

# INVESTIGATIONS AT MAGIOVINIUM 1990-91: THE LITTLE BRICKHILL AND FENNY STRATFORD BY-PASSES

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*Excavations undertaken at Magiovinium in 1991 in advance of construction of the Little Brickhill Bypass are described. The project was funded by English Heritage. Further evidence was recorded for a series of previously noted Romano-British ditched enclosures, apparently regularly planned, extending to the east of the defended area. It is argued that the enclosures were laid out using units of  $\frac{3}{4}$ ,  $1\frac{1}{2}$  or 3 actus; some boundaries appear, however, to have been repositioned from time to time. Evidence for buildings was only found in the part of the excavation closest to Watling Street, but in spite of the relative lack of structural remains that were excavated, the settlement appears to have been civilian in character. Away from Watling Street the enclosures contained a variety of cut features, of largely indeterminate function. Industrial activity, not necessarily large-scale, was also recorded. Most of the property divisions were probably maintained, with only minor repositioning, throughout the greater part of the period of occupation, which lasted from the second half of the first to the later fourth century. Trial trenching to the east of the main area of investigation located what may have been the surfaces of Watling Street, nearly two metres below the modern ground surface; the absence of other features here appears to define the eastern boundary of Magiovinium. Little evidence was recovered which would have served to advance the hypothesis that the settlement originated as a vicus outside a fort.*

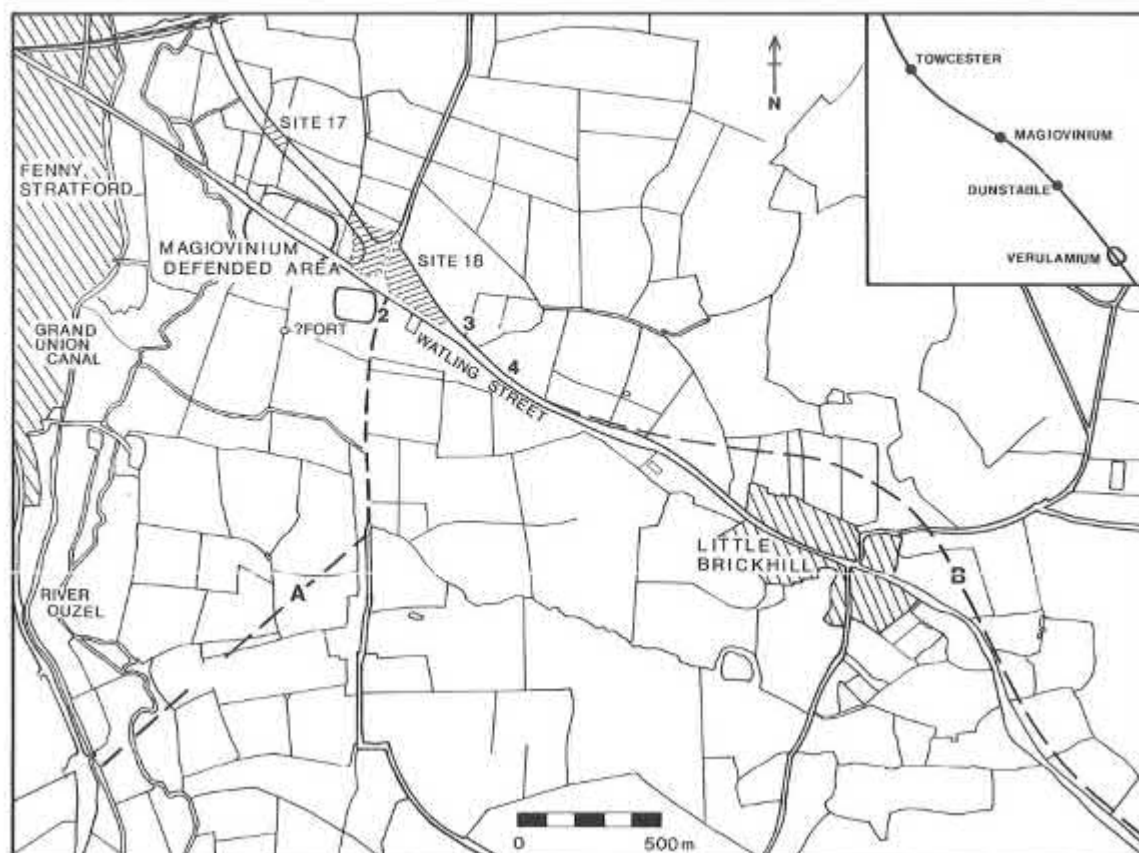
*Features recorded during construction of the Fenny Stratford By-pass, including a previously unknown inhumation cemetery, are also described. This watching brief also provided the first evidence for the extent of Magiovinium to the south.*

*The report contains specialist contributions on coarse pottery (C Woodfield), flagon fabrics (D Williams), samian ware (G Dannell), tile (C Woodfield), coins (P Woodfield with DM Metcalf), copper alloy objects (J Lawson with M Henig, R Jackson, D Mackreth, IR Scott and G Webster), lead, iron, worked bone (J Lawson), stone (C Woodfield), glass (D Allen), and animal and human bone (A Locker).*

## INTRODUCTION

In December 1989 and January 1990, Buckinghamshire County Museum carried out an archaeological evaluation of the proposed Little Brickhill Bypass. This work was commissioned by the Departments of the Environment and Transport, and

consisted of a documentary study together with fieldwalking, survey, geophysical survey and augering (Hunn and Kempster 1990). This led to a four week excavation during June and July 1991 funded by English Heritage, before construction began, of an area spanning three fields at the northwesternmost end of the proposed bypass, ad-



**Fig. 1:** The Fenny Stratford–Little Brickhill area. A, Fenny Stratford Bypass; B, Little Brickhill Bypass; 2, 1990 Watching Brief; 3 and 4, Site of 1991 excavations; Sites 17 and 18, CEU excavations 1978–80.

adjacent to the northern side of the modern A5 (London to Holyhead) road (SP 89493340 – 89733313). The Roman forerunner of the A5 was Watling Street. The defences of the Roman town of Magiovinium lie approximately 500 metres north-west of the excavated area. A possible Roman fort, indicated by cropmarks, lies 250 metres to the west-south-west (fig. 1).

Between the evaluation and excavation on the Little Brickhill Bypass, during the summer of 1990, a watching brief was undertaken during construction of the Fenny Stratford Bypass, the northern end of which was to link with the Little Brickhill Bypass. This was conducted by staff from the Milton Keynes Archaeological Unit and Buckinghamshire County Museum.

The discoveries made during this work are the subject of this report.

#### *PREVIOUS EXCAVATIONS AND DISCOVERIES*

Investigations were being undertaken at Magiovinium as far back as the nineteenth century. Most of this earlier work took place to the north-west of the site under discussion and has been summarised by David Neal, whose report includes a full bibliography by Andrew Pike (Neal 1987). The work by the Central Excavation Unit between 1978 and 1980, under the direction of David Neal, revealed buildings and occupation of an industrial nature fronting Watling Street east of the defences (Neal 1987). The major feature of the excavation was the discovery of a series of more or less regular

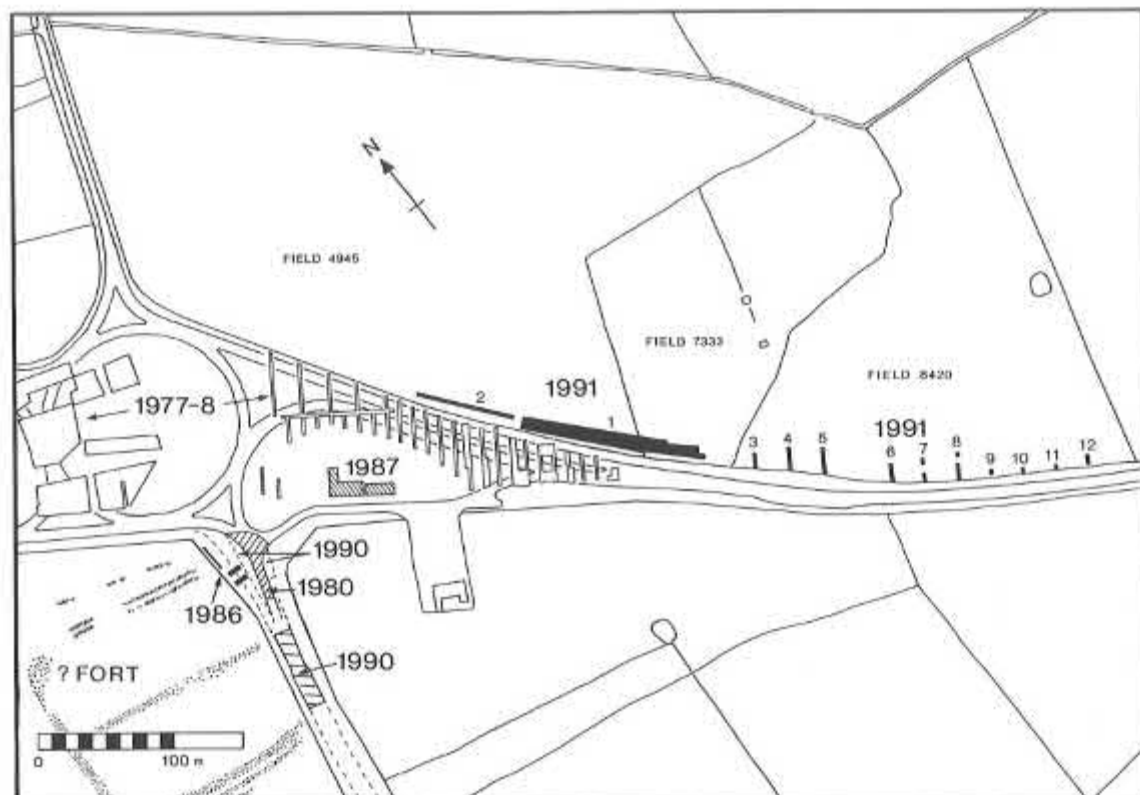


Fig. 2: Locations of excavations east of Magiovinium, 1977-91.

small ditched enclosures, orientated at approximately  $80^\circ$  to Watling Street, possibly aligned with respect to a conjectured road leading to the supposed fort investigated in 1976 (Woodfield 1977). Several phases of activity were evident (summarised below in the concluding discussion). Further work undertaken by Mark Collard on a smaller adjacent area for Buckinghamshire County Museum in 1988 has not yet been published apart from an interim note (Collard 1988), but the results confirmed the general conclusions reached by Neal as to the nature and extent of activity.

## PROCEDURES AND METHODOLOGY

### EVALUATION.

The 1991 excavations were preceded by an evaluation of the entire bypass route (Hunn

and Kempster 1990). This consisted of a review of existing data including aerial photographs, and also fieldwalking, augering and geophysical survey, this last technique being employed at the western end of the bypass route, near to the Roman town. At the time of this evaluation, the location of the contractor's works compound had not been determined, and the field (OS 7333) where the compound was eventually sited was not evaluated.

The evaluation indicated the presence of Romano-British material in the three westernmost fields affected by the bypass, concentrated along the side of Watling St to the east of the town. The geophysical data (Fig 5) were consistent with the presence of ditched enclosures and possibly also industrial activity, although the northern limits of this activity were not distinct. It was clear that further investigation would provide evidence supplementary to that recorded by Neal.

## THE EXCAVATION

Three fields (numbers 4945, 7333 and 8420) on the northern side of Watling Street between Fenny Stratford and Little Brickhill were sampled, by means of twelve trenches (Fig.2).

In field 4945, nearest the roundabout (Fig.2) that serves the A5 – Fenny Stratford bypass (Galley Lane) junction, one trench (trench 2) 76.5m long by 2m wide was cut parallel to, and 6m north of, the A5 roadside hedgerow. Here the A5 has been diverted from the Roman alignment of Watling Street by road alterations undertaken in the late 1970s. A gap of 5.5m was left between the eastern end of Trench 2 and the western end of Trench 1 to allow for machine access to the spoil heap. The main open-area trench (trench 1) measured 141.5m in length by an average of about 11m wide, and crossed the north-south boundary between fields 4945 and 7333. Both trenches 1 and 2 were immediately adjacent to the main area of David Neal's excavations. In field 8420 ten trial trenches (nos 3–12) 1.85m wide and varying in length between 19.50m and 2.40m were cut approximately at right angles to the A5 and as close as possible to the roadside fence and hedge, in order to attempt to locate the Roman surfaces of Watling Street, whose precise location was unknown.

After initial clearance within trenches 1 and 2, the numerous cut features thus revealed were planned. Sample sections were emptied, amounting to 25% of ditches/gullies and 50% of pits and other cut features

Medieval cultivation furrows had cut through the uppermost parts of many features and in some instances had obscured or destroyed stratigraphic relationships. Identification of phases of activity depended rather more than was necessarily desirable upon ceramic material contained within feature fills. This problem was exacerbated further by the generally undifferentiated nature of the fills in several areas of the excavation.

### NOTE:

- 1) For clarity this report uses the same site north as David Neal's report. This is orientated 57° east of National Grid North.
- 2) The differentiation implied in this report by the

terms Ditch and Gully is one of size, not of profile or function. The term gully is used for a linear cut feature smaller than 0.5m wide and 0.2m deep.

- 3) Dating evidence in the structural section of the report makes use of the evidence from the artefacts – principally the pottery. The phasing of the pottery is discussed at the start of Mrs Woodfield's report. It should however be emphasised that the phases referred to are ceramic, not structural. In the structural account we have therefore tended to give date ranges as opposed to phase numbers.
- 4) Within this text the adjectives early/late are generally used to denote a period of around twenty years at the end of a century, whilst the adjectives earlier/later denote rather longer periods of about forty years. There may be a degree of overlap between these usages.

## EXCAVATION RESULTS

### ENCLOSURE BOUNDARIES. (Figs. 3 and 4)

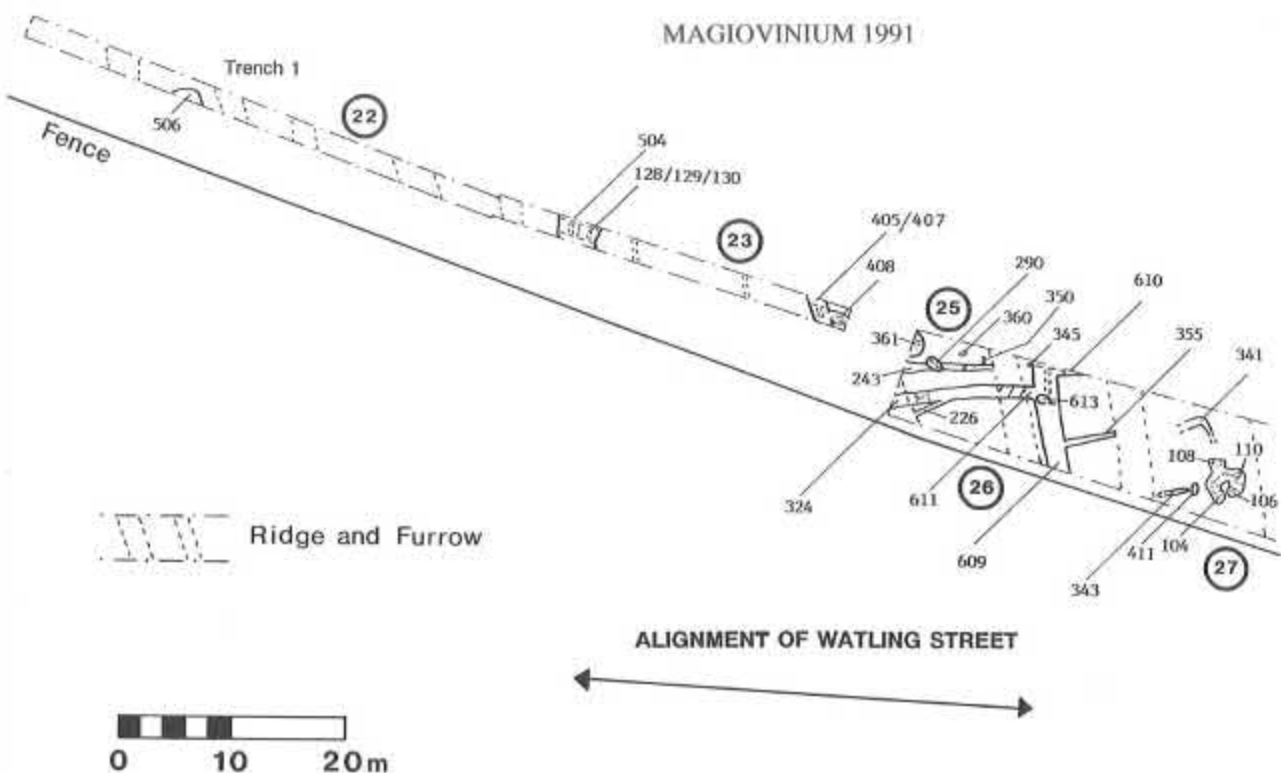
Trenches 1 and 2 revealed fragments of nine small ditched enclosures or plots (numbers 23 to 32). Lengths of some nineteen enclosure ditches, slots and gullies associated with these plots were discovered, including three probable internal divisions within enclosures.

For convenience and ease of description, numbers have been allocated to the enclosures revealed by DS Neal's investigations as well as those described here (see Fig.4).

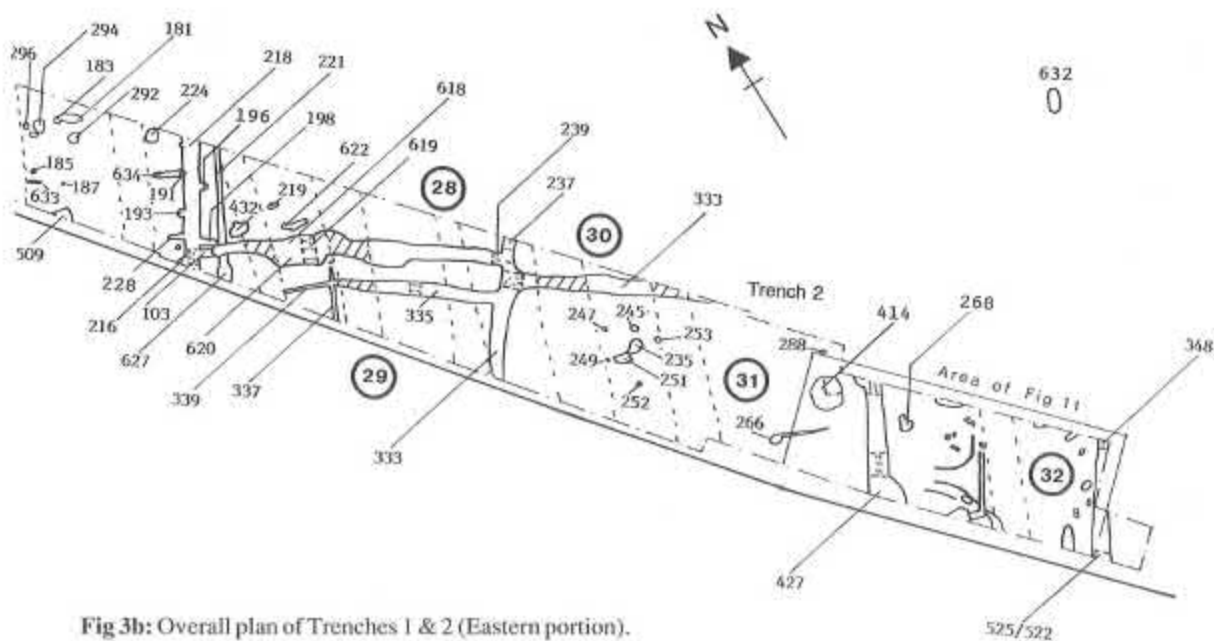
### TRENCH 2.

