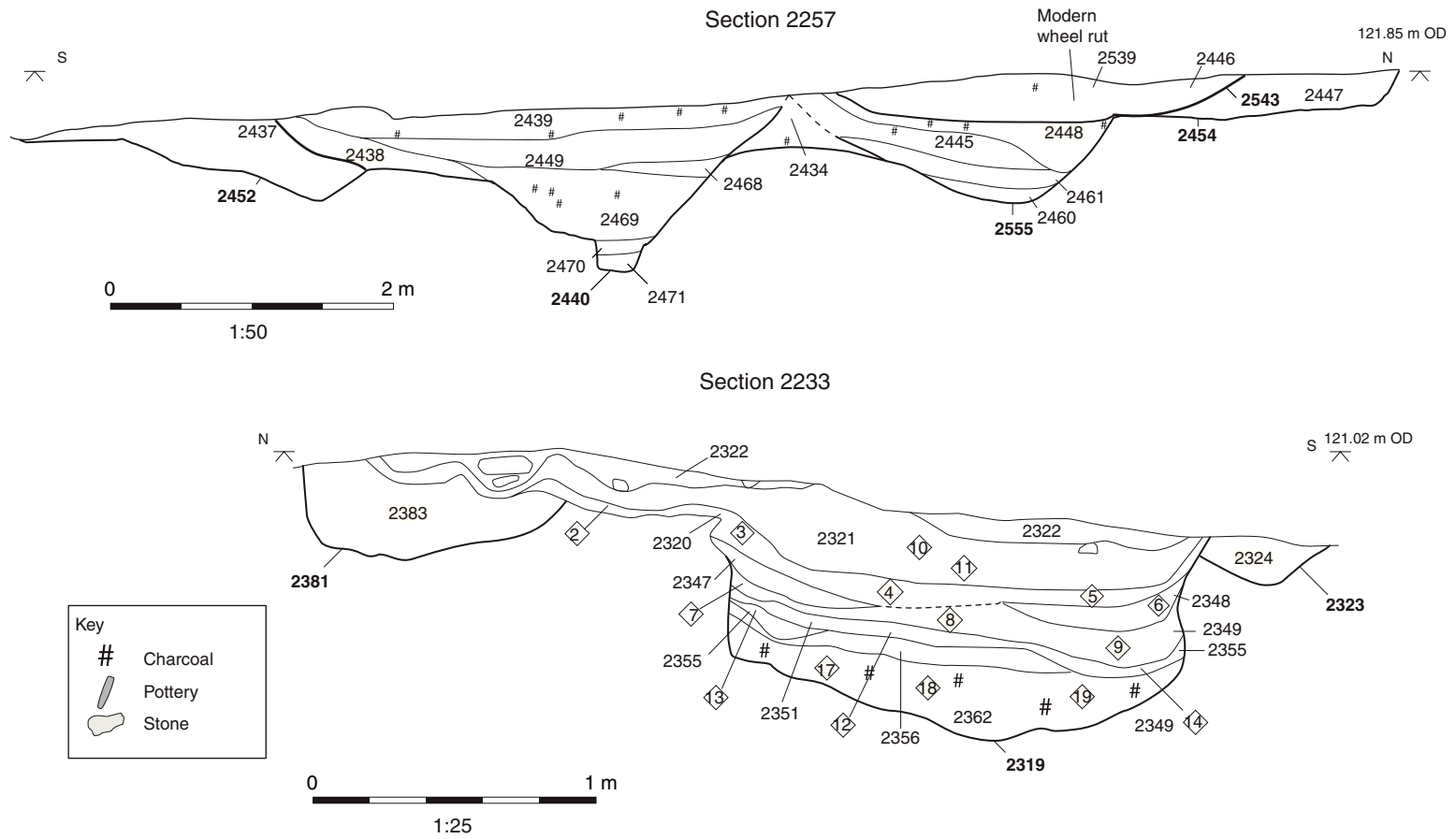


Figure 6: Selected sections

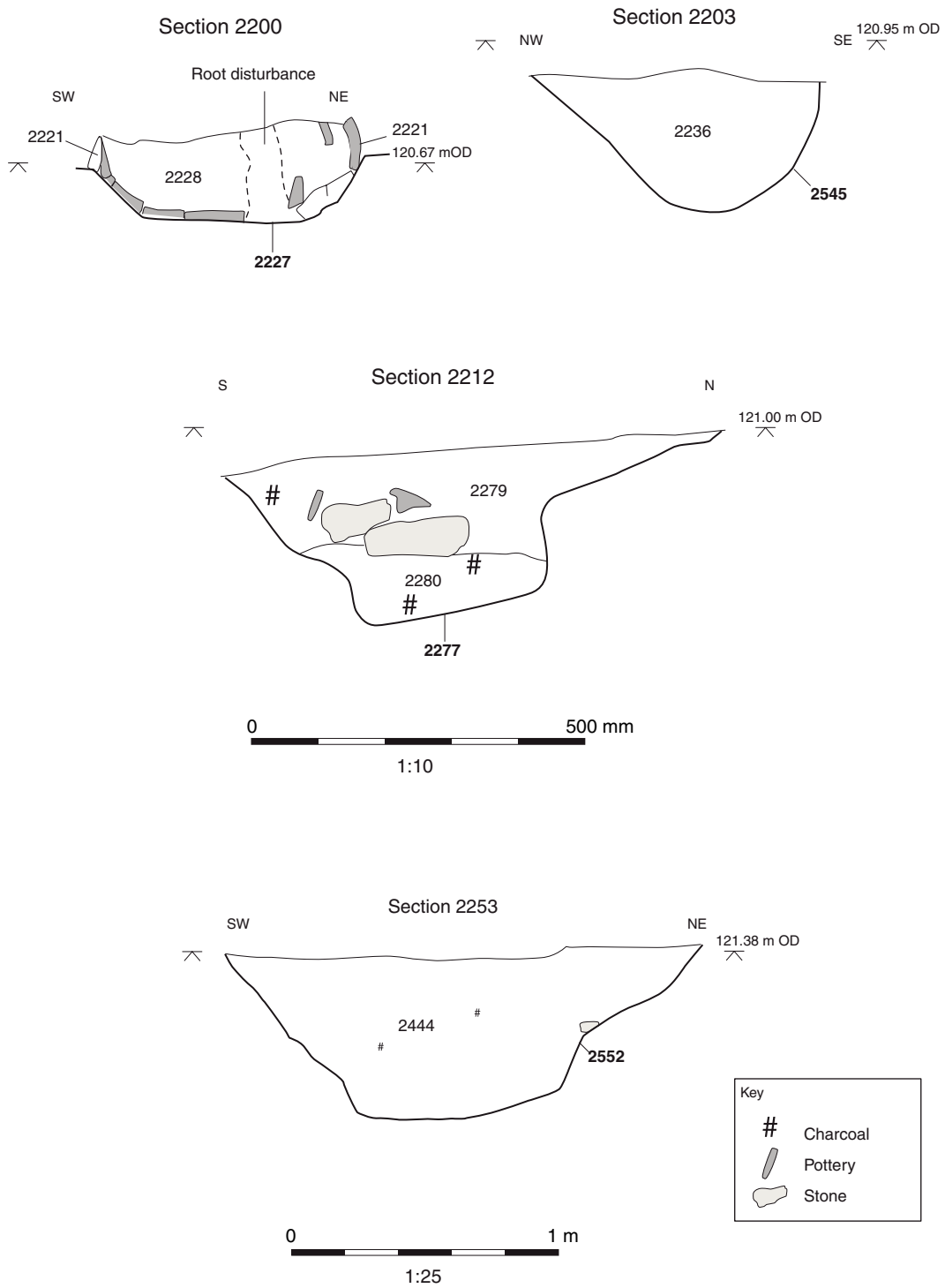


Figure 7: Selected sections

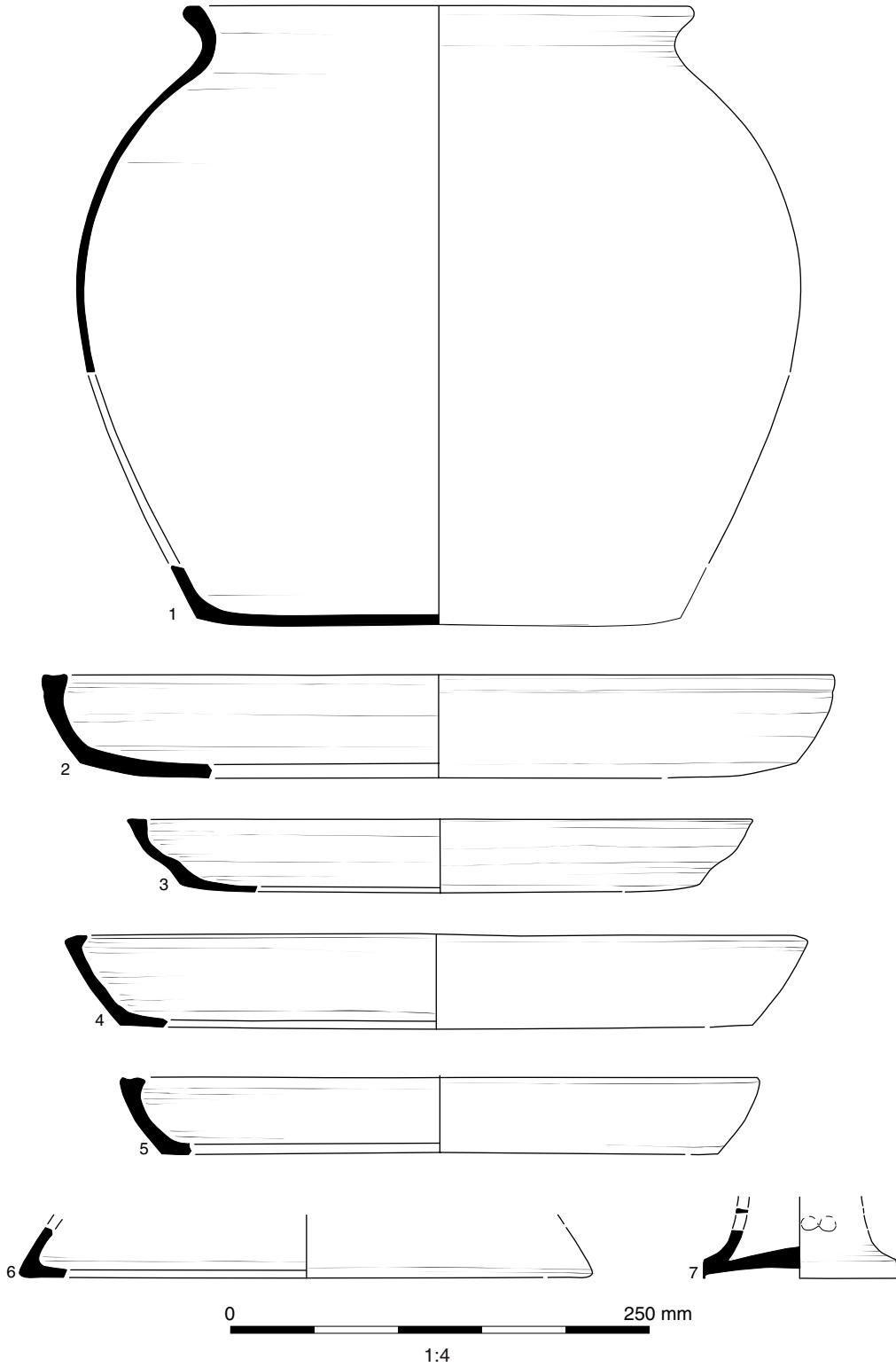


Figure 8: Pottery illustrations

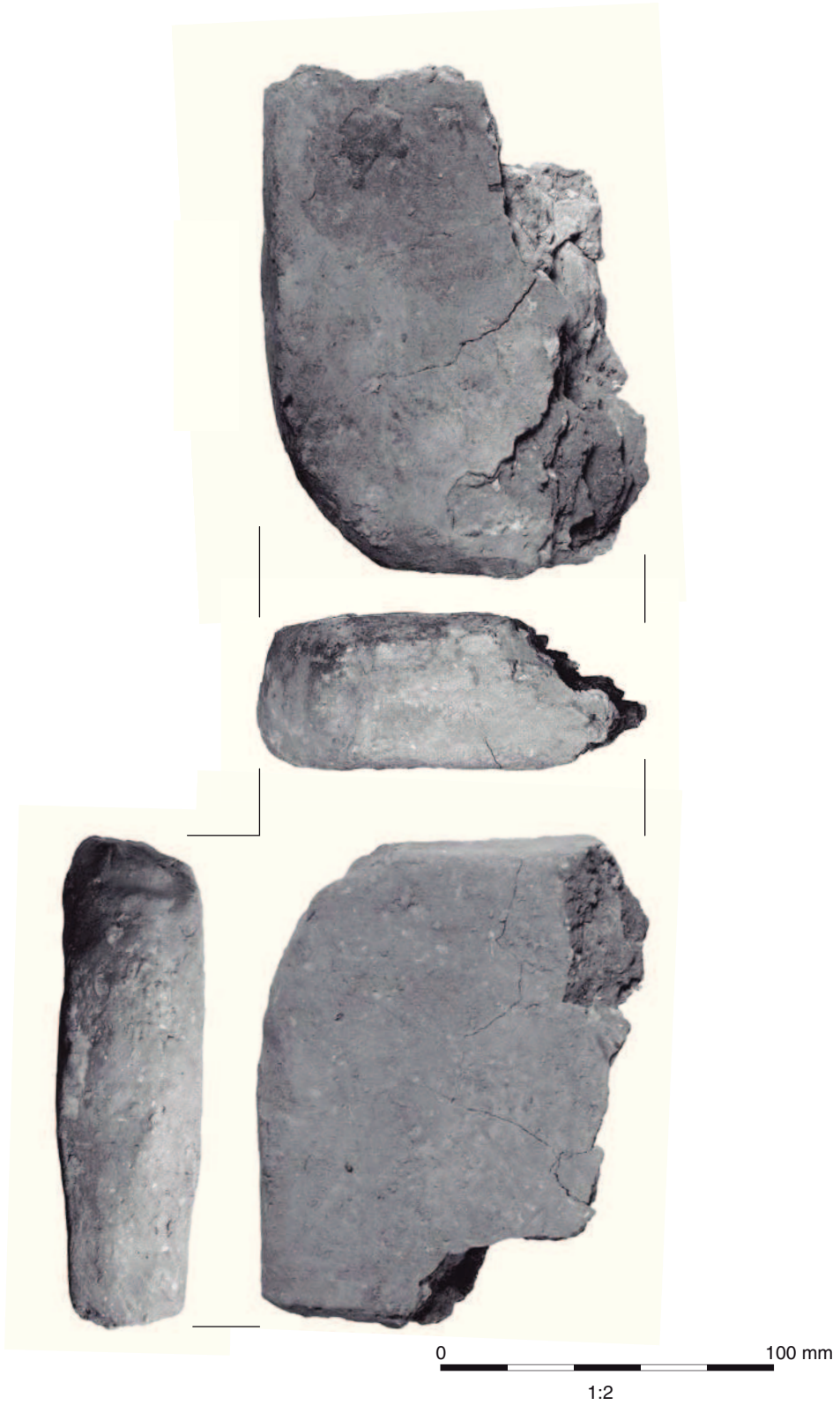