#### Ditch complex 504/128/129/130. (Figs. 3a and 6)

This N-S boundary formed the western margin of enclosure 23, (fig. 3). It was a composite feature up to 5.40m wide and 0.62m deep. At least four phases could be distinguished. The material within the primary fill of the first and westernmost ditch (504) could be dated to the late first or early second-century. This ditch was apparently re-cut in the mid to late second-century (the recut is proposed on the basis of ceramic evidence, but was not identified in the field). A shallower ditch (128) was then cut through the fill of the eastern edge of ditch 504. No



**Fig. 3a:** Overall plan of trenches 1 and 2 (Western portion). The numbers in circles are those of Roman enclosures.



**Fig 3b:** Overall plan of Trenches 1 & 2 (Eastern portion).

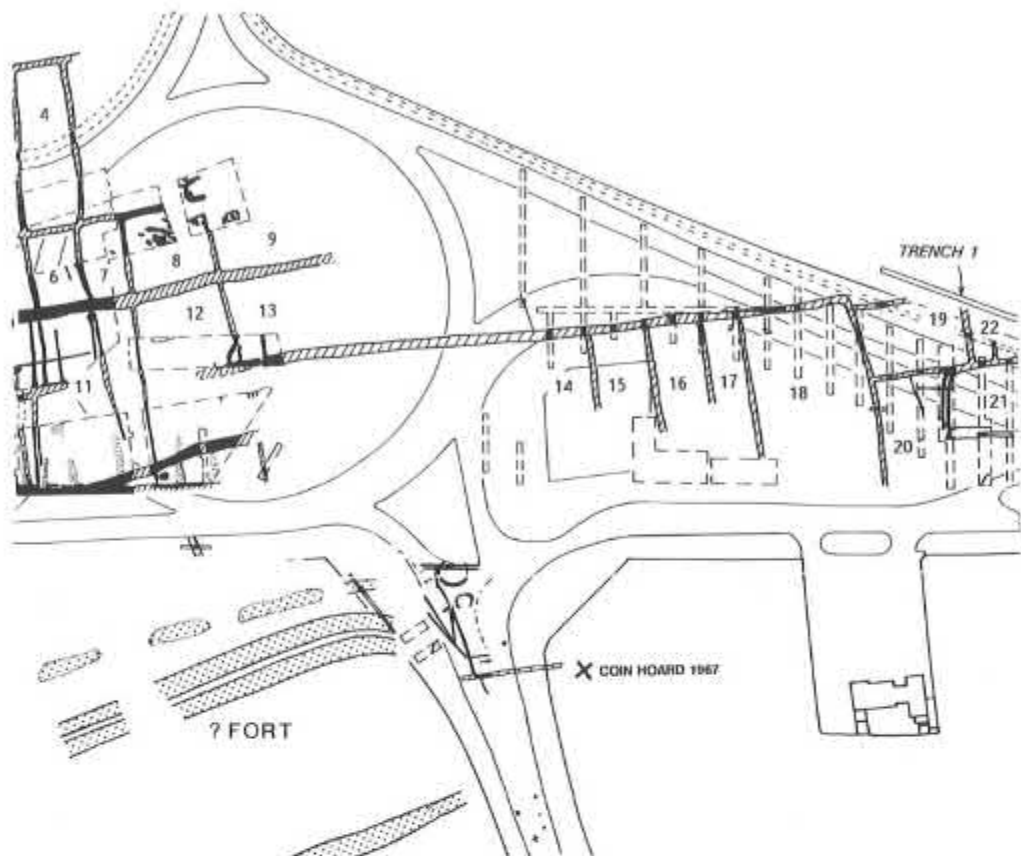


Fig. 4a: Principal features investigated during 1991 (Western portion), superimposed on plan (after Neal 1987 Fig. 3) of earlier discoveries.

finds were recovered from the fill of 128. This was in turn re-cut by ditch 129/130, the fills of which (421, 530) contained mid to late second-century pottery.

A possible fifth and final phase was indicated by the shallow uppermost fill (505) which contained pottery of late third to fourth-century date, and extended over much of the area occupied by the earlier phases of the boundary. 505 also contained structural debris including tile, imported perhaps as hardcore from the town centre

The successive ditches of this boundary were cut in such a way as to cause the boundary to migrate gradually eastwards with successive recuts. This may have been to ensure that ditches (or one side of them, at any rate) were cut through consolidated material which would have been less prone to erosion than the looser fills of earlier ditches; alternatively the presence of hedges may have

made recutting along the original line difficult. There may also be an implication that some plots were unoccupied and encroached upon by the tenants of neighbouring plots.

#### Ditch 405/407. (Fig.3a)

Ditch 405/407 separated enclosures 23 and 25 and was aligned N-S. 405, the earlier phase, was 1.33m wide and 0.50m deep. The earliest fill, 410, contained no datable finds. The ditch appears to have been recut (407), and the recut (but not the original ditch) cut the upper fill of pit 408 (on the eastern side of the ditch) which contained late first to early second-century material. The fill (404) of the recut ditch contained mainly mid to late second-century material, although there was one very late tile



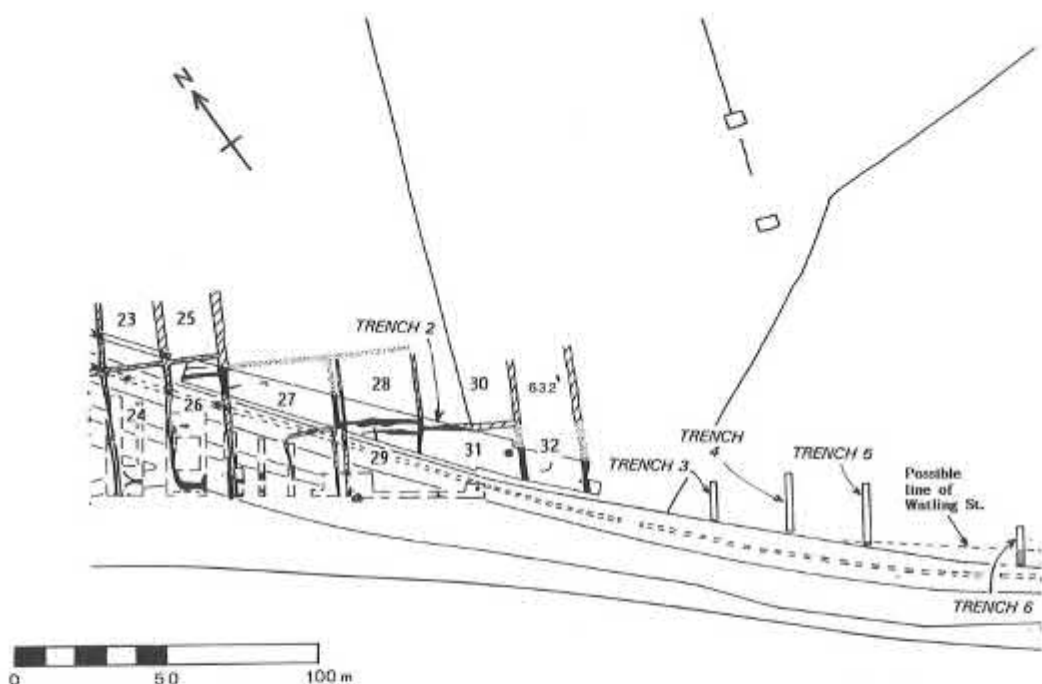


Fig. 4b: Principal features investigated during 1991(Eastern portion).

fragment. The ditch may have been recut a second time; the fills of this second recut – 402 and 403 – contained late second or early third-century material.

## TRENCH 1

### Gully 243. (Fig.3)

Gully 243 formed the original boundary between plots 25 and 26 and was orientated E-W, parallel with ditch 324 and 1.5m to its north. It was 0.50m wide and 0.20m deep. The sole fill of gully 243 contained late first to mid or possibly late second-century material (*see pottery report no 6*).

Gully 243 did not in fact extend all the way to Ditch 609, although there was a posthole (345) on the alignment of 243. However this area had been partially truncated by medieval cultivation.

### Ditch 324/611. (Fig.3a)

Ditch 324 formed the boundary between enclosures 25 and 26 and probably replaced the earlier boundary, 243, described previously, which lay 1.5m to the north. The profile dimensions varied, but were generally in the order of 0.90m wide by 0.36m deep, except at the eastern

end where both dimensions were greater. Two fills were observed where the ditch was sampled close to its junction with the north-south ditch 609. The earlier fill, 607, contained mid to late second-century material, whilst the later fill, 606, contained material from pottery phase 2 (late second to early third-century). The proximity to ditch 609 may mean however that there is some contamination of the finds assemblage. The section cut across the middle of ditch 324 contained third and fourth-century material including a coin of Postumus and a follis of Constantine, but the two fills observed elsewhere could not be differentiated here and a recut, not otherwise detected, may be inferred (*see pottery report no 13*).

### Ditch 609. (Figs. 3a,7)

Ditch 609 formed the boundary between enclosures 26 and 27 and was aligned north-south. It was 2.0m wide and 0.68m deep. The primary and middle ditch fills contained material dated to the mid to later second century, but the upper fills contained significant amounts of late first or second-century pottery and tile intermixed with late third or fourth-century material.

The presence of residual early material in the late fills may suggest that clearance of earlier features and buildings was taking place whilst the ditch was open.

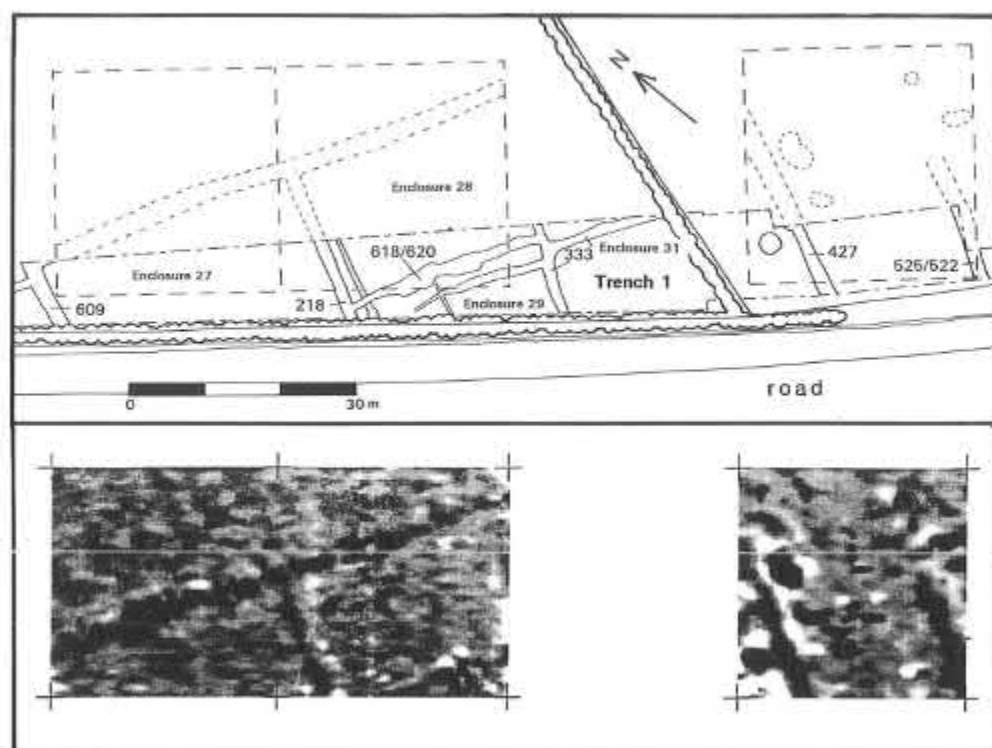


Fig. 5: Magnetometry plots in relation to excavated features, southeastern part of trench 2.

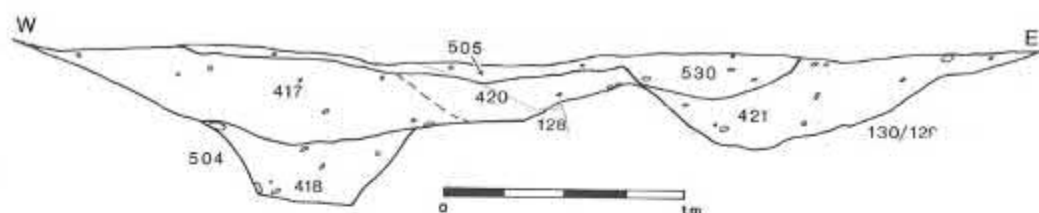


Fig. 6: Section across ditch complex 504/128/129/130.

The profile of ditch 609 (see Fig. 7b) suggests recuts, but these were undetected during excavation. A pit, 613, cut into the ditch bottom and containing late second or third-century material also provided difficulties during excavation.

#### Ditch 610. (Figs. 3a, 7)

Ditch 610 formed the northern boundary of enclosure 27 and was aligned E-W. It was 0.25m deep, but its full width could not be ascertained as only a small part of the feature was within the excavated area; this contained a few sherds including one of late fourth-century date.

#### Ditch 216. (Fig. 3a)

Ditch 216 was aligned E-W, and apparently provided a sub-division of plot 27. Its location close to the southern baulk of trench 1 made its characterisation difficult; it is identified as a ditch on the basis of its apparent alignment with one seen by Neal in the side of the roadside ditch beside the A5 cut in 1978. The fill contained late first to early second-century pottery and coins.

#### Ditch 218 & Gully 221/625. (Fig. 3a)

Ditch 218 formed the division between enclosures 27 and 28 and was aligned N-S. It was 1.35m wide and



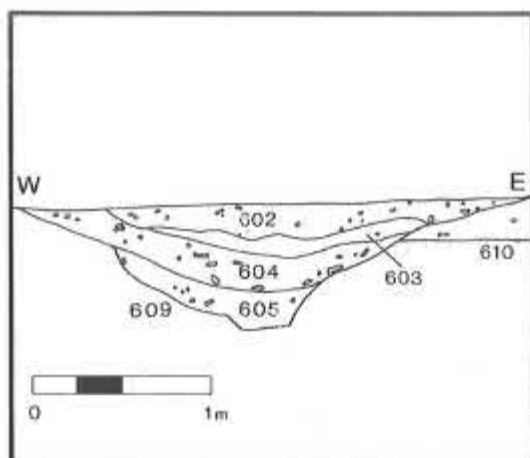
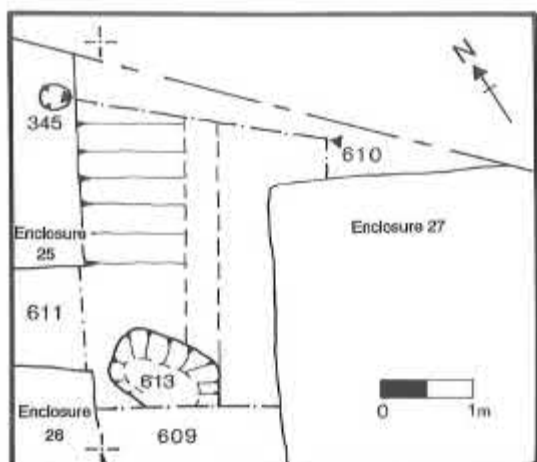


Fig. 7: Plan of intersection of ditches 609, 610 and 611; section across 609 and 610.

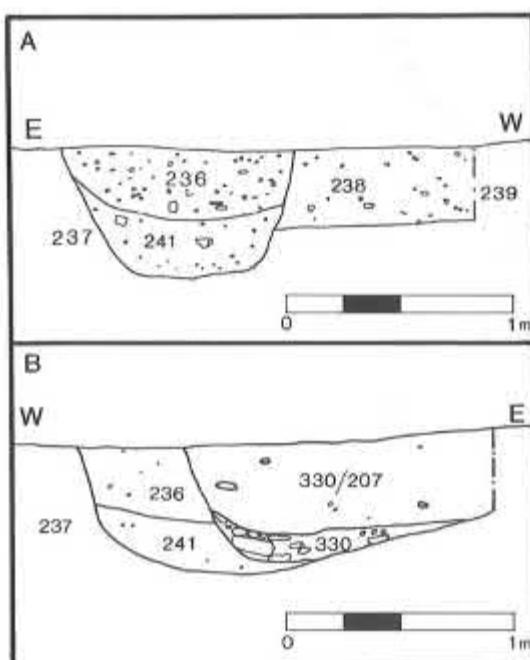
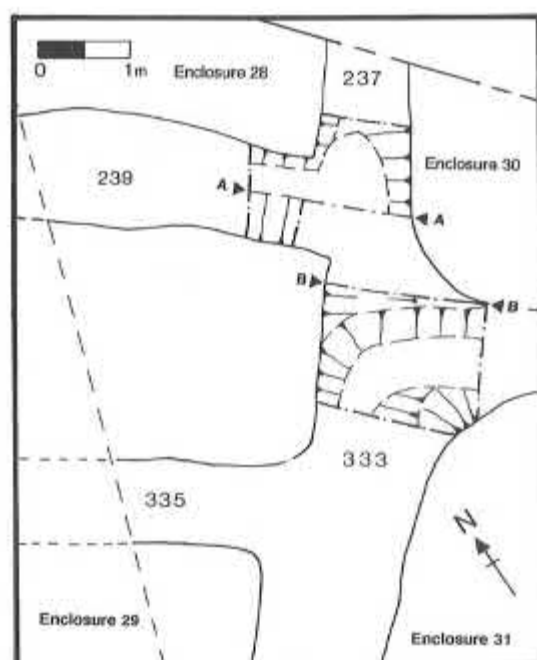


Fig. 8: Plan of intersection of ditches 237, 239, 333 and 335; sections across (a) 237 and 239, (b) 237 and 333.

0.40m deep. No differentiation of deposits was observed in a uniform fill, but the presence of much late first to second-century material together with pottery of fourth-century date indicates either recutting of the ditch which could not be observed in the field, or (as suggested above for the similar mixture of material in ditch 609) major clearance/ demolition occurring whilst the ditch was open. The fill of ditch 218 included 25 fragments of

limestone and ironstone ranging in size between  $0.05 \times 0.10 \times 0.03\text{m}$  and  $0.3 \times 0.10 \times 0.20\text{m}$ , possibly suggesting that building debris had been dumped within the ditch.

An earlier definition of this boundary is represented by gully 221, 1.50m to the east and parallel with ditch 218. This was 0.50m wide on average and 0.20m deep, al-

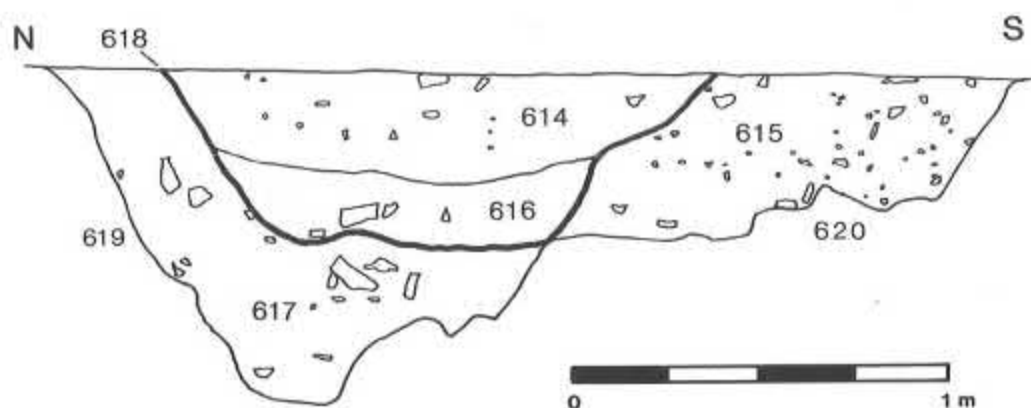


Fig. 9: Section across ditches 619 and 620.

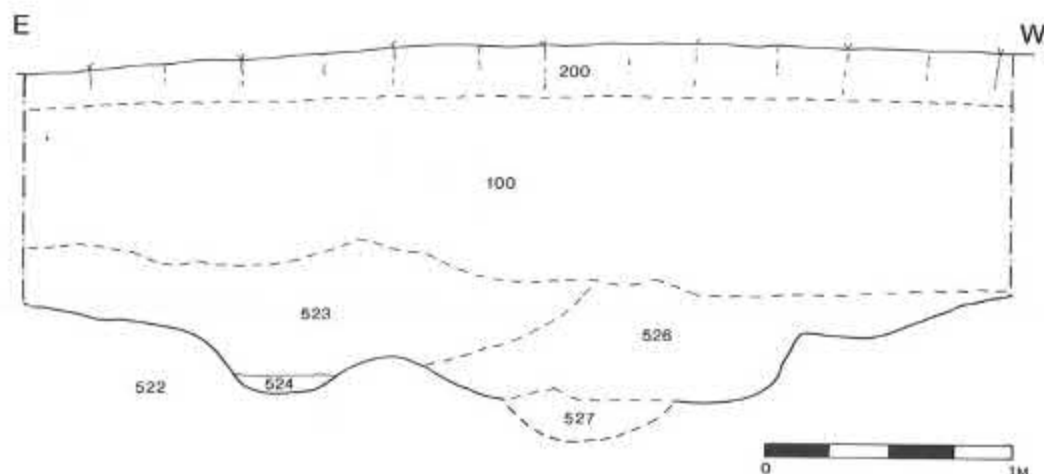


Fig. 10: Section across ditches 522 and 525

though it widened out to c1.05m at the southern end, where it cut an earlier ditch or pit (627) which was only observed close to the baulk. However it is not possible to demonstrate that ditch 218 was dug after gully 221 had gone out of use. The fill of gully 221 contained late first or early second-century material and was cut by the east-west ditch 618/620.

#### Gully 339 and Ditch 335. (Figs. 3b, 8)

Gully 339 was the westerly extension of ditch 335, and together they appear to have formed the earliest E-W boundary between enclosures 28 and 29. Gully 339 was 0.20m wide by 0.12m deep, whilst Ditch 335 was 1.10m

wide by 0.35m deep. The reason for the change in dimensions and profile between the ditch and the gully is not understood. The junction between the two features was cut by another gully (337) which lay at right angles to gully 339, but the ceramic material from these features suggested that 337 was possibly later than 339/335, the material from 339 dating to the late first or early second century, that from the primary fill (334) of 335 to the late first or mid second century, and that from the upper fill (208) of 335 to the mid second century, whilst the material in 337 was late second to mid third century in date. However the upper fill (208) of Ditch 335 also yielded two fourth-century coins.

#### **Ditch 618/620/239; Ditch 103.** (Figs 3b, 8 and 9)

Ditch 618/620, aligned east-west, formed the later boundary between enclosures 28 and 29, replacing 339/335, situated some 2m to the south. Ditch 620 was the earlier cut of this irregular multi-phased feature, and contained late second to mid third-century material. The broad date-range of the pottery in the fills of 618, the later phase of the boundary, suggests that recutting, although probable, was not readily discernible within the uniform fill. The earlier ceramic material dated to the late second or mid third century, while the later material dated to the late third or fourth century; certainly there was no material sufficiently early to imply that 618/620 had been cut before 339/335 had been abandoned. A later recut, 618, of the boundary had shifted its position slightly further north. The principal fill of ditch 618, and also a large pit (619) which it cut, contained material (including a coin of Carausius) dating to the late third or fourth century, except at the eastern end of 618 (context 239) at its join with the north-south ditch 237, where the fill (238) contained late second to mid third-century material; here too recutting, perhaps localised in extent, may be suspected even though no trace of it other than the feature's irregular shape was evident during excavation. The uppermost fill of ditch 618 apparently represented slumping of the sides rather than a recut and dated for the most part to the late fourth century, although this fill also included an Anglo-Saxon sceatta (*see pottery report, nos 71–81*).

The western end of ditch 618 cut a short length of ditch, 103, extending from the eastern side of ditch 218; its fill yielded no datable finds. Another feature 198, also undated, was parallel with 103 and immediately north of it. It was either an elongated pit or a short length of ditch, and this, too, may have been associated with the boundary between the two plots.

#### **Ditch 237.** (Figs. 3b, 8)

Ditch 237, aligned N-S, formed the boundary between enclosures 28 and 30. It extended for about 3 metres southwards from the northern baulk of trench 1, at which point it was cut by ditch 333 which turned a right angle at the same location.

The earliest material in ditch 237, from fill 241, dated to the late second to mid third century, whilst that from the upper fill, 236, dated to the late third to fourth century (*see pottery report nos 67–69*).

#### **Ditch 333.** (Figs. 3b, 8)

Ditch 333 formed the northern and western boundary of enclosure 31. The earliest material in the fill of ditch 333 dated to the late second to mid third centuries, but some of this was in the uppermost fill indicating apparently a similar situation to that found elsewhere (eg ditches 609

and 218) in that residual material appeared to have been introduced, perhaps as a consequence of large-scale clearance in other parts of the settlement. This same fill, 330, also contained much material of late third or fourth-century date, including a coin of either Gratian or Honorius, and the possibility of recutting which had left no readily identifiable trace in the archaeological record should not be discounted. The lowest fill (332) of ditch 333 contained pottery datable to late pottery phase 1 or early phase 2.

No pottery of late fourth-century date was found in the fill of ditch 237, suggesting that it had filled up completely before this period, and consequently had been abandoned whilst the boundary ditch on the north and west sides of plot 331 was still open.

#### **Ditch 427.** (Figs. 3b, 11)

Ditch 427, aligned N-S, formed the boundary between enclosures 31 and 32. The absence of any material earlier than the late fourth century from the two sections cut across this ditch suggests either that recutting of any earlier phase of the ditch was so thorough that no earlier material remained in it, or that this boundary was a later subdivision of one enclosure composed of enclosures 31 and 32 together. If this latter suggestion was the case, the early enclosure would be an unusually large one some 51m in width, but the suggestion is reinforced by the fact that ditch 427, near the northern side of trench 2, cut the fill (which contained mid-second-century finds) of a large pit, 431, which had presumably been filled in before 427 was first cut. (The question of the measurements used in the laying out of the extra-mural areas of Magiovinium is discussed below, p.61). (*see pottery report nos 92–94*).

The fills, 428 and 206, of ditch 427 included two coins of Valentinian I and another unidentifiable issue of the House of Valentinian as well as several other later fourth-century coins.

#### **Ditch 525/348/522.** (Figs. 3b, 10, 11)

Ditch 525/522, aligned N-S, formed the eastern boundary of enclosure 32 at the easternmost end of trench 1. The profile suggested that there had been (at least) three different cuts, although the uniform nature of the fill was such as to mask this fact until the profile had been exposed. A section excavated beside the northern trench edge through the westernmost ditch-cut revealed two fills – 346 & 347 – which contained material of later first to early second century date (*pottery report no 1*), as well as a coin of Gallienus (AD 253–268).

The ditch section at the southern trench edge was permanently waterlogged and proved impossible to keep dry long enough to allow reasonable conditions for excavation. Therefore the data recorded here must be treated

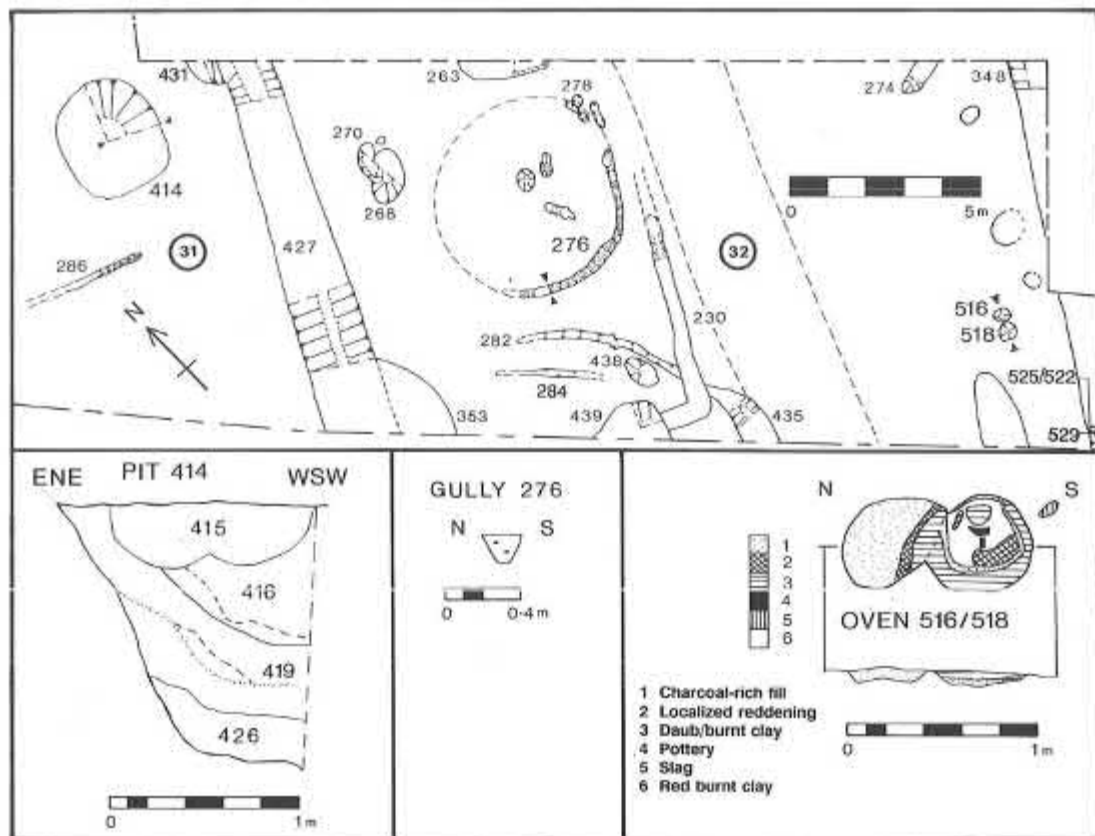


Fig. 11: Detail plan, southeastern end of trench 1 (enclosures 31 and 32); sections of pit 414, gully 276 and oven 516/518.

with some caution. The profile of ditch 525 (equivalent to 348 at the opposite end of the ditch) (see fig. 10) at this point, and the broad date-range of the ceramic material suggest that it may have been recut, but this was not observed during the initial stages of excavation. Fifty sherds were of late first to early second-century date; several sherds were of late second to early third-century date; 12 sherds were of third or fourth-century date – each group possibly corresponding to a phase of recutting, (see pottery report part 5.1.3).

Ditch 522 was a late recut slightly further east. Material from the fills, 523 and 524, of this ditch gave a late third or fourth-century date; the Dupondius of AD 154 in context 523 was doubtless residual.

#### THE INTERNAL FEATURES.

#### TRENCH 2

##### Enclosures 22 and 23.

One internal feature was seen within the small area of enclosures 22 and 23 uncovered by Trench 2 (Fig.3).

Part of a cut feature (506), apparently a pit at least 2.9m wide and 1.4m deep was recorded within enclosure 22 (or strictly, the area to the north of enclosure 19, for the ditch defining the western side of enclosure 22 was not located during the 1991 work, although a section of it had been recorded further south during David Neal's excavations). Its fill (507) contained material assigned to pottery phase 2 (late second to earlier third century) which appeared to have been pounded into small fragments.

#### TRENCH 1

##### Enclosure 25.

The only distinct feature in the small area of Trench 1 lying north of early gully 243 consisted of an oblong pit (350),  $0.69 \times 0.29 \times 0.05$ m deep, orientated at a right angle to the gully. Its fill contained charcoal and bone including several burnt bone fragments. Other ill-defined features included a pair of adjacent post holes (360) and, underlying the western baulk, a possible shallow pit 361.

### Enclosure 26.

South of ditch 324 there were no features other than a narrow gully 226 possibly cut by ditch 324 and meeting it at a shallow angle. No finds were recovered from its fill.

### Enclosure 27.

Enclosure 27 was 33m wide and contained a possible internal division formed by an east-west gully 355 which possibly linked up with an "L"-shaped feature 341 which in turn may join up with a gully discovered by Neal. Neither 355 nor 341 contained any dateable material. The subdivision, if it is such, formed by these features would be more trapezoidal than square and would reflect an equally irregular subdivision of the south-eastern quadrant of the enclosure. There were numerous pits and post holes within the enclosure which did not form any clear pattern. All dated to the late first or early second centuries with the exception of the upper fill of pit 224 which dated to the mid to late second century. A group of four pits (104, 106, 108 and 110) contained material dated to the late first to mid second centuries (*pottery report nos 25 – 35*) and charcoal, and one of these (110) contained fired clay which may have been furnace lining. Two short gullies 228 and 634 lay at right-angles to the eastern enclosure ditch 218, and may have drained into the ditch. The fill of 228 dated to the late first or early second century. Another short length of gully (343), parallel with 355 and 5.5m to its south, also contained first-phase pottery.

### Enclosure 28.

Enclosure 28 was 27m wide. Of five scattered internal pits two (219, 622) were undatable, the fills of 432 and 196 contained material dated to the late first or mid second centuries, and 198 contained material dated to the fourth century.

### Enclosure 29.

Enclosure 29 measured 25m in width. The only internal feature was a north-south narrow linear gully (337) 0.20m deep, the fill of which dated to the late second to mid third century. This gully probably extended as far as boundary ditch 618/620 and represented a subdivision of the enclosure.

### Enclosure 31.

Enclosure 31 measured 32m across. The internal features included a group of five postholes or pits (245, 247, 249, 252, 253), grouped around two further pits (235, 251), one of which (235) contained the (partial) skeleton of a dog and pottery dated to the mid second century (*pottery report, no 58*); the high proportion of flagons and amphorae may be significant.

The fill of another pit, 266, dated from the mid to late second century, contained much charcoal. Sooty deposits externally and hard-water scale internally were detected on some of the sherds from its fill 264, and may indicate domestic rather than industrial use. A gully (286), 4m long and 0.15m deep, extended from the eastern side of pit 266. The fill of gully 286 yielded material of late second-century date.

The fill of a pit, 431, protruding from the northern trench edge yielded material with a date of mid second century. This pit was cut by N-S ditch 427 (see above).

The largest feature within enclosure 31 was a sub-circular pit (414) 3m x 2.60m by 1.40m deep. Finds from the fills dated to between the late first and mid to late second centuries (*pottery report nos 36 – 57*). It may have been a shallow well or water sump, possibly associated with a wattle-built circular building some seven or eight metres to the east in enclosure 32 (see below), on the assumption that the north-south ditch 427 is a later division of enclosures 31 and 32 (ie post-dating the period of use of pit 414; see also the discussion of boundary ditch 427 above).

The range and quantity of pottery within pit 414 suggests that the pit was open, or partially so, for the best part of a century. The lime-scale on some sherds may indicate use as a latrine, although it is possible that the pit was originally excavated in order to extract clay for daub. Mrs Woodfield suggests in her report on the pottery that the high occurrence of worn storage jar sherds may be indicative of some form of shop situated nearer to the plot frontage.

### Enclosure 32. (Fig.11)

Enclosure 32 was 18m wide. This enclosure, the closest to Watling Street of those excavated, contained the only clear signs of what was apparently domestic occupation.

A continuous section of a curving, narrow gully (276), 5.40m long by 0.20m wide and 0.15m deep, could have been part of a circular wattle or plank-built structure, the diameter of which would have been about 5m. Its fill contained late first to early second-century material. At the northern end of the gully the cut widened slightly and revealed an unusually large, flat piece of reddened, possibly burnt, ironstone, perhaps a post-pad. Roughly aligned with the gully was a group of four small features – one posthole (278) and three short linear gully sections. The posthole and the possible post-pad within gully 276 noted above may indicate an entrance to the circular building, the width of which would be 1.30m, but the alignment was not entirely convincing. The arc of the gully enclosed three small pits, none of which contained dateable material.



Ten metres to the east, beside the eastern enclosure ditch, was a small figure-of-eight shaped oven 516/518 (Fig.11). Its southern half contained what was probably burnt clay lining and reddened silts, while the northern half contained mostly charcoal and was apparently the stoke-pit. The fill of the oven contained material dated to the late first century, and it may thus have been contemporary with the supposed building represented by the curvilinear gully 276.

Two other sections of narrow linear gully, 282 and 284, possibly indicated other buildings, the former containing late second-century material. Just outside and to the west of the arc of the supposed building represented by 276 were two pits and a posthole. The fill of pit 270 contained material dated to the late first or early second centuries, while pit 268 contained material dated to the later third to early fourth century. A short linear feature (274) extending a short distance from the north baulk produced pottery from the Hadrianic period onwards.

A shallow "L"-shaped gully, 230, the fill of which contained material dated to the fourth century, may have been a remnant of an internal division within enclosure 32. This cut a pit (439) underlying the southern trench edge, the fill of which contained material with a date of late second century. An irregular curvilinear feature (435) adjacent to and on the east side of gully 230 yielded material dated to the fourth century. The fill of an oblong feature 274 extending from the northern trench edge contained material of early to mid second-century date.

During topsoil stripping in order to create the bypass works compound, a human skeleton (632) was found at an approximate depth of 0.30m within the area to the north of enclosure 32 (see Fig.4). It was buried in an irregularly shaped grave pit in a contracted position lying on its left-hand side, head orientated north-north-east (see A. Locker's report below). It is not certain whether the enclosure system extended to the area around this burial. The metal detectorist who found the skeleton reported that there were ditches either side of the grave – whether these were enclosure ditches or merely the remains of approximately north-south orientated furrows of the ridge-and-furrow system is not clear. Pottery recovered from the grave fill, 631, dated to the late third or fourth century. This date is consistent with Neal's observations in his Area 1 cemetery further west that the north-south inhumations were to be dated to the late third or early fourth century, as opposed to the late fourth-century east-west inhumations (Neal 1987, 22).

## AREAS INVESTIGATED TO THE EAST OF TRENCH 1, IN FIELD OS 8420. (Figs. 2, 4, 12)

Ten trial trenches were cut in this field by machine, approximately at right angles to the northern edge of the A5 road and as close as possible to it, in an attempt to locate the precise position of Roman Watling Street. All were 1.85m wide and were aligned north-south according to the site grid.

### TRENCH 3

Trench 3 was 13.20m. long. It was cut to a greatest depth of 1.75m, through a metre of topsoil and ridge and furrow and/or colluvial deposits. The lowest deposit reached was a very uniform mid grey clayey sandy silt mottled with ginger-brown iron staining. On the basis of observations subsequently made in adjacent trenches it is likely that this layer was deposited after the Roman period; it was not possible to excavate further for logistical reasons.

### TRENCH 4

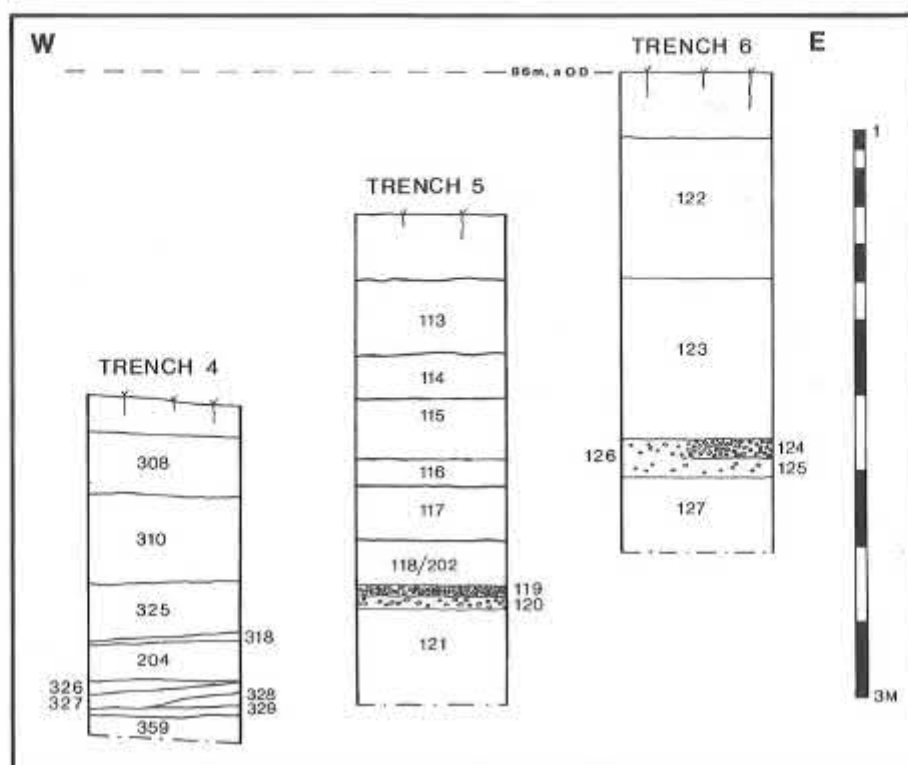
Trench 4 was 19.50m long and was excavated to an average depth of 1.40, except where a sump was dug in order to draw off the substantial quantities of water which drained into the cutting. The sequence, from top to bottom, was as follows (see Fig.12):

- 308, 310, 325, 318. Topsoil and colluvium, up to 1m thick.
- 204. Greyish brown sandy silt with gravel, containing late third to early fourth century material, as well as earlier, residual, material from pottery phase 1.
- 326. Yellowish brown silty sand (only present at southern end of trench).
- 327. Greyish brown silty sand with frequent small stones (only present at southern end of trench).
- 328. Yellow-brown sandy silt and ironstone, containing mid to late second-century material, including evidence suggesting iron-working.
- 329. Thin layer (0.05m thick), containing burnt clay and charcoal, possibly derived from industrial waste. The finds from this layer and the underlying 359 dated to pottery phase 1 (late first to late second century).
- 359. Orange-brown clayey sandy silt with lenses of mid-grey clayey silt and occasional charcoal fragments.

Undisturbed silts were encountered at a depth of 1.90m

Trenches 3 and 4 lay in a slight hollow, possibly originating as a sand quarry pit, within which debris had accumulated, perhaps over a long period of time, al-





**Fig. 12:** Representative sections through trenches 4, 5 and 6.

though some of the material may have been derived from the late second-century clearance of buildings and general levelling asserted by Neal (Neal 1987, 18).

#### TRENCH 5

Trench 5 was 20m in length. Its greatest depth was 2.60m. The sequence was as follows (top to bottom):

200. Topsoil

113–117. Colluvial sequence of sands and silts.