Figure 9: Fired clay oven plate

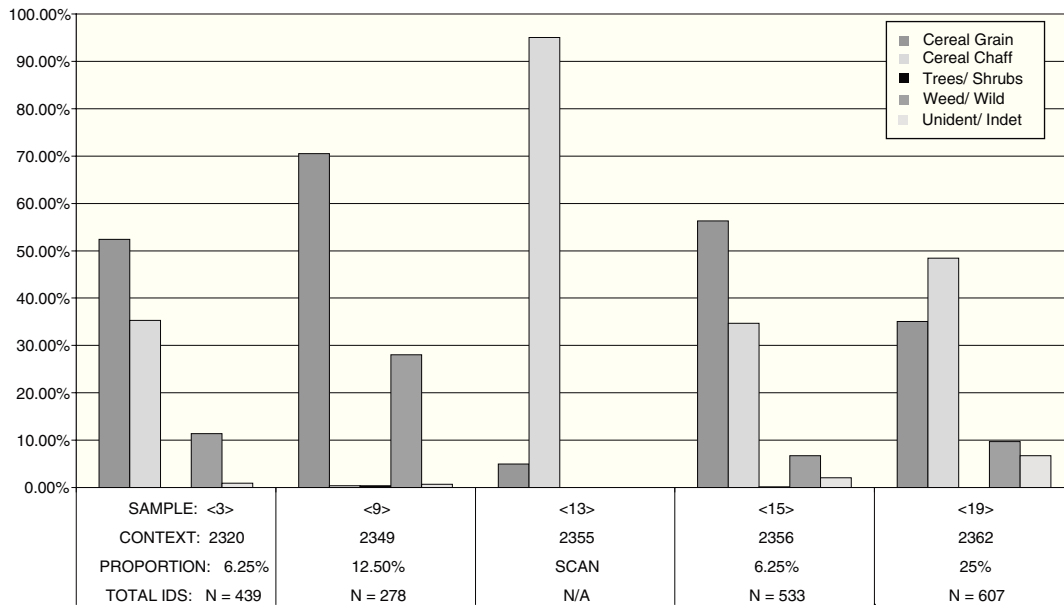


Figure 10: Relative proportion of plant remains from corn-drier 2319

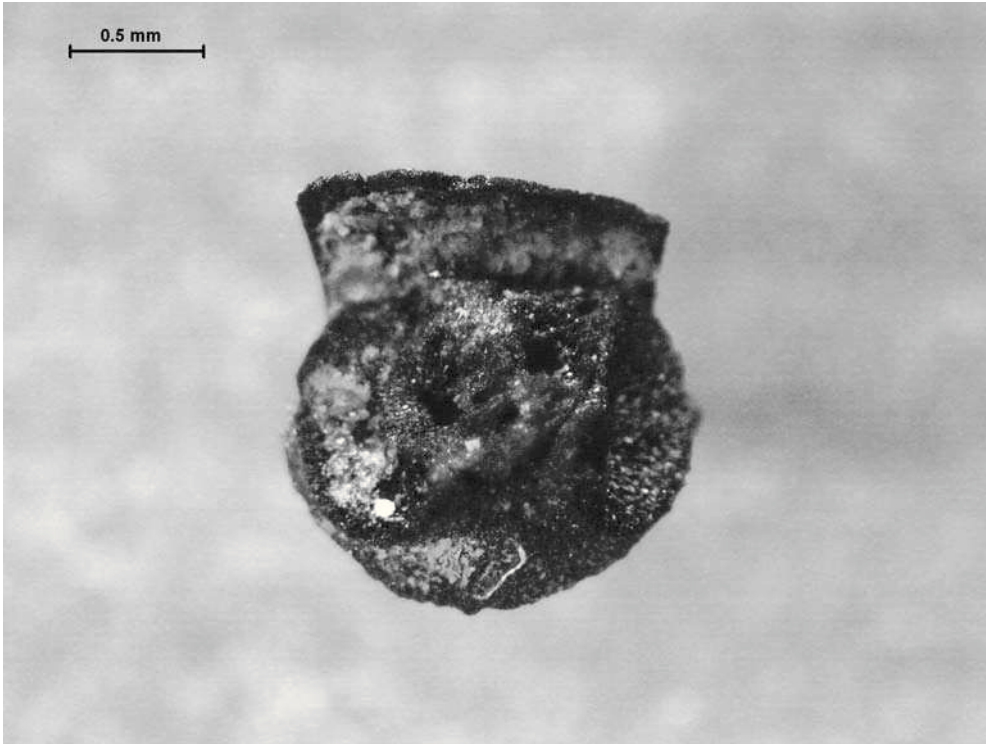


Plate 1: Sample 3 Free-threshing wheat rachis nod

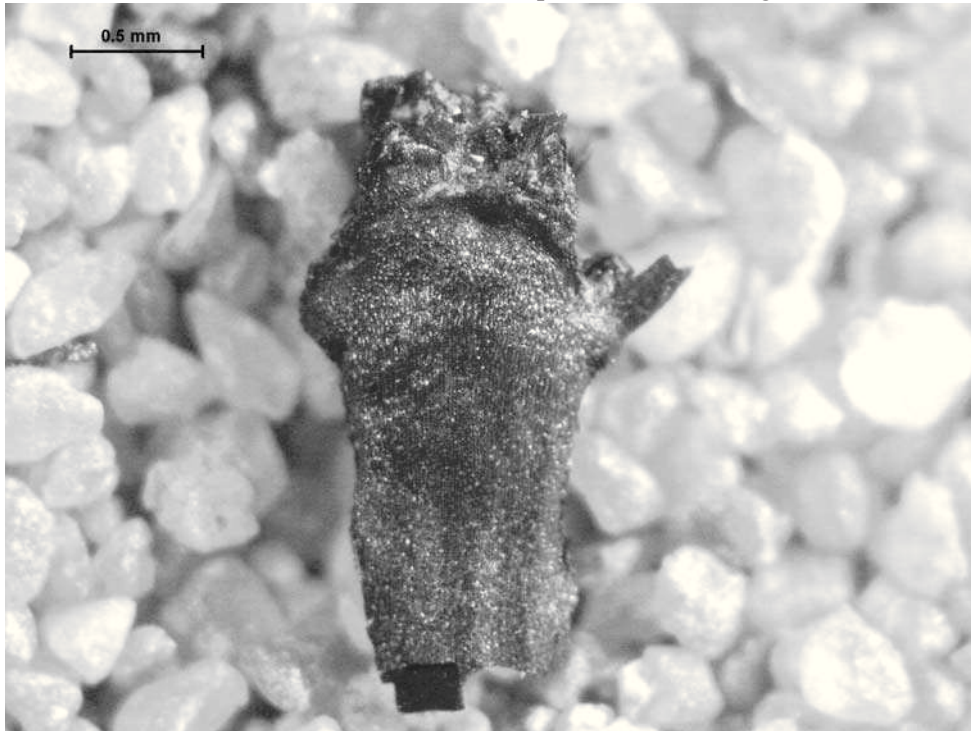


Plate 2: Sample 3 Rye rachis node



OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
f: +44 (0) 1223 850599
e: oaeast@thehumanjourney.net
w: <http://thehumanjourney.net>

OA North

Mill 3
Moor Lane Mills
Moor Lane
Lancaster LA1 1GF

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: oanorth@thehumanjourney.net
w: <http://thehumanjourney.net>

OA South

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarch.co.uk
w: <http://thehumanjourney.net>

OA Grand Ouest

7 Rue des Monderaines
ZI - Ouest
14650 Carpiquet
France

t: +33 (0) 249 88 01 01
f: +33 (0) 249 88 01 02
e: info@oago.fr
w: <http://oago.fr>

OA Méditerranée

115 Rue Merlot
ZAC La Louvade
34 130 Maugeio
France

t: +33 (0) 4.67.57.86.92
f: +33 (0) 4.67.42.65.93
e: oamed@thehumanjourney.net
w: <http://oamed.fr/>

Director: David Jennings, BA MIFA FSA



*The Oxford Archaeological Unit Ltd is a Private Limited Company, N^o: 1618597 and a Registered Charity, No: 285627
Head Office: Janus House, Osney Mead, Oxford, OX2 0ES, t: +44 (0) 1865 263 800*