202. Similar and perhaps equivalent to 204 in trench 4, and containing late third to fourth-century material. (not shown on Fig.12)

118. (relationship with 202 unclear) Slightly clayey sandy silt mottled with ironstaining.

119. Packed pebble layer, 0.05m thick and 1.97m below present (1991) ground surface.

120. Packed pebble layer, not as densely packed as overlying 119.

121. Apparently undisturbed pale buff compacted sand.

Layers 119 and 120 both ended some 1.18m north of the southern end of the trench and appeared to be cambered surfaces, possibly the remains of Watling Street.

#### TRENCH 6

Trench 6 was 12.50m long and 2.55m deep. The recorded sequence was as follows (top to bottom):

*Topsoil.*

122. Colluvium

123. Sandy silt with iron mottling.
- 124 (southernmost 5.10m of trench). Compact pebble layer, apparently cambered, and interpreted as (probable) surface of Watling St.
- 126 (northern part of trench, replacing 124 in the stratigraphic sequence). Orange silt and gravel.
125. Dark blue-grey sand and silt, becoming orange in colour where overlain by 126.
- 127 (in the area underlying layer 124). Yellowish-brown sandy silt and patches or lenses of blue-grey clay. It could not be determined whether or not this deposit was the result of human activity.

Contexts 123, 124 and 125 all varied in colour; these variations appear to be due to localised differentiation in post-depositional oxidation/reduction regimes.

Although 124 may be interpreted as a possible road surface, there was no trace of any side ditch associated with it. The depth of this surface in trenches 5 and 6 is quite marked at approximately 2m beneath the modern ground surface.

## TRENCHES 7-12

These trenches revealed a sequence of blue-grey clays and silts overlain by sands, silts and gravels together with colluvium. There were several clear but unremarkable variations in the lithology and particle size characteristics of these clays and silts.

No archaeological features were recorded in any of these trenches, suggesting that they lay beyond the limits of settlement activity at Magiovinium. The distribution of Romano-British pottery (absent in trenches 6-12, but present in significant quantities in trenches 4 and 5), also provides a valuable clue to the approximate position of the eastern boundary of the settlement. The absence of any surface identifiable as that of Watling Street, particularly in Trench 7 may be due to ploughing; alternatively it may demonstrate that even a major thoroughfare such as Watling Street may have been subject to minor variations in its alignment.

## DISCOVERIES ON THE LINE OF THE FENNY STRATFORD SOUTHERN BYPASS.

(Figs. 2, 13)

During June and July 1990 finds of material were made by metal detectorists searching along the route of the Fenny Stratford Southern bypass. This material, which included a coin manufacturer's hoard, a small bronze figurine of a horned ram and several inhumations was reported to the Milton Keynes Archaeological Unit. No provision for archaeological work had been arranged for this area,

as trial work in 1986 (admittedly limited in extent) had failed to produce evidence for the fort which had been thought to exist here, and in any case, the original road (Galley Lane) was still in use. Construction works were by now at an advanced stage, but some limited salvage recording work was possible and this was carried out by staff from the MKAU and from Buckinghamshire County Museum. Features were sketch-planned and located by means of the contractor's chainage measurements, with all that such methods imply in terms of accuracy. The area at the northern end of the bypass nearest to the town was mainly recorded by BCM, whilst that further south was largely recorded by MKAU. The coin manufacturer's hoard has been published separately on behalf of MKAU (Zeepvat 1994); brief notices of the figurine have appeared previously (Frere and Tomlin 1991, 258-9; Zeepvat 1991) and the item is also described below.

The more northerly group of features (Gullies 9115, 9140 and 9136, pits 9134, 9143 and 9181, and hearth 9138; see Fig.13) was recorded either side of an area recorded in 1980 by D Neal (Neal 1987, Figs. 7 and 8) and referred to by him as "Site 17, Area 3"; the remaining features, one of which (9018) contained the hoard (the ram figurine also came from this area but was unstratified), and the inhumations were recorded in an area some 50 - 100m further to the south.

## GULLIES AND PITS (Fig.13)

### Gully 9115. (Fig.13 no 2).

This gully, aligned north-south, is the continuation of Neal's gully 2375 (shown as 1 on Fig.13) which curved closely around the west side of a circular building and then ran some 20m southwards. It appears to have functioned as both drain and boundary ditch. Pottery from the gully (fill 9142) produced the same late second to early third-century date (our phase 2) as the assemblage recovered by Neal (Neal 1987, 16).

### Ditch 9140. (Fig.13 no 3).

This "U"-profile ditch was aligned NNW-ESE. After an unknown proportion had been machined away by the road construction contractors its depth was 0.15m and its width at this level was 0.70m. It appeared to cut ditch 9136 although the relationship was difficult to elucidate, and the finds from 9136 appeared to be later than those from the fill (9141) of ditch 9140, which included tile dated to the late first or early second century and pottery

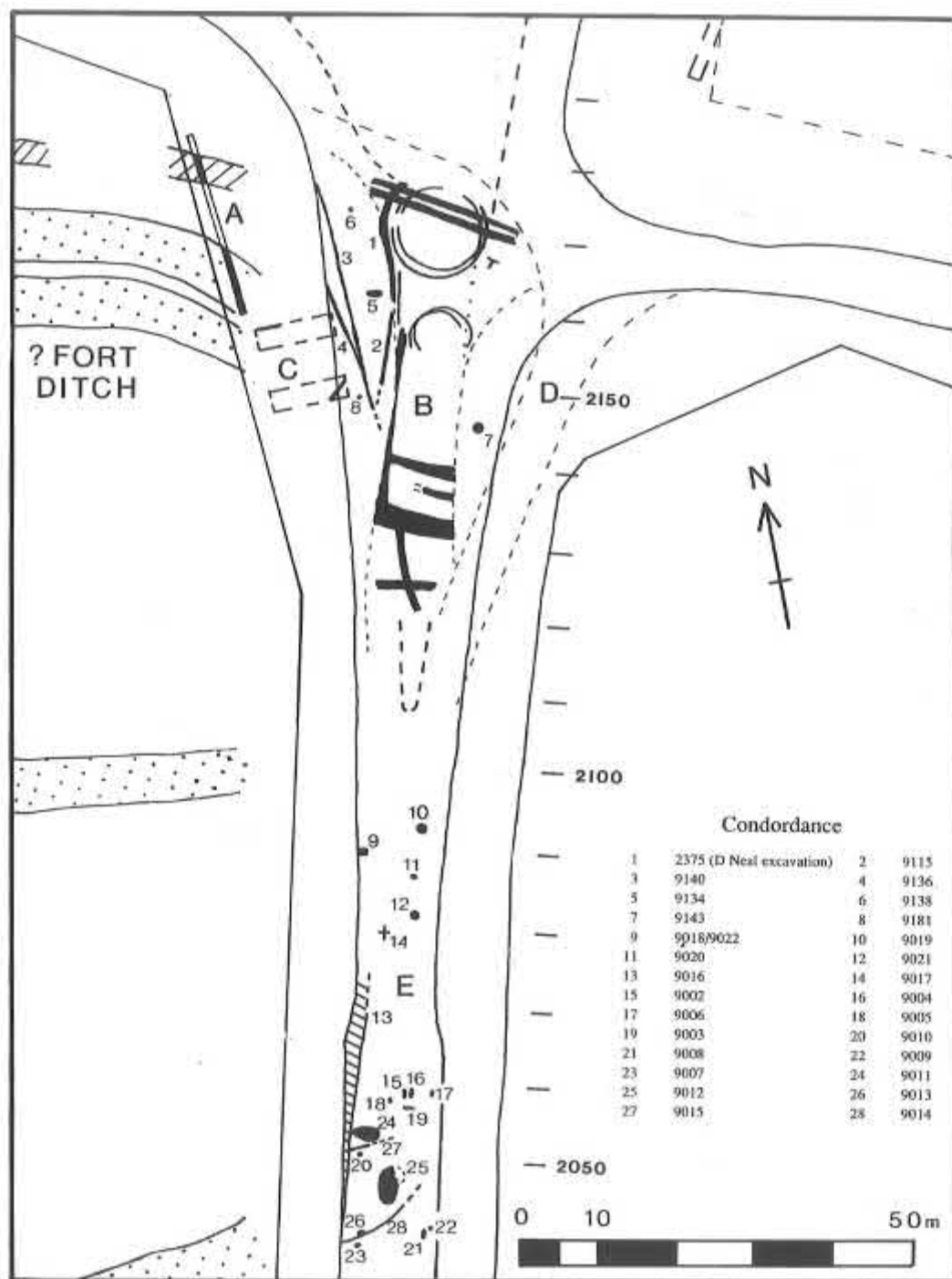


Fig. 13: Junction of Fenny Stratford bypass and A5 at the Galley Lane roundabout. (A) pipetrench examined by Mrs C Woodfield in 1976; (B) post-1978 road alignment and area of D Neal's 1980 excavation; (C) D Neal's 1986 trial trenches; (D) pre-1978 road alignment; (E) area of features (numbered 9-28) recorded by Milton Keynes Archaeology Unit. Features 1-8 were recorded by Buckinghamshire County Museum.

which was possibly of phase 3a (later third to earlier fourth century).

#### **Ditch 9136.** (Fig.13 no 4)

This "V"-profile ditch was aligned approximately NW-SE. After machining it was 0.25m deep by 0.50m wide, broadening towards the south end to 0.95m. A 9.60m length was revealed. Further south the area was too disturbed by contractors' machinery for detailed recording. The assemblage of pottery from this ditch was late second to third century (phase 2 or 3a). The fill (9137) of the southern end of the ditch was very fine soft silt which suggested that it had functioned as a drain.

#### **Pit 9134.** (Fig.13 no 5)

This kidney-shaped pit 2.10m long by 0.85m wide was aligned east-west. The natural clayey silt into which the feature was cut was heavily burnt a deep red colour for a distance of several centimetres around the sides of the pit. The pit may have had an industrial function or have been used for cooking and subsequently backfilled with refuse. Butchered bone, pottery and charcoal were recovered from the fill, but no slag or products of obvious industrial activity. The pottery gave a broad date of late first or early second to mid third century. The pit lay to the west of Neal's circular buildings.

#### **Hearth 9138.** (Fig.13 no 6)

This small, sub-circular hearth, 0.50 by 0.40m, cut on its northern side by a modern service trench, lay about 4m west of Neal's larger circular building 2383/2380. Pottery from its ashy fill (9139) dated to the late first to early second centuries (phase 1).

#### **Pit 9143.** (Fig.13 no 7)

A circular pit, 1.45m in diameter, was found to be 0.46m deep, although its upper part had been machined away. Its eastern side was straight and sloped at an angle of about 50 degrees. The western side was concave and dropped steeply, while the northern edge was cut by a gas pipe trench. Pottery from the pit fill dated to the late second to third century.

#### **Pit 9181** (Fig.13 no 8)

A sub-circular cut feature (dimensions not recorded) was situated west of the southern end of ditch 9140. The silty fill (9182) contained pottery assigned to phase 3a.

### **THE INHUMATIONS.**

Nine human inhumations in varying degrees of completeness were located and recorded by P Busby and R J Williams of MKAU. All had been disturbed, most of them seriously, by the contractor's operations.

#### **Inhumation 9017.** (Fig.13 no 14)

Inhumation 9017 was badly disturbed and possibly redeposited from another location. Only several vertebrae and a femur were retrieved. This burial was found in isolation at chainage 2080, some 20m north of a group of five burials (9002-9006) which were located between chainages 2056 and 2060.

#### **Inhumations 9002 and 9004.** (Fig.13 nos 15 and 16)

Two adult burials 9002 and 9004 lay side by side, heads orientated south, the bodies in an extended position. In both cases grave cuts were present. No coffin nails or grave goods were present.

#### **Inhumation 9006.** (Fig.13 no 17)

Inhumation 9006 of a youngish child consisted only of tibia and fibula.

#### **Inhumation 9005.** (Fig.13 no 18)

Inhumation 9005 was that of an adult. It consisted only of a very badly crushed upper abdomen with arms badly disturbed by the sides. The orientation had possibly been north-south. No grave cut or finds were present, although some phase 2 tile was recovered in association with 9002.

#### **Inhumation 9003.** (Fig.13 no 19)

Inhumation 9003 was that of an adult orientated east-west, fully extended, with the head pointing east. The grave cut was visible but no coffin nails or grave goods were present. Pottery recovered from the grave fill gave a date of third to fourth century (phase 3a).

#### **Inhumation 9010.** (Fig.13 no 20)

Inhumation 9010 consisted of some very disturbed remains of a skull and some limb bones. The orientation and age were impossible to determine. This was another apparently isolated burial lying at about chainage 2051.

#### **Inhumations 9008 and 9009.** (Fig.13, nos 21 and 22)

Inhumations 9008 and 9009 were positioned close together at chainage 2040. Inhumation 9008, orientated north-south with the head pointing south, consisted only of the base of a skull. Part of the grave cut could be seen. Inhumation 9009 consisted of the very disturbed remains of an infant. The orientation was impossible to assess.

#### **Inhumation 9007.** (Fig.13 no 23)

Inhumation 9007 consisted of the very disturbed remains of one leg of a young child. The orientation was not possible to assess.

## OTHER FEATURES IN THE AREA OF THE INHUMATIONS. (Fig.13)

### Ditch 9014. (Fig.13 no 28)

Ditch 9014, up to 1m wide, was aligned NE-SW and curved towards the north before disappearing beneath one of the contractor's spoil heaps. Pit 9013 lay on its northern side towards the southern end. No relationship was discernible between the two features. Pottery finds dated the ditch fill to the earlier third century (phase 2). Interestingly, this feature was on or near the position of the southeastern corner of the fort ditch posited by Mrs Woodfield (Woodfield 1977); it is clearly later than any fort, which would necessarily be of mid first-century date, but it is possible that the line of 9014 may in some way have been influenced by some earlier feature.

### Ditch 9015. (Fig.13 no 27)

Ditch 9015, up to 0.50m wide, ran straight and was aligned ENE-WSW. The eastern end continued beneath a modern spoil heap while the western end appeared to be cut by a possible road ditch, 9016. No finds were retrieved.

### Ditch 9016. (Fig.13 no 13)

Ditch 9016 ran N-S along the western side of Galley Lane. The fill was much darker than that of ditches 9014 and 9015 and therefore was possibly a more recent (ie post-Roman) road ditch. No finds were retrieved. Pits 9018/9022 were on the line of this ditch.

### Pit 9019. (Fig.13 no 10)

Pit 9019, at chainage 2092, was a circular pit with a diameter of about 2m. It was not excavated.

### Pits 9018 and 9022. (Fig.13 no 9)

The coin manufacturer's hoard at chainage 2089 was contained within a composite feature. Archaeological recording of the area took place after the discovery and removal of the hoard, and the data is thus incomplete. This description is based in part upon the verbal account of the metal detectorists.

The smaller pit, 9018, was possibly square in shape, 0.40 x 0.40m, and this may indicate that the hoard had originally been buried in a wooden box. Iron nails were recovered from the hole dug around the initial find but their association with the hoard cannot be confirmed. The hoard consisted of three ceramic vessels of phase 3a date containing some 1848 objects (coin flans and copper alloy rods and pellets). Two iron coin dies were found beneath one of the pots. The hoard has been fully published elsewhere (Zeevat 1994).

A hole approximately 1.30 x 0.90m was dug around the hoard by the metal detectorists. This excavation appeared to conform to the outline of a larger pit (identified

as 9022), and pottery, including samian, was recovered suggesting that the hoard had either cut an already existing Romano-British feature or that the putative pit was contemporary with the hoard. The pottery from the pit fill dated from the late third to earlier fourth century (phase 3a), although some 40% of the sherds were of phases 1 and 2.

9018/9022 is on the line of the apparently much more recent ditch 9016, but no direct relationship was observed in the field.

### Pit/Ditch 9020. (Fig.13 no 11)

An irregular hole no more than 0.40m deep was dug by a metal detectorist at chainage 2086.5 through a pit or ditch. The fill contained charcoal, burnt clay, bone and pottery. The latter produced a mid second-century date.

### Pit 9021. (Fig.13 no 12)

A circular pit was revealed at chainage 2081.5 approximately 1.5m across. Finds of second-century pottery and bone were recovered.

### Pit 9011. (Fig.13 no 24)

Pit 9011, at chainage 2053, was a large irregular pit 3.5 x 2m orientated approximately E-W. The south-eastern corner was covered by modern spoil. No finds were recovered.

### Pit 9012. (Fig.13 no 25)

Pit 9012, at chainage 2046, was a large irregular pit 5.0 x 2.5m orientated approximately N-S. The north-eastern corner was covered by modern spoil.

### Pit 9013. (Fig.13 no 26)

Pit 9013 lay at chainage 2040. Its fill was identical with that of ditch 9014 although the relationship between the two features could not be determined. No finds were retained.

## THE SOUTH-WESTERN END OF THE FENNY STRATFORD BYPASS.

During the *ad hoc* watching brief carried out by Buckinghamshire County Museum during box-scraping, several features were discovered at the south-western end of the Fenny Stratford bypass, some 100m east of the River Ouzel between chainage distances 460 and 560 (Fig 1, site A). Of these, two were clearly archaeological and contained datable finds from around the period of the Roman conquest.

### Gully 9127.

An approximately 8m length of gully, 0.50m wide was



seen running approximately N-S and was sectioned in the battered north road-side cut at chainage 561. The clayey silt fill contained a sherd of first-century "Belgic" pottery and (possibly burnt) flint pebbles.

#### Pit 9129.

A conical pit 0.70 x 0.70m by 0.38m deep at chainage 461.8 contained much charcoal, some pottery fragments and burnt stones in a clayey silt fill. The pottery (five sherds) gave a date of late first century.

### SUMMARY

The results of the watching brief and emergency recording on the Fenny Stratford Bypass need to be used with caution, given the circumstances in which the work was undertaken. With this caveat in mind, it is suggested that the Fenny Stratford Bypass observations may help to determine the southern limit of Magiovinium. If the features at the southwestern end of the bypass, which are clearly too distant to be germane to this matter, are ignored, then it appears that the southern limit of activity lies at around 130m south of Watling St. There was nothing demonstrably comparable to the system of ditched enclosures recorded further north, and many of the features recorded, particularly those further from Watling Street, were part of what was clearly a cemetery, and therefore presumably beyond the area of formal, regular land allotments. It is not, however, possible to identify any particular feature that marks this boundary.

### THE FINDS

Finds from the main excavations and from the Fenny Stratford Bypass watching brief are both presented in this section.

Finds have been classified and categorised according to material of manufacture, based on visual identification only of such materials. In the published catalogue unique sets of numbers have been used for the pottery and coins, but a continuous number series for all other objects.

The need for economic use of time meant that only the most interesting or dateable finds, ceramic and other, could be illustrated. The remaining finds are summarised. A detailed catalogue of all finds is filed with the site documentation.

### THE COARSE POTTERY

by Charmian Woodfield, with Jo Lawson

The purpose of this report is to date the features uncovered during the 1991 excavations (and as far as possible the 1990 watching brief), and to that end to clarify further a chronology of fabrics and forms additional to the material from Magiovinium classified some half decade ago (Parminter 1987). The phasing referred to throughout is of this paper, not that of 1987.

The report consists of Part I, a discussion of the chronology of the fabrics, Part II, a catalogue of illustrated pottery, and Part III, a phased list of those features where no pottery has been illustrated. The drawings are the work of Jo Lawson and Paul Woodfield.

### PART I THE FABRICS

A simplified version of the sixty-six fabrics of the 1987 report has been used, based on the chronology of their development. The fabric numbers (abbreviated to fab) are those of the main, apparently parallel, fabrics listed by Parminter in 1987. The abbreviations preceding the fabric name are those used in the present catalogue.

#### PHASE 1:

#### LATE FIRST TO LATER SECOND CENTURY

1. NSH, NATIVE SHELLY FABRICS. These wares (Fab 6, some additionally with grog inclusions), often red in colour, occur here only as channel rim jars.
2. HSH, SHELLY wares of HARROLD type (Fab 18). These probably do not arrive in the area, replacing the native product, until the second century. (Marney 1989, 58). They continue throughout the Roman period and beyond (*pers comm* A E Brown). This is a major industry, also making tile.
3. NGR, NATIVE GROGGED. Tempered with grog, or clay pellets, this fabric of 'Belgic' (Late Iron Age) type (but here probably not pre-conquest for the major part) Fab 26, with its brown, orange and black, rather soapy surfaces, alters throughout the first century, becoming sandier (Fab 14) and develops gradually into Romanized grey ware somewhere about the beginning of the last quarter of that century. But see 4 below -
4. NDSG, NATIVE DERIVED SANDY GROGGED.



Some grogged fabrics continue, particularly for storage jars and cooking pots. The larger coarser vessels often have tempering additional to sand (usually limestone and shell). These wares, of the late first and second century, are here classified for simplicity under the NDSG heading.

5. BSGR, a distinctive BLACK SANDY GROGGED ware, with noticeable red margins (Fab 7) can also be seen contemporaneously developing possibly into Fab 8, but almost certainly into the group of CGW, Coarse Grey Wares.
6. CGW, COARSE GREY WARES, (Fab 44 and 33), with orange-brown surfaces and margins. Fabs 7, 33, and 44 all resemble the products of the nearby Caldecotte kilns – although Fulmer/Hedgerly was suggested in 1987 for Fab 33. Another somewhat less coarse blue grey ware (Fab 3) seems related, although a Brockley Hill source was suggested in 1987 (but see discussion below under Oxidised Wares.) As the difference between Fab 3 and Fabs 33 and 44 is sometimes indistinct, this is also included under the heading CGW. White slips were common with these three fabrics, often used decoratively in zones. Fab 44 sometimes appears with bright orange oxidised surfaces, and rarely, completely oxidised. These coarse grey wares seem to continue into the third century, and possibly thinly into the fourth, which is anomalous with the suggested kiln sources, and it seems likely that some of them come from an unknown source.
7. BB1, BLACK BURNISHED WARE 1. On the basis of comparison with sherds from the kiln, from Poole, Dorset, this apparently appears at Magiovinium sometime after the mid-second century. The colour is in fact sometimes grey, often with red margins, and the wet conditions at Magiovinium can produce a whitish effect not unlike a slip, but its hand-made character and particularly its irregular hand burnishing remain an aid to recognition. It has coarse angular quartz tempering, and shale is present. It continues to appear here apparently until, and throughout, the fourth century. A major industry.
8. IBB, IMITATION BLACK BURNISHED ware, a much finer and blacker fabric than BB1 and the local coarse grey wares, (perhaps Fab 39 but finer than that described) appears in the mid second century, possibly earlier than Dorset BB1, despite its name. It is wheel made, but occasionally (confusingly) appears to be hand burnished. It is not impossible that some of this material is a form of BB1 from a source other than Dorset, having likewise developed from native traditions. It also continues into the fourth century.
9. FGW, FINE GREY WARES are present in this

phase, mainly Fab 35, and the occasional sherd of Fab 24, (thought in 1987 to be from the Oxford and Verulamium areas respectively, but see discussion below under Oxidised Wares) but their forms make it clear that they do not continue into Phase 2.

- 10 & 11. LNGW and UNGW, GREY WARES from the LOWER NENE valley (Fab 2, fine, with a pale grey almost white core, and from the nearer UPPER NENE (Marney 1989, Fab 14), sandy, with a speckly finish, are scarce.
- 12 & 13. CMDW and FMDW, MICA DUSTED WARES are present in this phase, – but are residual later – Fab 15 on a BROWN surprisingly COARSE body, and fab 38 on a FINER ORANGE body. Owing to the loss of most surface treatment – colour coats and paint as well as mica dusting – from the Magiovinium pottery, due in part to soil conditions, some may have avoided identification. (The author would like to re-affirm the importance of not over-washing pottery, which causes very considerable difficulties in dating and processing).
14. OXID, OXIDISED WARES. The distinction between cream/pink material from production sites of the Upper Nene/Northamptonshire/Oxford areas is difficult (cf Marney 1989, Fab 14/33), and depends largely on the identifiable presence of rather more pinker/browner quartz in the Oxford material (both producing pottery fabrics with grey, pink and white quartz and black and red iron-derived inclusions). Upper Nene material was not identified at Magiovinium in 1987, although it was present in immediately adjacent Milton Keynes (Marney 1989, Fab 17 and 18, and p.112), the conclusion there being that the majority of the white and pink wares were likely to be from Northamptonshire, and that distinguishing (Marney Fabrics 18c) between these sources is often impossible. Most of these wares appear to cease being made in the third quarter of the second century i.e. in Phase 1. OXID is therefore used here to cover all pink sandy wares with grey white and/or pink-brown quartz and red and black inclusions without specifying which source, and which are not so sandy and granular as to suggest the Verulamium area, Fab 9/45. Despite the dating of the 1987 vessel 13 (Fab 45) to the present paper's Phase 2, the Verulamium coarse wares do not seem to continue to reach this area at that date (Hartley, in Marney 1989, 131.)
15. OXIDVER are the initials here used for vessels believed to come from Verulamium on the grounds of their heavy quartz tempering.
16. OXIDFOM, OXIDISED FINE ORANGE MICA-CEOUS WARES, present conspicuous problems of identification and dating. In 1987 these were represented by Fab 38, and other fine orange wares (e.g.

eroded Central Gaulish colour coats) of Phase 1, together with Fabs 12–16–65, orange rouletted and indented beaker fabrics of Phase 2, thought in 1987 to be from Oxford, but probably doubtful as only one sherd of Oxford oxidised ware was recognised at Milton Keynes (Marney 1989, fab 35). A further and more chronologically dangerous confusion of the early fabrics is possible with eroded sherds of both Fab 17, OXRCC, the OXFORD RED COLOUR COATED WARE, having lost their red colour coat, and MH, MUCH HADHAM WARE, Fab 50, when it has lost its diagnostic burnishing, these last two fabrics being of phases 3 and 4. This is a serious ceramic problem, and can result not only in wrong kiln attributions but in dating that is wrong by two centuries. There is no easy answer, but the problem needs to be recognised. This difficulty is apparent in the 1987 report where the date and form of vessel 10, given as Fab 17, and dated to the late first to mid second centuries, are unattested at Oxford. In fact this is probably an Arthur and Marsh (1978) type 31 in mica dusted ware. The same applies to vessel 28, said to be Much Hadham, but this is extremely unlikely at the early to mid second century date attested, and in this form and at this date is likely again to be a Marsh type 31, both presumably from London kilns. Because of this confusion about the Oxford fabrics, vessel 53, apparently a fourth-century Oxford C.68, was dated to the second century in the 1987 report.

17. WW, WHITE WARES. Similar problems of identification apply to the sources of these fabrics. Apart from Oxford MORTARIA, Fab 49, these also do not continue beyond phase 1.
18. OXIDBKR, OXIDISED BEAKERS occur in various orange fabrics, probably Fab 12/16. These may occur throughout this phase, but in quantity one would expect them to indicate a Phase 2 date (Woodfield, in Brown and Woodfield 1983, Fig. 18).
19. RCCCB, ROUGH CAST COLOUR COATED BEAKERS Fab 34, probably from Cologne. These have a fine white body, and a dark brown to blackish colour coat. They have been sprinkled with sand before the slip was applied. They seem here to date from late in this phase, and are rare.
20. DR.20 AMPHORA. The only imported amphora fabric present was represented by the thick pinky-brown sherds of Dressel 20 amphorae from Spain, Fab 23. So-called 'Brockley Hill amphorae', Fab 45, coming from the Verulamium area, were also present.

## PHASE 2:

### LATER SECOND TO EARLIER THIRD CENTURY

#### i *Fabrics appearing for the first time*

Sometime towards the end of the second century, Romanised grogged fabrics develop further into the fabric known as SPG, Soft Pink Grogged.

21. SPG, SOFT PINK GROGGED (Marney, 1989, Fab 2) in 1987, apparently, but not consistently, Fab 13. This is usually a buff pink utilitarian fabric, underfired, with a rather unpleasant soft powdery surface. This is a major new industry, also manufacturing tile. It is, very oddly, barely represented at Magiovinium, although copious at Walton, two miles to the north west (Woodfield, in Mynard and Woodfield 1977b, 367).
22. LNVCC, the LOWER NENE VALLEY COLOUR COATED fine wares, appear on the site at the beginning of this phase, 1987 Fabric 10–86, another major new industry. The fabric is normally white or buff, with metallic black and coppery colour coats.

#### ii *Fabrics no longer, or rarely, in use*

These include the old hard NATIVE DERIVED SANDY GROGGED fabrics 7 and 14, the NATIVE SHELLY WARES, Fab 6, the FINE GREY WARES, Fabs 24, 35, the UPPER NENE GREY WARES, the MICA DUSTED FINE WARES, Fabs 15 and 38, the COLOGNE/RHINELAND ROUGH CAST COLOUR COATED fine ware, Fab 34, the OXIDISED TABLE WARES, (not the rouletted and indented beakers, but including FLAGONS and fab 45), the Dressel 20 AMPHORA, Fab 23, go during, or have gone by or shortly after the end of, the previous phase. During Phase 2 samian follows them.

The end of the second century sees one of the greatest changes in Romano-British ceramic history.

#### iii *Continuing fabrics.*

These are largely utilitarian.

The HARROLD SHELLY WARE, Fab 18, continues, as does apparently the OXIDISED BEAKER FAB 12/16, the forms now being rouletted and indented, some probably originally with a dark brown wash. The attribution to Oxford of these fabrics now seems uncertain. Plain rim, or 'dog' dishes, in the two main COARSE GREY WARES Fab 33, and 44, are common, carrying these fabrics on in time into the third century but the fact that flanged bowls do not occur in them makes it unlikely that they continue with any vigour into Phase 3, although a single flanged bowl has been previously suggested, (Parminter 1987, no. 8).

LOWER NENE VALLEY GREY WARES, Fab 20, may continue. BLACK BURNISHED 1 continues, the forms suggesting that the fabric was particularly common in this Phase, although the material largely occurred residually in later phases, however. IMITATION BBI continues throughout this phase, a variant of Fab 39. In addition a single sherd of OXFORD WHITE WARE MORTARIA, Fab 49, occurred in this phase (there was only one in Phase 1), though there may well be others occurring residually.

#### PHASE 3a:

#### LATER THIRD CENTURY TO EARLIER FOURTH

##### *i Fabrics appearing for the first time*

23. OXRCC, OXFORD RED COLOUR COATS, Fab 17, with their orange to brown micaceous fabrics, and red colour-coated surfaces, do not appear convincingly in this area till the later third century (Marney 1989, 125; Woodfield 1983, Fig. 18) and they are not common till the next century. A major industry.

24. MH, MUCH HADHAM. These bright orange burnished wares, Fab 50, are rarer, and their date of introduction to this area more controversial, but it is clear that they are not widely traded until the fourth century (Marney 1989, 122). Their first appearance at Towcester was in the late third century. The only recognised Hadham sherd here was unfortunately unstratified. Their appearance right at the end of Phase 2 is not impossible on present knowledge, but unlikely. A major industry elsewhere.

PARCHMENT WARES were not recognised from the 1991 excavation.

##### *ii Fabrics no longer in use*

The OXIDISED ROULETTED AND INDENTED BEAKERS, Fab 12-16, have disappeared, as have the very sparse LOWER NENE GREY WARES, Fab 20.

##### *iii Continuing fabrics*

HARROLD SHELLY, Fab 18, SOFT PINK GROGGED, Fab 13, BLACK BURNISHED WARE 1, and IMITATION BLACK BURNISHED WARE, a variant of Fab 39, continue, the last apparently more strongly. The position of the COARSE GREY WARES, Fab 33 and 34, is uncertain. Some of the dog dishes in Fab 44 may just be of this phase, but they do appear to be in some decline by the fourth century.

MORTARIA FABRICS of this phase are entirely Oxford, and for the first time distinct forms are identifiable, that is two M.17s, and an M.18 (Young 1977).

#### PHASE 3b:

#### FOURTH CENTURY

##### *i New fabrics*

25. RBNVCC, the RED-BODIED NENE VALLEY COLOUR COATED ware with black metallic coating, usually rouletted beakers, probably starts now, though some may occur at the end of Phase 3a. The same is true of

26. OXWCC, OXFORD WHITE COLOUR COATED FABRICS. A WC 7 mortaria occurs in this phase. These are Oxford red bodied wares, but with a white colour coat. (Young 1977).

*ii Fabrics no longer in use.* None, apparently.

*iii Continuing fabrics.* As Phase 3a.

#### PHASE 4:

#### LATE FOURTH CENTURY

##### *i New fabrics*

27. LBS, LATE BLACK SHELLY, a rather soapy fabric, with occasional large pieces of shell, thrown as thin walled cooking pots with triangular undercut rims, and rather wide rilling. A E Brown informs the writer that he does not believe these to be a product of the Harrold kilns. This particular shelly ware seems to date from the later fourth century, (Marney 1989, 60, and Woodfield 1983, Fig. 18).

28. OXR, OXFORD REDUCED WARE. Fab. 35. This fine grey fabric does not have a wide distribution, and its presence is surprising. However it certainly occurred here as a large, possibly handled, storage vessel, these travelling more widely than more everyday grey wares, especially, apparently, in the fourth century, (cf Marney 1989 Fig. 48 no 9).

##### *ii Fabrics no longer in use*

There are not sufficient contexts of this phase to be certain, but the coarse grey wares certainly seem to be fading away.

*iii Continuing fabrics.* As Phase 3a.

#### CATALOGUE OF ILLUSTRATED VESSELS

For ease of reference the fabric abbreviations are here listed in alphabetical order, with a reference to the numbered paragraph above in which they are discussed. The simple fabric descriptions given above can be amplified by reference to the 1987 report. The concordance is in Part I.

BB1	7	Black Burnished Ware.
BSGR	5	Black Sandy Grogged Ware.
CGW	6	Coarse Grey Wares.
CMDW	12	Coarse Mica Dusted Ware.
DR20	20	Dressel 20 Amphorae.
FGW	9	Fine Grey Wares.
FMDW	13	Fine Mica Dusted Ware.
HSH	2	Harrold Shelly Ware.
IBB	8	Imitation BBI.
LBS	27	Late Black Shelly Ware.
LNGW	10	Lower Nene Grey Ware.
LNVC	22	Lower Nene Valley Colour Coated Ware.
MH	24	Much Hadham Ware (orange).
NDSGR	4	Native Derived Sandy Grogged Ware.
NGR	3	Native Grogged Ware.
NSH	1	Native Shelly Ware.
OXID	14	Oxidised Wares.
OXIDBKR	18	Oxidised Beaker Fabrics.
OXIDVER	15	Oxidised Wares (apparently from Verulamium).
OXIDFOM	16	Oxidised Fine Orange Micaceous Wares.
OXR	28	Oxford Reduced Ware.
OXRCC	23	Oxford Red Colour Coated Wares.
OXWCC	26	Oxford White Colour Coated Wares.
RBNVC	25	Red Bodied Nene Valley Colour Coated Wares.
RCCCB	19	Rough Cast Colour Coated Beakers.
SPG	21	Soft Pink Grogged Wares.
UNGW	11	Upper Nene Grey Wares.
WW	17	White Wares.

**DATING.** The dating of the contexts is based on the sherds which are illustrated, and the conformity of the unillustrated sherds to the fabric development set out in Part I, and the form development set out in this catalogue.

Allowance should be made for the fact that virtually all features are here dated by their fills, not by the levels they cut.

Features are locatable on Fig. 3, unless otherwise stated.

## Pottery from the excavated areas

### (A) Vessels from the fill of plot boundary ditches of phase 1 (Nos 1-17, Figure 14)

#### Early Phase 1: Ditches 348, 335/339, 243

1. NGR. Storage jar of 'Belgic' form, standard zigzag line decoration. Bright orange, grey core. *Fill of ditch 348, plot 32, context 346.*
2. NGR. Sherd of 'Belgic' hollow cordoned beaker, probably made using a template. Black/dark brown, buff core. *Fill of ditch 335, plot 28/29, context 208.*
3. NGR. Lamp or dish, probably originally with four or five 'horns', black/brown/dark-red, hand made, strong rough burnishing lines. The fabric is 'Belgic' but the form is not recorded in *Grog Tempered 'Belgic' pottery of South Eastern England* (Thompson 1982). There is, however, a long tradition of horned vessels in the Low Countries (de Laet 1958, Pl 9) and there are general parallels to the rim form in Late Iron Age and early Roman pottery in the Low Countries, for example at Wijster, (van Es 1967, Fig. 122, no. 2, and Fig. 150, no. 853E) and the possibility of the presence of auxiliary Batavian cohorts, known from Tacitus's *Historiae* to have been attached to Legio XIV (Frere 1967, p. 61, note 1), cannot be ignored. (The writer is indebted to Valery Rigby for the van Es reference, and for commenting that the appearance of this vessel from an auxiliary's pack seems the most likely explanation for its occurrence.) *Context 208.*
4. NDSGR. Carinated bowl, dark brown-grey. Burnished on rim/neck/cordon. *Fill of gully 339 (narrowed continuation of ditch 335 above). Context 338.*
5. BSGR. Pie dish, traces of damaged lattice. *Context 208.*
6. CGW. Channel-rim cooking pot. No slip. *Gully 243, plot 26, context 242.*
7. CGW. High necked jar with beaded rim. Traces of a white over a dark grey slip. Brown surfaces. *Context 208.*
8. CGW. Jar with short everted rim. Primary fill ditch 609, plot 26, (Fig. 7). *Context 605.*
9. CGW. Probably originally white slipped, but little remains. This may have been a lid to vessel 10 or a platter. *Context 208.*
10. CGW. Channel rim jar. White slip over int and ext. rim and shoulder. Brown surfaces. *Context 208.*
11. CGW. Jar with high angled neck with bead and cordon. (Jars with high necks and cordons are very common in this phase. Their fragmentary survival means that few are illustrated here.) White slip survives on the int and ext. rim and shoulder. *Context 208.*

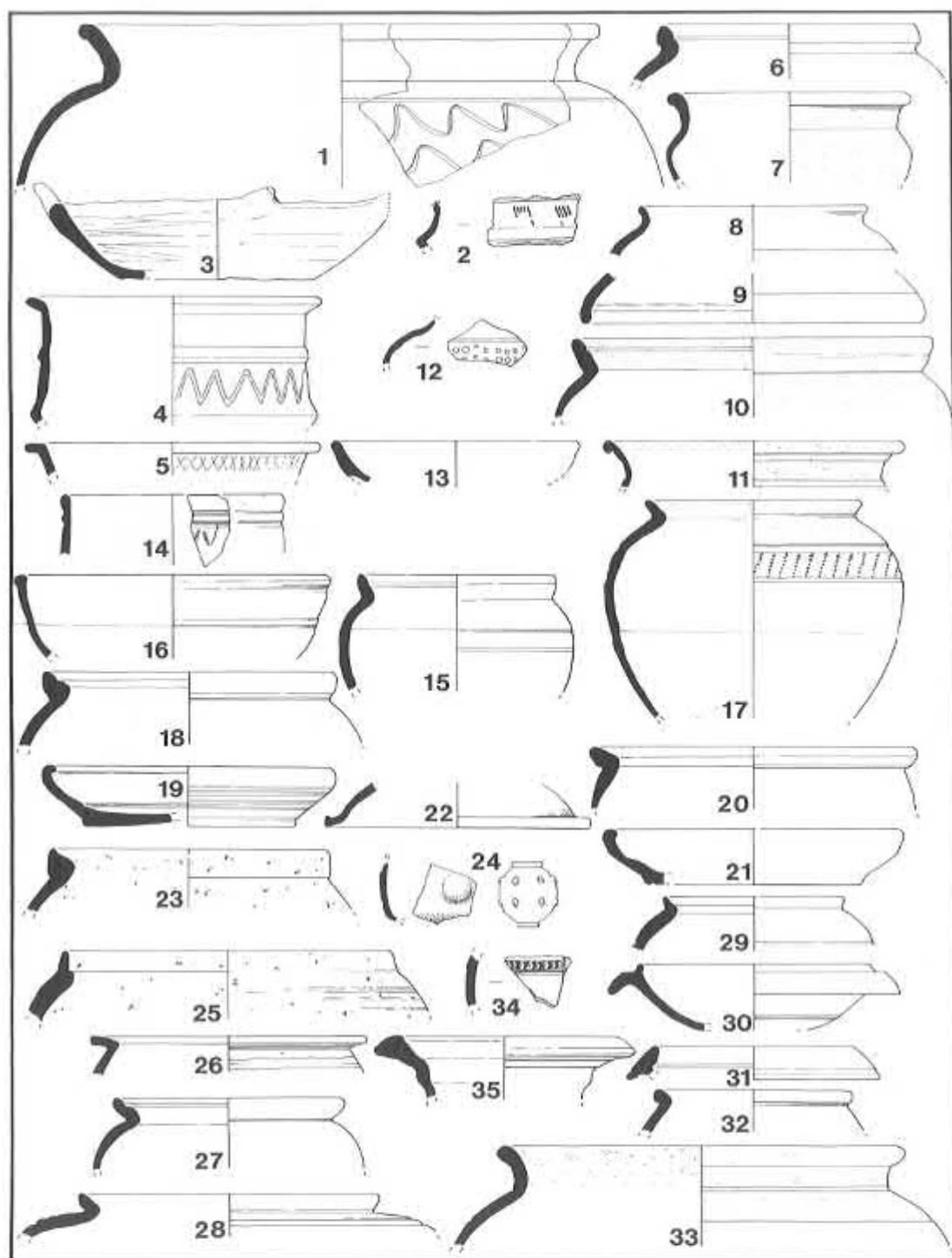


Fig. 14: Coarse pottery, nos 1–35 (1:4).



12. FGW, soft. Blue grey slip. Poppy head beaker of the multiple large dot (i.e. not in panels) variety. *Context 208.*

#### Late Phase 1, Early Phase 2?

13. FMDW? simple platter with curving wall, neatly burnished internally, fine buff, grey-cored mica-cous fabric, probably originally mica dusted? Diameter uncertain. Perhaps Marsh type 6, (Arthur and Marsh 1978, Fig. 6.10). *Ditch 611, plot 26, lower fill context 607.*

This ditch produced sherds of Antonine samian, some possibly late Antonine, and lies therefore at the border of the two phases.

#### Probably earlier rather than later in Phase 1

It is assumed that the short gully 228 (fill 227), plot 27/28, relates to the plot boundary system from its position.

14. NGR. Cordoned bowl. Black, hand made, rim burnished *Context 227*
15. BSGR/CGW. Transitional fabric. Channel rim. *Context 227.*
16. CMDW. Probably intended as a Dr. 37 copy, and presumably stamped, as vessel 105, (very little remained of the bowl wall of this vessel.) Stamped Dr. 37 copies in mica dusted ware are unusual, but occurred at Baldock, Herts, (Stead and Rigby 1986, Fig. 101.) I am further grateful to Valery Rigby for this reference. *Context 227.*
17. CGW. Jar with short everted rim and comb stabbing, further decorated by white slip on the rim and shoulder. The vessel has been used for cooking. *Context 227.*

#### (B) Gullies of phase 1 (Nos 18–21, Figure 14).

Phase 1 gullies 623/220 fill of 221, plot 28, (possibly a slight boundary ditch) and 342, fill of 343, plot 27, a V-shaped drainage gully, have no pot worth illustrating. Their form and decoration are included in the summary given after the entry for vessel 24, however.

**Context 215**, fill of ditch 216. Plot 27. (The material is probably a little earlier than that from pit 509 below).

18. BSBR. Channel rim jar. *Context 215.*
19. NSDGR/CGW. An intermediate fabric. Platter with sharply incurved rim and footring. Orange/buff. Strongly rilled. Cf 21 below. *Context 215.*
20. CGW. Jar with short sharply everted rim. *Context 215.*
21. CGW. Platter in fully developed grey ware, but simpler form than 19. *Context 215.*

#### (C) Phase 1, Pits (Nos. 22 – 35, Figure 14; 36 – 49, Figure 15)

**Pit 509** Contexts 510, upper fill, and 511, intermediate fill, of Pit 509, Plot 27. Hadrianic Samian is present.

22. NDSGR. Lid. Black/brown. *Context 510.*
23. NSH. Devolved channel-rim cooking pot. Buff, but burnt. *Context 510.*
24. CMDW. Sherd, presumably from a beaker as illustrated, Marsh type 20, (Arthur and Marsh 1978, Fig. 6.9). Reddish buff, very sandy. The boss appears to have been made by pushing the vessel wall against an open tube. Very faint traces of mica dusting. *Context 511.*

Unillustrated but diagnostic vessel forms from the pits and gullies noted above include particularly high-necked beaded rim cordoned jars, and also channel-rim jars and storage jars similar to those illustrated. They also include body sherds of a single greyware rouletted beaker, a type that occurs throughout the second century. The normal range of decoration for pottery from these features is shown on Fig. 14, but groups of parallel incised lines between cordons on the shoulders of jars, and zig-zag decoration on lids, should be added to those. The 'tin-can' base, (that is a base that when viewed from below has a very small vestigial rim-like foot) is common.

**Pit Cluster 104/106/108/110** Plot 27. (105, fill of 104; 107, fill of 106; 109, fill of 108; 111 and 112, fills of 110). These all appear to be of the same period and to have been filled about the middle of the second century, although some pot is present from earlier in Phase 1. Hadrianic-Antonine Samian was recovered from 105, implying a slightly later date for that fill than the previous pits.

25. NSH. Channel-rimmed cooking pot. Rilled. Buff/black. *Context 105.*
26. BSGR. Jar, with short everted rim. *Context 107.*
27. NDSGR/CGW. A transitional fabric. Channel-rim cooking pot, orange/dark grey. *Context 107.*
28. NDSGR. Jar with short sharply everted rim and cordon, a particularly common form with this group of pits. Buff, grog very visible. *Context 105.*
29. CGW. Jar with devolved channel rim, cordon, and traces of decoration (undrawable) below. *Context 105.*
30. FGW. Soft, originally with black slip? Elegant small bowl with bead and flange (not to be confused with the later flanged bowls, as vessel 91). A sherd of this vessel came from context 105. Probably mid second century. *Context 109.*
31. FGW. Hard. An unusual hammer headed small



bowl. Dark grey. Somewhat similar vessels are dated to the mid second century at Verulamium, (Wilson, in Frere 1972, Fig. 119). *Context 109*.

32. CGW. Bead-rim beaker, or perhaps small jar. *Context 107*.
33. CGW. Large high necked jar. The standard neck cord on of (for example) no 11 has now almost disappeared. Slight traces of white slip. *Context 105*.
34. CGW. Sherd from jar shoulder, unusual stabbed decoration, derived from 'Belgic' prototypes. Unlikely to be later than earlier second century. *Context 105*.
35. OXIDVER. Rim of so-called Brockley Hill amphora. See report by D Williams, below p.41. Mid second century. *Context 105*.

Other vessels: Lids are still represented in this pit, and the usual jar forms, together with poppy head beakers, in fine and coarse wares. An orange beaker with a pedestal foot is a new type, as are copy BB1 dishes, (rim form unknown).

**Pit 414, Trench 1.** Contexts 416 and 419, fill of pit 414. Plot 31. (Section, Fig. 11.) This pit is also of some interest as the development of the pottery can be observed from the late first century through into the second half of the second. It also means that whatever the initial use of this large feature, (perhaps as a clay pit to provide daub for the round houses?) it was apparently never totally cleaned out for nearly a century. The amount of lime scale on both sides of some sherds raised the question whether it might not have been a latrine. The exceptional amount of use shown by wear on the storage jars, and their rather high occurrence, suggests perhaps a shop on the frontage of plot 31.

Flavian samian is present in the lower fill (419) of this pit.

36. NDSGR. Wheel-made cordoned bowl, with chevron decoration. Dark brown/orange, burnishing on rim and cordons. *Context 419*.
37. NDSGR. Hand-made lid, form confirmed by the hand burnishing on the exterior, the interior being roughly wiped. Dark brown/black. *Context 419*.
38. NDSGR. Another very similar lid, diameter uncertain, again rough inside, hand burnished over rim and top. Black. Five notches have been chipped on the inside through to the reddish margins *post cocturam*, possibly a tally rather than an illiterate owner's mark. *Context 419*.
39. NDSGR. Channel-rim cooking pot, presumably designed to take a lid as no. 37. Black. *Context 419*.
40. NDSGR. Multi cordoned jar, black ext., red brown

int. *Context 419*.

41. NDSGR. Storage jar, diameter about 360mm. Orange. The int. of the rim and shoulder is damaged, presumably from long scooping out of contents. See 49, 50 and 51 below. *Context 419*.
42. CGW. Curious roughly made sooted cooking pot, hint of channel only. The sub-rectangular rim is also odd, and the ext. surface shows grass impressions. *Context 419*.
43. CGW. Another roughly made, sooted, channel-rim pot. *Context 419*.
44. CGW. Jar with short sharply everted rim, burnished. *Context 419*.
45. FMDW. Dish, strong int rilling, and patches of mica dusting. The fabric is apparently a pale pinky buff, with a grey core, but has been burnt. *Context 419*.

Intermediate fill (416): The Samian indicates a date of c. 110 to 130.

46. BSGR. Cordoned rim of narrow-mouthed vessel. *Context 416*.
47. CGW. Grey ware indented beaker, black ext. slip. At this date this is presumably copying mica dusted indented beakers, (not apparently recorded at Magiovinium in 1987, but known at nearby Caldecotte (Marney 1989, Fig. 10, 21) and also recovered in 1990 from the Galley Lane site.) *Context 416/419*.
48. FGW. Hard, with many black inclusions. Reeded rim bowl – early to mid second-century type, most common in the mid second. *Context 416*.
49. NDSG. Storage jar, diameter 400mm. This heavier form foreshadows that of the ubiquitous Soft Pink Grogged storage jar (Parminster 1987, Fig.37, no 151). Much damaged by use inside the rim and neck. *Context 416*.

Additional unillustrated forms for contexts 416 and 419 included four storage jars, and the usual high-necked cordoned and channel-rim jars.

#### (D) Late phase 1: vessels from pits and layers (Nos 50 – 61, Figure 15).

With the top deposit (here possibly a small recut?) 415 (the upper fill of pit 414), and contexts 234 (fill of pit 235 in Plot 31), 264/265 (fills of pit 266 in Plot 31), and 404 (the upper fill of pit 408 in Plot 25), all described below, a change occurs in the pottery. 415 and 264/265 contained Antonine Samian, confirming the impression gained from the coarse wares of a date from somewhere in the middle of the second century to somewhere towards the end of the third quarter. There are now clear changes in the pattern of vessel forms, the most notice-

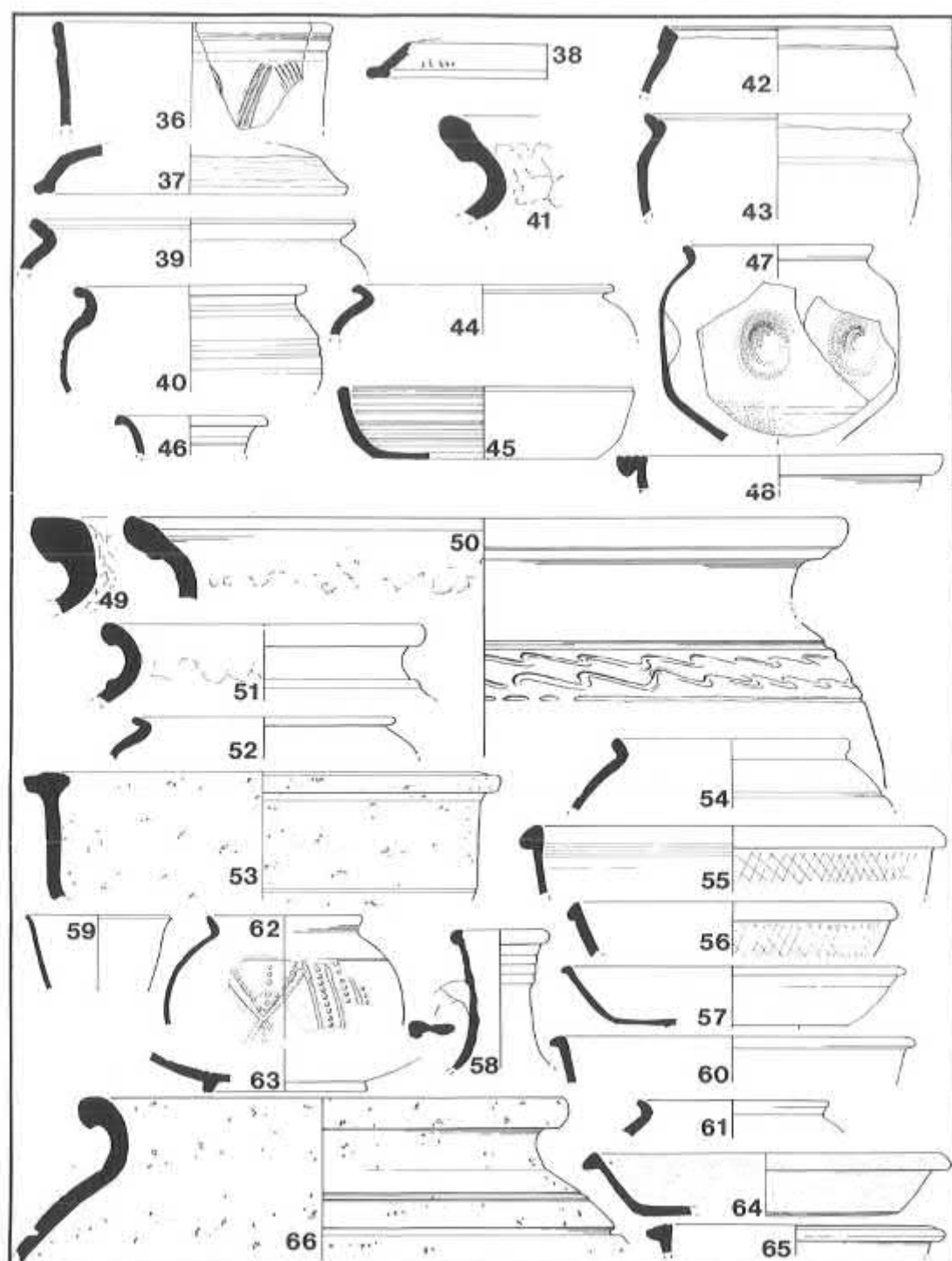


Fig. 15: Coarse pottery, nos 36–66 (1:4).

able being the increase of vessels imitating Samian (nos. 57, 59 and 63) together with a general increase in decorated fine wares, for example no. 62. This variety is presumably the result of prosperity.

The popularity of the triangular-rim dishes, (nos. 55, 56, 60 and 64), is noticeable, often in a fabric normally thought of as imitating Black Burnished Ware 1 from Poole. This 'imitation BB1' fabric now shows an increase, (the occasional sherd had appeared in the earlier Pit Cluster). However there is a problem in that the triangular-rim dish is in fact a Black Burnished 2 form, fabric and form being well known particularly in south-east England and on the Northern frontier, but that fabric itself is not convincingly attested in this area. The Imitation Black Burnished ware may, therefore, be a development independent of both those sources.

#### Context 415, (upper fill of pit 414).

50. NDSGR. Bright orange/red. This, the more familiar storage jar rim form, may still continue, although this vessel is likely to be of some age. The area of the neck and upper int. shoulder is again damaged, presumably by the lading out of the contents. *Context 415.*
51. NDSGR. Buff orange. Large grogged jar, with cord on neck. There is damage again around the internal neck. *Context 415.*
52. BSGR. The sharply everted short rim and absence of neck makes it likely that this actual jar rim is residual. However there are four other fragmentary jar rims, and a lid, of this fabric in this context, and it is possible that form and fabric are still being produced. *Context 415.*
53. HSH. Devolved reeded-rim carinated bowl. Dark grey/buff. *Context 415.*
54. CGW. Grey ware beaker. *Context 415.*
55. IBB. Heavy triangular-rim dish with fine lattice decoration. Wheel made. (The triangular-rim dish is not, of course, a normal BB1 form, though lattice is common in that fabric. However it is also a local tradition, and may be a local development). Form and decoration suggest a date in the third quarter of the second century. *Context 415.*
56. IBB. Similar but smaller vessel, faint traces of lattice. *Context 415.*
57. OXIDFOM. Elegant bead-rim dish with vestige of foot ring, imitating Samian Dr. 18/31 or similar? Pale orange, very micaceous. *Context 415.*

Other forms from 415 included a poppy head beaker with white barbotine dots. The virtual absence of flagons from this pit was notable.

**Pit 235** Context 234, fill of pit 235, Plot 31. (The

contents, which included the skeleton of a dog and a high proportion of flagons, may suggest some unusual significance.)

58. OXID. Flagon, large top ring indicating a date in the Antonine period. Another flagon from the pit resembled in form and fabric Parmenter 1987, no. 347, there dated to the mid second century. Out of some fifteen sherds from this pit three were from flagons and two from Dressel 20 amphorae, a high proportion of these wares for this site. *Context 234.*

**Pit 408** Context 404, fill of pit 408. Plot 25, trench 2

59. OXIDFOM, the fabric redder and with rather more mica than vessel 62. A finely potted cup, originally decorated with white paint, now eroded/scrubbed away. (Two blobs of paint survive on a non-joining sherd of the same vessel, possibly painted over a red slip.) *Context 404.*
60. OXIDFOM. Triangular rim dish, original surface lost. *Context 404.*
61. CGW. Beaker, with outward curving rim, blue-grey fabric. *Context 404.*

A rough cast indented beaker, thin white fabric, black colour coat, probably from Cologne, (unlikely to occur here before c. 160) was also recovered from 404.

#### (E) Late phase 1/ early phase 2: Pits (Nos 62 – 66, Figure 15).

**Pit 266** Context 265, lower fill of pit 266. (264 is the upper fill. Sherds of the same vessels occur in both deposits.) The household or enterprise on double plot 31 could afford handsome table vessels. (Antonine Samian was again also present.)

62. OXIDFOM. Beaker with white painted decoration, apparently comprising a zone of triple stripes each with a central row of dots, and a zone with a barred saltire composed of a line with an upper row of dots, a vertical row of dots bisecting the X. (A reconstruction from eleven sherds). *Context 265.*
63. OXIDFOM. Base of dish, perhaps imitating a Samian Dr. 18/31 or similar. Burnished externally, traces of white paint internally. *Context 265.*
64. FGW. Another triangular-rim dish, neatly made, chamfer at base, smooth silver-grey all over slip, (its present streaky appearance probably the effect of wear). *Context 265.*
65. OXID. Reeded-rim bowl, third quarter of second century. Probably originally cream, burnt. Very sandy, a Verulamium product? *Context 265.*
66. HSH. Some twenty sherds of a handsomely potted buff shelly storage jar. Wall sherds indicate cross wiping, surprising at this date. *Context 265.*

Other vessels from this pit included a channel-rimmed shelly pot, this form being now in decline, though some appear to be still being made for kitchen use. A Lower Nene Valley colour coated sherd, again indicating a date of c. 160–170, was present, and this pit is therefore overlapping the beginning of ceramic phase 2.

Many of the sherds have internal lime scale and are sooted externally, suggesting that the context 264 'char-coal layer' is domestic, not industrial.

**Pit 251** No vessels are illustrated from context 250, fill of pit 251, also plot 31, but handsome table wares were again present, viz Antonine Samian, orange rouletted beakers, an orange imitation Samian Dr. 33 copy, and a white-ware rouletted beaker.

**(F) Phase 2: Vessels from plot boundary ditches (Nos 67–75, Figure 16)**

**Ditch 237** Context 236, upper fill of ditch 237, boundary between plots 28 and 30. (Section, Fig. 8. There were only 2 sherds in 241, the primary fill.) Although dated to Phase 3a, much of the pottery is of this phase (and Phase 1) suggesting the recut of earlier ditches. The sherd numbers are: Phase 1, 17 sherds; Phase 2, 11; Phase 3a, 10; unassignable 19.

67. OXIDBKR. A triangular-rim chamfered dish in this fabric. Buff. This form seems to continue into Phase 2. *Context 236.*

68. IBB. Triangular-rim shallow chamfered dish, wheel made, hand burnished. This more rounded rim form is likely to be late second century. *Context 236.*

69. BBI. Grooved pie dish (or incipient flanged bowl) with intersecting round headed chevron decoration. These vessels were of the equivalent to Magiovinium Phase 2 in the Towcester suburbs (Woodfield in Brown and Woodfield 1983, Fig. 19, 16–18). Probably late second or early third century. *Context 236.*

Further Phase 2 forms from context 236 are:

An orange rouletted beaker (sherds), an Oxford white colour-coated flagon, WC 1 (Young 1977), first half of the third century, and a chamfered coarse grey-ware dog dish with white slip (perhaps late Phase 1).

**Ditch 337** Context 336, primary fill of gully 337, possibly subdividing plot 29, or perhaps merely a drain, apparently cut *de novo*.

70. SPG. Storage jar. The sharp form and orange colour suggest this phase. The appearance of this form and fabric takes us out of Phase 1. *Context 336*

The low percentage of Soft Pink Grogged ware on this site (2% on vessel count, Parmenter 1987 Fig. 49.1) is

remarkable. There were no other forms from 336.

**Ditch 620** Context 615, fill of plot 28/29 boundary ditch 620. (Section, Fig. 9.) Though basically dated to Phase 3a, the pot suggests that a ditch of Phase 2 has been recut. The proportions of material are – Phase 1, 5 sherds; Phase 2, 42 sherds; Phase 3a, 95 sherds; Unassignable 19; Total 161.

71. BBI. Plain rim dish/lid with intersecting arcs. One of two. The casserole-combination of this type of vessel and vessel 69 seems to make the production of the many lids of earlier type unnecessary. Hand made and burnished. Date as 70, (cf Woodfield, in Brown and Woodfield 1983, Fig. 19, no. 12). *Context 615.*

72. CGW. Neat small jar, perhaps for ointments. *Context 615.*

73. CGW. Beaker with large indents, form suggests late second or early third-century type as (red ware) beakers in the Towcester suburbs, (Woodfield, in Brown and Woodfield 1983, Fig. 20 no. 33). White slip used in decorative zones. Handsome, but sooted from cooking. *Context 615.*

74. CGW. Jar or beaker again with white slip on rim and shoulder. The unslipped zone shows considerable quantities of burnt out grass, presumably an error (but cf vessel 42). The rim form is late second century at Verulamium, (Wilson, in Frere 1972, Fig. 117 no. 624). *Context 615.*

75. LNVCC. Major part of small cornice-rim beaker, orange-red colour coat. The marks of the thumb and three fingers can be seen round the base, where it was held for dipping into the slip, as also the mark of the steadying first finger on the body. *Context 615.*

Other Phase 2 forms from 615 included a triangular rim dish (now few in number), and two Imitation BBI incipient flanged bowls as vessel 69.

**(G) Phase 3a: Vessels from fill of plot boundaries (Nos 76–83, Figure 16).**

**Ditch 333** (No illustration). 330 and 331, upper and lower fills of plot 31 boundary ditch 333, produced a rouletted beaker and an indented beaker of late third or early fourth-century type in LNVCC, and in OXRCCW the base of a C.16 jar, and a C.45 and C.55 bowl, all these from the late third century on. The section suggests a recut of the Phase 2 ditch (Fig. 8.)

Further pottery from plot boundary ditches of this phase, possibly cut *de novo*, recut, or filled, is discussed in Part III, (including material suggesting a further Phase 4 recut or fill from context 330 above).

**Ditch 620** Phase 3a pottery in context 615, fill of plot 28

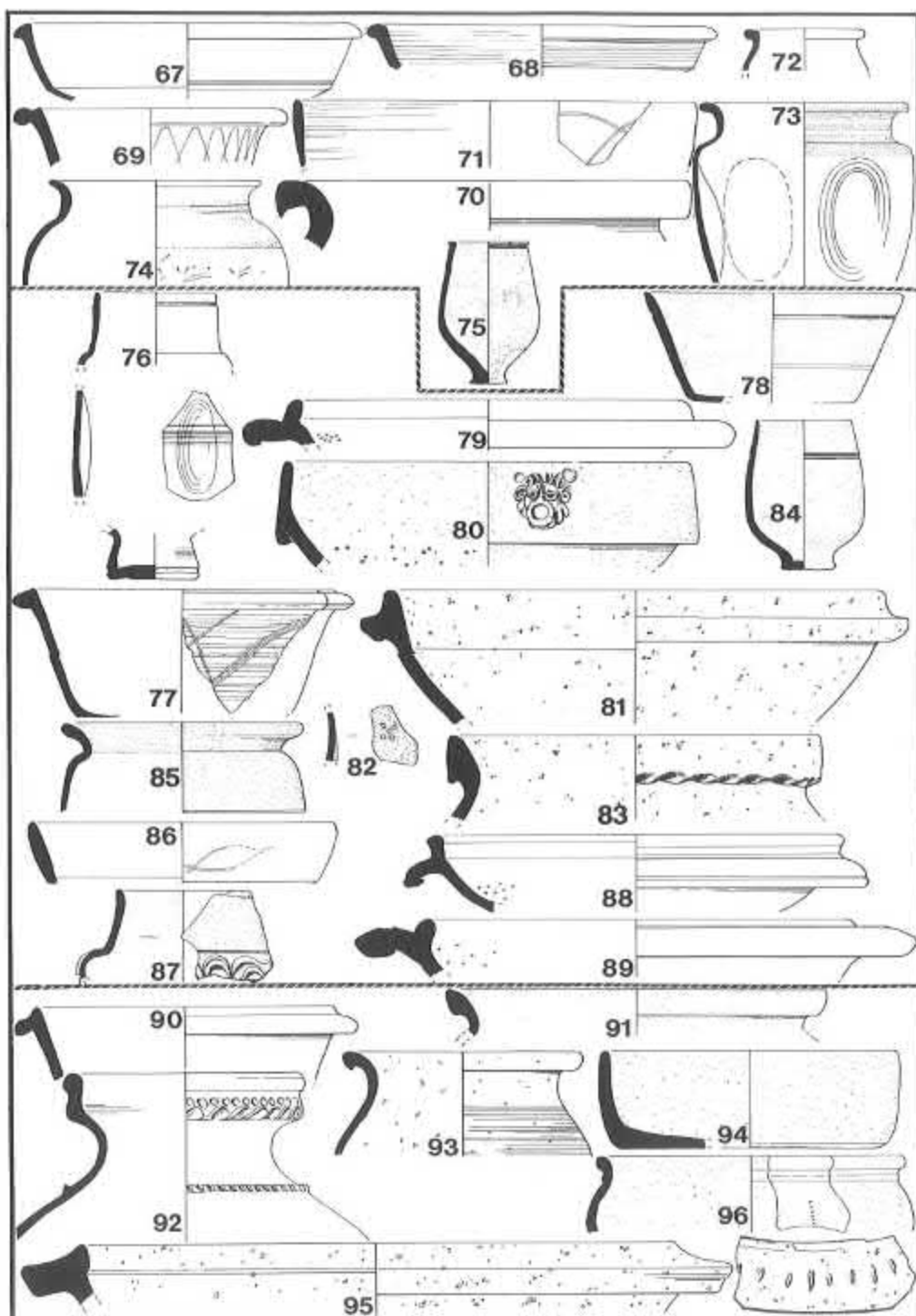


Fig. 16: Coarse pottery, nos 67–96 (1:4).



boundary ditch 620. (The phase 2 material from this ditch appears above, nos. 71–75.) The profile of the ditch base on the section (Fig. 9) suggests a recut of the phase 2 ditch.

76. LNVCC? Indented beaker, of the elongated type unlikely to be earlier than the mid third century. Very overfired, base cracked, grey blue fabric and int. surface, khaki ext. *Context 615*.
77. IBB. Imitation BB1 bowl, with intersecting arcs. Wheel made but distinctive wide hand burnishing. *Context 615*.
78. CWG. Dish with splayed sides and elongated bead. Traces of white slip. The type is dated to the late third or fourth century at Verulamium (Wilson, in Frere 1984 Fig. 105, no. 2535). This vessel and no. 85 carry these white slipped coarse grey wares to the late third, or perhaps the fourth century. *Context 615*.
79. OXFORD WHITE WARE. M.17 mortarium, (Young 1977) late third century. *Context 615*.
80. OXRCC. Fourteen sherds of a C.97 mortarium. One sherd has broken across an L-shaped rivetting slot. Worn. Unusually much of the red colour coat survives. (Sherds of same vessel from 614, ditch 618.) *Context 615*.
81. HSH. Bowl of what is known locally as the 'Scotty dog' form, buff. Late third/fourth century. *Context 615*.

Other vessels from 615 of this phase included a single Soft Pink Grogged standard wide mouthed jar (as Parminster 1987, fig. 36, no. 116), some eight shelly storage and other jars (notoriously difficult to date but apparently of this phase), and a considerable quantity of Lower Nene Valley colour-coated vessels, including an indented scale beaker of late third-century form, three indented beakers additional to vessel 76, a rouletted beaker and a red-bodied Nene Valley indented beaker of early fourth-century date – the Lower Nene Valley being clearly an important source for fine wares, (but oddly not at all for mortaria), at this date.

**Ditch 237** Phase 3a material from 236, upper fill of plot 28 boundary ditch 237, (Fig. 8.) (The Phase 2 material has been listed above, nos. 67–69.) This plot, at least, seems likely to have been reoccupied in this phase.

82. LNVCC. Part of an indented beaker. The owner has chipped out five dots through the black colour coat to expose the white body, perhaps to make a gambling piece, or perhaps as an illiterate owner's mark. Late third century? *Context 236*.
83. HSH. Buff storage jar, cable decoration. ?Fourth century. *Context 236*.

**(H) Phase 3a: Vessels from pits and layers (Nos 84 –**

**91, Figure 16).**

**Pit 268** Context 267, fill of pit 268, Plot 32. (This seems to be one of only two pits recorded for either phases 3 or 4.)

84. LNVCC. Major part of plain-rim beaker. Dark brown/copper colour coat. The pot had been clumsily removed from the kiln with wire or cord, and the base bodged up underneath with three blobs of clay to enable it to stand. *Context 267*.
85. CGW. The form of this jar is reminiscent of BB1 types, and presumably a lattice occurred below the line on the body. The area that would be burnished in a BB1 vessel is here slipped dark grey. Late third century. *Context 267*.

Other sherds indicated the continuation of coarse grey ware jars and dishes with both white and dark grey slips.

**Layer 202** Trench 5, Fig. 12

86. IBB. Shallow plain rim dish, untidy arcs. Presumably late third century. *Context 202*.
87. LNVCC. Indented scale beaker. Orange/brown. Mid to late third century. *Context 202*.
88. OXFORD. White ware M.17 mortarium (Young 1977). Late third century. *Context 202*.
89. OXFORD. White ware M.18 mortarium (Young 1977). Late third century. *Context 202*.

Other forms present in layer 202 included a Lower Nene Valley colour coated scroll beaker, mid to late third century, and a rouletted indented beaker, probably of the same date. (There was at least one Oxford red colour-coated vessel present, but its form is unknown.)

**Layer 204** Possible industrial layer, Trench 4, Fig. 12.

90. IBB. Flanged bowl. Late third or early fourth century. *Context 204*.
91. OXRCC. A C.18 jar, (Young 1977). The colour coat has virtually disappeared, (but is depicted for consistency for this fabric.) *Context 204*.

Other forms from layer 204 of this phase included a BB1 dog dish, a large shelly jar, and a standard Soft Pink Grogged jar rim, i.e. not the usual preponderance of shelly wares over Soft Pink Grogged. Fine wares included a flange from an Oxford C.51 bowl (Young 1977) and some sherds of Nene Valley beakers. A coarse grey ware jar, with a cut-and-fold rim and a pale grey colour coat seems to confirm the existence of this fabric at this date.

**(I) Phase 3b.**

For Phase 3b see part III. There was no convincing evidence for the cutting or recutting of plot boundaries, but perhaps some may have continued to be filled.



**(J) Phase 4: Vessels from plot boundary ditches (Nos 92 – 96, Figure 16).**

(Late fourth century, with coins of the House of Valentinian).

**Ditch 427.** Plot boundary ditch cut *de novo*. (It appears that the three eastern plots were occupied in the late fourth century). Context 428, primary fill of plots 31/32 boundary ditch 427.

92. OXR coarse hard light grey, much sparkly quartz and mica. Some dozen sherds of probably a large one-handled jug (no direct evidence for handle) with cable decoration round the lower rim and the neck. (A sherd of this vessel came from the top of Phase 1 pit 414.) Malcolm Lyne writes:-

'This is not an Alice Holt IA.16, but the Oxfordshire equivalent. It is a variant of Young 1977 type R.9, a large one or no-handled jug, and is of fourth-century date. Oxfordshire grey wares do not have a particularly wide distribution and I suspect that your sherd represents peripheral trading on the edge of the main distribution zone.' A handsome vessel. Context 428.

93. LBS. Black shelly cooking pot of neat, thin walled, hooked rim, rather wide rilling type. These date from the late fourth century in the Towcester suburbs (Woodfield, in Brown and Woodfield 1983, Fig. 18) where it was noted that they also occurred at Shakenoak, Oxfordshire, *op cit*, 79). A non local large industry seems likely. Context 428.
94. LNVCC. Heavy dog dish, roughly made, of typical late fourth-century type. These are no longer fine wares, and it was used for cooking. Context 428.

Other forms included another Nene Valley late dish and a jar base, and an Oxford C.75 necked bowl, (faint traces of rouletted bands), post c. 370 at Towcester, (Woodfield, *op cit*, Fig. 18.). Also an Oxford C.51 flanged bowl, common in late fourth-century deposits. In addition another late black shelly pot as 93, and a Harrold jar with hooked rim of late fourth-century type. There are less than half a dozen residual vessels, and this ditch was probably cut at the end of the third quarter of the fourth century.

**Ditches 218, 618:** Ditches with late fourth century fills.

**Ditch 218** Context 217, fill of plot 27/28 boundary ditch 218. It is possible that this is a Phase 1 recut ditch, but it contains some 11% of fourth-century pottery. Some may be from Phase 3a, but the vessel below is likely to be late in the fourth century.

95. HSH. Damaged rim of bowl, angle and diameter difficult to determine, but it could well have been very much larger than the illustration. Buff. Stab

decoration above rim. Perhaps from a shop or tavern? Context 217.

Sherds of Oxford vessels, including a C.16 or C.18 (Young 1977), both of which are being made in the late fourth century, and particularly a late black shelly jar, confirm a date in this phase.

**Ditch 618** Context 614, upper fill, over Phase 3a primary fill 616, of plot 28/29 boundary ditch 618. (Section, Fig. 9).

96. OXRCC. Necked bowl of type C.78, remains of stamped decoration and colour coat just visible. Post 370 in the Towcester suburbs. Context 614.

**Unstratified and residual pottery**

**(A) Residual pottery suggesting a phase 1 ditch (Nos 97–100, Figure 17)**

**Ditch 525.** Context 526, fill of ditch 525. Plot 32 boundary.

The dates of the contents are – Phase 1, 43 sherds; Phase 2, 2 sherds; Phase 3b, 6 sherds, unassignable 25 sherds, total 76 sherds. The drawn section suggests recuts.

97. NSGR. Everted rim, shoulder decoration. Brown/black. Early Phase 1. Context 526.
98. NSH. Everted rim. Cross combing on body. Brown ext, red int. Early Phase 1. Context 526.
99. HSH. The form, buff colour, and neat potting suggest a late Phase 1 date, (*cf* Marney 1989, Fig. 26 no. 35.). Context 526.
100. OXID. Pink sandy. Triangular-rim dish. Later Phase 1. Context 526.

**(B) Unstratified and residual vessels of interest (Nos 100 – 113, Figure 17).**

(For Trenches 4 and 5 see Fig. 12).

101. BSGR. Unusual bowl, copying a Dr. 37, with burnished ovolo. Context 200/Unstratified.
102. NSGR. Dark grey. The combination of Gallo-Belgic derived form with this decoration was not recorded in 1987. Residual in Trench 5, layer 202.
103. NSGR. Mid grey. Comb-stabbed lattice was not recorded in 1987. Unstratified in Trench 4, 205.

**Mica dusted wares of phase 1 from Trench 4.**

104. Fine buff, grey core, micaceous, mica dusted. Flange of a deep bowl (probably about 110mm deep) of Marsh type 37 (Arthur and Marsh 1978, Fig. 6, 17) of Rhineland ancestry. Uncommon, and normally found in London, where it was doubtless made. Dated to 60–75 A.D. at St. Albans (Wilson 1972, Fig. 106, no. 216.) Residual in Trench 4, layer

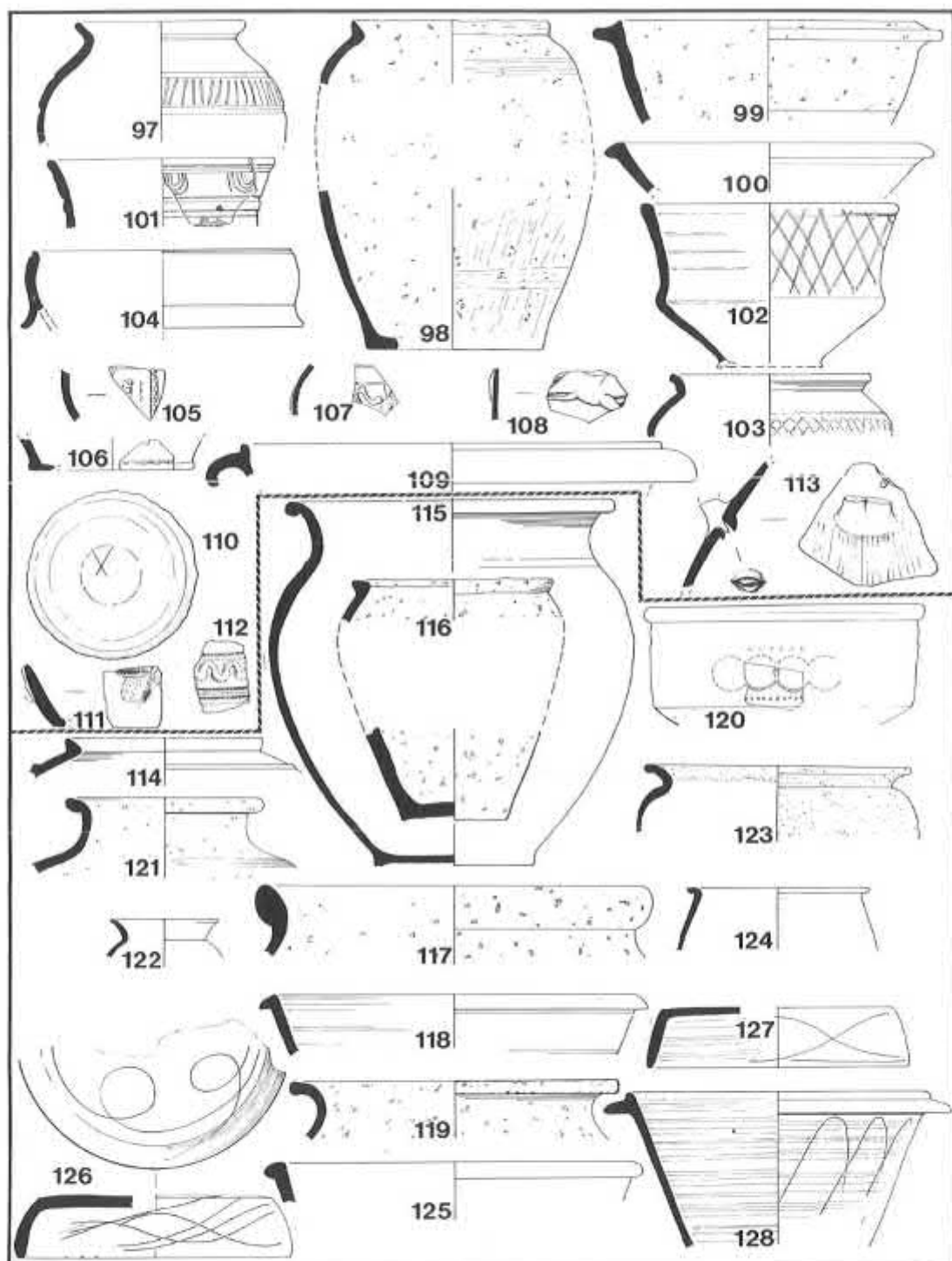


Fig. 17: Coarse pottery, nos 97–128 (1:4).

105. CMDW. Red brown, moderately sandy, grey core. (Fabric seems sandier and less micaceous than 104.) Mica dusted. Shoulder of bowl with stamped decoration, form presumably as no. 16. *Residual in Trench 4, layer 359.*

It is not clear why there should be these exotica in Trench 4. They may have come from some important town centre building together with the tile hard core that had been deposited in this trench. Dumping from the town was suspected at this time in 1987 (*op cit* p. 28).

#### Medieval lead glazed ware from Trench 4.

106. Light pink sandy fabric, sprinkled with fine dark red sand and large red inclusions (5mm). Footed base. Thin transparent to light orange-yellow glaze survives in the crack of the base foot, with large splashes under the base. Such glazes are known in the Roman period, but the fabric is puzzling. Following completion of this report, the sherd was identified by staff of the Museum of London as being a later medieval product of the Brill kilns. There does not appear to be any other intrusive material in this context. We are grateful to the Museum of London, particularly Robin Symonds, for its identification.) *Intrusive in Context 204.*

#### Miscellaneous Residual Vessels.

107. LNVCC. Fragment of beaker depicting a religious scene? Graham Webster writes 'The scraps of decoration do not match anything I have seen. It is possible that the main fragment is part of an odd version of the caduceus of Mercury who does feature in scenes on this class of vessel. Unfortunately as it stands it remains a tantalizing enigma.' For vessels of this class see Webster 1989. *200/ unstratified*

108. LNVCC. Fragment of hunt cup. Black colour coat. Hunt cups were not apparently recorded in 1987. *Residual in Trench 5, layer 202.*

MORTARIA No. 109 completes the illustratable mortaria, all of them from Oxford. Two body sherds of Verulamium mortaria occurred on site, however. (I am grateful to Kay Hartley for a confirmation of the source of these last sherds.)

109. Burnt sandy mortarium fragment, which has lost its trituration grit. This is not a Verulamium form, and is probably, with its wide thin flange, a third-century Oxford M.20 (Young 1977). Plot 31/32. *Residual in 428, fill of boundary ditch 427.*
110. CGW, with shell. Bowl base, traces of dark grey slip. Neat spiral inside. Overlapping circle on the outside with *post cocturam* X. The base has been neatly clipped into a disc. There is no sign of fire,

and it may have been used for a game rather than as a pot lid. *?Residual 428.*

111. BB1. Dish, with remains of handle. This seems too highly placed for a normal 'fish dish', and remains a puzzle. Presumably fourth century. *200/US.*
112. SPG. Sherd from large jar. The wavy line appears to have been moulded rather than, as normally, incised, perhaps to give a base for painted decoration? If so it is likely to be Phase 4. Unusual. *200/US.*
113. MH/OXIDFOM. Faint traces of vertical burnishing identify this as a Much Hadham flagon. *200/US.*

#### Pottery from the Fenny Stratford Bypass/ Galley Lane.

The illustrated pottery is to be found on Figure 17, nos 114 to 128.

#### (A) Pre phase 1 (No 114, Figure 17).

##### Site A. (Fig 1)

South western end of Fenny Stratford by-pass. There are no detailed plans, but the finds are important as showing an apparent pre-Conquest site in this position.

**Ditch 9127.** 8m. long gully, context 9127, fill 9128.

114. NGR. Cordoned jar of 'Belgic' form. Water eroded. *Context 9128.*

In addition contexts 9104, and 9130 pit fills, and other contexts 9111, 9133 and 9172 representing adjacent pot scatters and briefly observed linear and other features, produced fired clay, possibly burnt daub from destroyed buildings, or perhaps material from some oven or industrial process, and pottery of pre-Roman Conquest, or perhaps actual Roman Conquest date. This site produced no Romanized pottery.

##### Sites B and E (Fig. 13).

Recording was done under difficult conditions and represents only an incomplete record of what existed on the site. (In addition earlier features may have existed on 1980 site B, where again hurried conditions prevailed.) In most cases it is not possible to say from what point in the fill of a feature the pottery came.

#### (B) Earlier phase 1 (not illustrated)

##### Site B

**Hearth 9138 (Fig.13 no 6).** Six sandy grogged sherds and a high necked shelly jar rim suggest a date earlier in the second century for Phase 1 activity on this plot. *Fill 9139.*

#### (C) Phase 2 (Nos 115 – 117, Figure 17)

Probably middle of the second century.

9020 Site E, (presumably Site B roundhouses back plot?) Pit (or possibly boundary ditch) 9020 (Fig.13 no 11), some 90m back from the Watling Street of Phase 1.

115. CGW. Major part of large wide mouthed jar. No trace of slip. 9020.

116. NSH. Seven sherds, 'tin can' base. Black/buff. Eroded. 9020.

117. HSH. Rim of storage jar, buff, eroded. 9020.

Some two dozen other sherds were not at variance with this date.

**(D) Late phase 1/ early phase 2 (Nos 118 – 119, Figure 17)**

**Pit 9021**, Site E (Fig.13 no 12). Some 5m further south than Pit 9020 above. This occupation activity at a considerable distance back from Watling Street suggests a very deep, perhaps multiple, plot here.

118. BB1 copy. Triangular rim dish. 9021.

119. HSH. High necked, bead rim jar. Buff. Water eroded. 9021.

Some two dozen other sherds (eighteen from an Oxford white-ware flagon) were not at variance with this date. (One intrusive late sherd.)

**(E) Late phase 1 (No 120, Figure 17).**

**Site E.** Apparently from a layer into which the hoard 9022 described below had been inserted.

120. OXIDFOM. Straight-sided carinated bowl, white painted interlocking circles and dots. No traces of red slip under the paint. 9022

**(F) Phase 2 (Nos 121 – 122, Figure 17).**

**Site B** Context 9142, fill of plot boundary GULLY 9115 (Fig.13 no 2).

121. HSH. Narrow necked jar, slight rim bead. Buff. Late second century. 9142.

122. UNGW. A miniature beaker? Speckled grey. Mid to late second century. 9142.

Some half dozen other sherds are not at variance with this phase.

**(G) Late phase 2 (Nos 123 – 125, Figure 17).**

**Site B, Pit 9134** (Fig.13 no 5), fill 9135.

123. FGW. Pink-grey sandwich body, pale grey slip. The form looks early (to mid) third century. 9135.

124. OXIDBRK. Orange core, grey buff surface burnished in streaks. 9135.

Some two dozen sherds, including a Soft Pink Grogged standard jar rim, were not at variance with this date.

**Site E, ditch 9014** (Fig 13 no 28). Curved ditch, some

130m back from Watling Street. It may owe its form to the pre-existence of the apparent fort corner ditches indicated in this area by aerial photography, (Woodfield 1977a, fig. 2,386, and Gowing, 1971, Pl. VIII, 47).

125. FGW. A rounded triangular rim suggests late phase 2. Buff/grey. 9014.

**(H) Phase 3a (Nos 126 – 128).**

**Pit 9022** SITE E, (Fig.13 no 9), coin manufacturer's hoard pit.

As planned this seems to be aligned with the possible road ditch, 9016 (Fig.13, no 13), which is likely to be a modern feature, but there is some uncertainty as to its precise position. It is recorded as having been in a dark soil feature of some depth, 'not undisturbed sub soil', possibly an underlying Roman ditch or ditches. This coin manufacturer's hoard of blanks and dies and its containing vessels have been published elsewhere (Zeepvat 1994). Vessel 126 is recorded as having lain in an area of disturbance some 1.3m long, and positioned within a quarter or half a metre of a possible box thought to have been the hoard container by the metal detectorists.

126. IBB. The base pattern and careful finish indicate a 'casserole' lid. The wild decoration is unlikely before the late third century. 9022

The other material loosely associated from the 'area of disturbance' runs from the late first century, comprising some half dozen sherds of both phases 1 and 2, and some fifteen of phase 3a. Two sherds look intrusive from later periods. Phase 3a occupation seems well attested.

**Layer(?) by Pit 9021** SITE E (Fig.13 no 12). From uncertain, but apparently late LAYER *in situ*, by Pit 9021.

127. BB1 lid, (or dish, for these vessels double as both) hand burnished, water damaged. Presumably this phase, and paralleled by vessel 86, but the form has quite a long life. 9021b.

128. BB1 flanged bowl. The size and number of sherds indicate a vessel *in situ*. Late third to early fourth century, confirming Phase 3a occupation. 9021b.

**(I) Phase 3a (not illustrated).**

Possible Phase 3a ditches on new alignment.

**Ditch 9140.** 9141, fill of ditch 9140, Site B (Fig.13 no 3), produced a BB1 dog dish with traces of a flattened arc, and tile of an early type but including pilae. This may well date from Phase 3a, when much heating-system tile was dumped in the suburbs, but the evidence is very thin. It was thought to have cut feature 9136.

**Ditch 9136** 9137, fill of ditch 9136, Site B (Fig.13 no 4). The pottery could be either late in Phase 2, or early in

Phase 3. The curious alignment may suggest the latter, for these ditches make little sense as part of the Phase 2 plot layout.

**Pit 9144.** 9143, fill of Pit 9144, Site B (Fig.13 no 7), appears likely to be of this phase.

**Pit 9181.** 9182, fill of pit 9181, site B (Fig.13 no 8), adjacent to ditch 9140, appears also to be of Phase 3a.

#### **(J) The cemetery.**

A cemetery lay some 110 to 135m back from the Watling Street, double the distance of the Area 1 cemetery lying just NW of that road. (not illustrated).

#### **Phase 2?**

**Grave fill 9002** (Fig.13 no 15), orientated north/south, contained chips of tile in first and second-century fabrics, but no pottery.

#### **Phase 3a**

**Grave fill 9003** (Fig.13 no 19), orientated east/west, was dated by sherd of a T.52 Nene Valley beaker (Howe *et al* 1980) to this phase.

#### **Other pottery.**

The small quantity of mortaria recovered in 1990 was all Oxford white wares, and included three further M17s.

A sherd of an indented mica dusted beaker, (the type of vessel from which the Fig 15, no 47, vessel was copied) was recovered unstratified.

### **PART 3:**

#### **DATING OF FEATURES WITHOUT ILLUSTRATED POTTERY (*Trenches 1-4 only*).**

Features which do not have vessels illustrated in Part 5.1.2, are dated to phases on grounds of the fabric and form model set up in parts I and II of this report. Vessels of particular relevance are here noted in addition. Entries in brackets are contexts where an early date is assumed on grounds of the site logic and the presence of high quantities of residual pottery. These are boundary ditches with multiple recuts not always noted during excavation.

#### **(A) Phase 1 (Late first century to later second century).**

**Plot Boundaries:** Additional plot boundaries apparently, from their ceramic contents, originally cut, and being filled, in earlier Phase 1:

**Ditch 348.** 347, lower fill of ditch 348, Plot 32. One sherd only, could be earlier second century.

**Ditch 504.** 418, primary fill of boundary ditch 504, Plot 22/23. (Section Fig. 6). 417, higher fill of 504, overlying 418, dates from the mid to later second century, and might run into Phase 2.

**Ditch 609.** 603, intermediate fill of ditch 609, Plot 26/27, (Section Fig. 7), contained ten sherds apparently of Phase 1, and 1 of Phase 3a perhaps intrusive, but this appears otherwise to be a Phase 1 ditch. 604 (only 2 sherds), immediately underlying 603 is likely to date to the third quarter of the second century, i.e. late in Phase 1. (The underlying primary level 605 is listed as Phase 1 in Part II).

#### **Phase 1: Other ditches and gullies**

273, fill of 274, linear feature, Plot 32, (Fig. 11). The date is Hadrianic or later.

334, fill of ditch 335, Plot 28/29 boundary.

624, fill of ditch 625, Plot 27/28. Earlier boundary, the southernmost part of gully 221.

#### **Hut gullies**

275, fill of hut gully 276, Plot 32. (Fig. 11). Earlier Phase 1.

#### **Post holes**

192, fill of post hole 193, Plot 27.

269, fill of post hole/cut 270, Plot 32. (Fig. 11).

287, fill of post hole 288 (one sherd), Plot 31.

All earlier Phase 1.

188, fill of post hole 187, Plot 27.

344, fill of post hole 345, Plot 26.

Possibly later in Phase 1.

**Oven 518.** 519, top fill of oven 518, Plot 32. (Fig. 11); Earlier Phase 1.

#### **Pits**

184, fill of pit 185, Plot 27. Trajanic Samian.

186, fill of pit 187, Plot 27.

223, lower fill of pit 224, Plot 27.

252, fill of pit 253, Plot 31.

406, top of fill of pit 408, Plot 26.

412, upper fill of pit 411, Plot 27.

426, primary fill of pit 414, Plot 31.

All earlier Phase 1.

(433, upper fill of pit 432, and 434, pit fill below 433, both Plot 28. Not easily dateable, but perhaps Phase 1.

512, intermediate fill of pit 509, Plot 27.

513, lower fill of pit 509, Plot 27.

Both earlier Phase 1.

Upper fills illustrated, pots 22-24.



437, fill of pit 438, Plot 32. (Fig. 11).

430, lowest fill of pit 431, Plot 31.

222, upper fill of pit 224, Plot 27, perhaps a little later.  
All mid second century – later Phase 1.

### Industrial Levels

328, industrial layer in trial trench 4, (Fig. 12).  
Hadrianic/Antonine.

329, industrial ironworking level in trench 4, below 328.

**(B) Phase 2** (Late second century to earlier third century.)

### Other plot boundaries apparently cut *de novo* during Phase 2.

238, primary fill of boundary ditch 239, Plot 28. (Coin of Geta supplements pottery evidence).

241, lower fill of boundary ditch 23. Plot 28. (Only two sherds).

403 (bottom) 402 (top) fills of boundary ditch 407. Plot 23/25.

425, primary fill of boundary ditch 130. Plot 22/23.  
(Later second rather than early third century).

606, upper fill of northwest-southeast boundary ditch 611, Plot 25/26. Nine sherds, later second century.  
(Seventeenth or eighteenth-century slip ware sherd also present.)

(There were no extra forms from these contexts to add to those already illustrated for Phase 2.)

### Constructional features

281, fill of wall trench 282, Plot 32. (Fig. 11).

Earlier Phase 2, or even late Phase 1.

(Rough cast Cologne beaker sherds suggest after c. 160 at the earliest.)

### Gullies

285, fill of gully 286, Plot 31. (Fig. 11).

Later second century rather than early third (orange rouletted beaker present.)

### Pits

300, fill of pit 301, Plot 23.

507, fill of pit 506, North of Plot 19. The condition of the pottery from this context was exceptional for it had apparently been deliberately pounded into small fragments.

527, fill of pit 529, in base of ditch 525, Plot 32, eastern side. (Figs. 10, 11)

The relationship between the pit and the ditch (initially Phase 1, but later recut) could not be resolved during the

course of excavation.

612, fill of pit 613, in base of ditch 609, Plot 26/27. Late Antonine Samian confirms the coarse pottery evidence.

**(C) Phase 3a** (Later third century to earlier fourth century)

### Boundary ditches possible defined *de novo* in this phase.

332, the bottom fill of boundary ditch 333, Plot 30/31

(There was some pottery of either late Phase 1 or early Phase 2, and it is possible that this ditch recut an earlier one, but the quantities of pottery are small.)

616, intermediate fill of boundary ditch 618, Plot 28.

Cut or recut now.

### Upper fills of boundary ditches defined in this, or previous or later phases

207/330, upper fill of ditch 333. (Fig. 8)

602, shallow top layer of ditch 609, Plot 26. (Fig. 7).

The presence of very small quantities of Nene valley and Oxford red colour-coated sherds suggests activity (filling) in this phase.

(614, shallow fill of ditch 618, Plot 28). (Fig. 9).

Some half dozen sherds of one Nene Valley rouletted beaker (and a coin of Carausius of 287 to 293) suggest activity in this phase (the section suggests a recut), though 614 has additionally slight Phase 4 elements; see Part II and vessel 96.)

**Ditch 522.** 523, upper fill, and 524, lower fill of shallow ditch 522, Plot 32. (Fig. 11).

**Grave 630.** 631, fill of grave 630, containing inhumation 632, from area north of enclosure 32.

**(D) Phase 3b** (of general fourth-century date)

No pottery has been illustrated from this blanket fourth century 'Phase'. The following features were recorded.

608, fill of plot boundary ditch 610, Plot 27.

349, fill of plot boundary ditch 324, Plot 26.

### Other ditches.

197, fill of ditch, or possible pit, 198, Plot 28.

**Gully 230** 229, and 436, fill of shallow linear feature 230. Plot 32. (Fig. 11).

**Layer 505.** 505, overlying and partly filling boundaries. Plot 22/23. (Fig. 6). It is highly probable that this context

represents more than one deposition.

**Pit 619.** 617, fill of pit 619, in ditch 618. Plot 28/29.

#### (E) Phase 4

**Plot boundary ditch 333.** 330/331 top fills of boundary ditch 333. Plot 31. (Fig. 8). 330 has no pottery in it necessarily later than Phase 3a, but 331 (the level below) produced rim sherds from late black shelly vessels, which are likely to be late fourth century. The bottom fill, 332, contains pottery of late Phase 1, or early Phase 2, presumably the residues of context 241).

#### Features which are shown on figures but from which no pottery is recorded:

##### FIG. 3

103, 128, 129, 130, 181, 183, 191.  
219, 226, 243, 245, 247, 290, 292, 294, 296.  
339, 341, 350, 355, 360, 361.  
405.  
622, 627, 633, 634.

##### FIG. 6

420, 530.

##### FIG. 7

610.

##### FIG. 11

263 and 352

##### FIG. 12

113 to 127 inclusive.  
308, 310, 325, 326, 327.

##### FIG. 13

##### SITE E

10, 13, 14, 16, 17, 18, 20 to 27 inclusive.

#### REPORT ON TWO FLAGON RIMS FROM MAGIOVINIUM

by D.F. Williams, [HBMC Ceramic Petrology Project]  
Department of Archaeology, University of Southampton

1. Part of a rim, quite possibly from a large two-handle flagon, in a hard, very sandy fabric, with

frequent quartz grains protruding through the surfaces, creamy-white in colour throughout (Munsell 10YR 8/12). The somewhat rounded rim is splayed outwards, with a thin cordon underneath, and is slightly scalloped on the inner edge. Another example of this form was recovered from the 1978–1980 excavations at Magiovinium, though unfortunately undated (Neal, 1987, Fig. 38, no. 158). Similar examples of the type from Verulamium are dated to A.D. 145–155 (Wilson, 1984, Fig. 82, no. 1956) and A.D. 145–170 (Wilson, Fig. 123, no. 818). Possibly also Fig. 111, no. 411, dated A.D. 110–120. For a revision of the dating for Type 818, see, 184, 273). *Context 217*

This type of vessel, or something closely allied to it, seems to have been made at kiln II in Verulam Hills Field, St. Albans, which may have been in production during the period c. A.D. 130–165 (Anthony, 1968, Fig. X1, no. 17). Thin sectioning and study under the petrological microscope of the Magiovinium sherd showed a sparse groundmass of silt-sized quartz, with larger (average size 0.20–.50mm) more frequent quartz grains scattered throughout a fairly clean clay matrix. Also present are a few flecks of mica, some quartzite and iron oxide. This fabric appears to compare closely with thin sections of kiln products from the Verulamium region previously studied by Mackenna (1977), and on this evidence it may be reasonable to assume that the Magiovinium vessel probably originated from this area.

2. Part of a rim, again quite possibly from a large two-handled flagon, in a similar fabric to No. 1. In this case, the rim is somewhat thinner and more pointed than for the previous sherd, though it also is splayed out and is somewhat scalloped on the inner edge. Verulamium again seems to provide a reasonable parallel, dated A.D. 145–150 (Wilson, 1984, Fig. 82, no. 1960). In view of the similarities of fabric with no. 1 above, an origin in the Verulamium region would appear a distinct possibility. *Context 105*

# THE SAMIAN

by G. Dannell

## SAMIAN FROM THE EXCAVATIONS

### (A) The decorated samian (Fig. 18, 130–141)

(Abbreviations: F = form; CG = Central Gaulish; SG = Southern Gaulish; O = Oswald 1937)

There is no samian present before about AD 75. It is interesting that there is proportionately more from Les Martres de Veyre, c. AD 100–120, which suggests that the site got under way in the Trajanic period. The Eastern Gaulish sherd suggests that importation took place at least until the end of the second century.

Phase 1:  
Context

- 111 F37. This ovolo is similar to one on a f37 from London (ML 4250G), which may be that of L COS VIRILIS, cf. K12, Taf. XXII.3. The figure is a Diana and hind; the small dog is a reduced version of O 2035A. AD 75–95. SG. (130)
- 208 F37. Victory, D 478. c. AD. 115–135? CG. (131)
- 264 F37. This trident-tipped ovolo is on a f37 stamped in the mould by SVLPICIVS (Carlisle, Annatwell St., 1982, *verb pers.*, Miss B.M. Dickinson). His style is middle-Flavian. It also appears on a bowl stamped in the mould by SABINVS iv, (British Museum), of the same date. c. AD 75–90. SG. (132) Ovolo, Rogers B28. Antonine. CG. (133)
- 415 F37. A decorated sherd from this context joins the context 111 f37 vessel. The ovolo was used on bowls stamped in the mould by PATRICIVS, although the tongue is not normally so squashed up. Clearly, the *poisson matrice* was used to make up different roulettes, which accounts for the difference in spacing. The dog, 0.20 is known from a f29 with his internal stamp. The other figures are Diana and hare, H Pl. 18.5; a putto, 0.436, and a Victory, H.104. The basal wreath is similar to Knorr 1919, Textbild 12.5 (IVCVNDVS, SECVNDVS & VITALIS). The PATRICIVS associated with f37 worked apparently with moulds signed by CALVOS (CALVVS), cf. the wrongly attributed bowl from Fishbourne, Dannell 1971, Fig. 130, which has a twin from the same mould at La Graefesenque, with signature, and the stamp of PATRICIVS on the handles. It has a similar Diana. The ovolo on that vessel is one associated with bowls in the style of CALVVS. The grass tuft appears widely in the work in this combination

style. The division of the current bowl into strict panels may indicate a slightly later date. c. AD 70–90. SG. (135)

F37. This bifid wreath is nearest to that used by the early Central Gaulish group (cf. OGP i, Pls 62/64). c. AD 110–130. CG. (136)

Phase 4:  
context

- 217 F37. Style of DRVSVS T, cf. CGP Pl. 13.168, Trajanic. M de V. (137)
- 330 F37. The ovolo is Rogers B144, on a piece with micaceous fabric and smooth, thin, orange-brown slip. c. AD. 145–165. CG. (134)
- 428 Ovolo, Rogers B32. Hadrianic-Antonine. CG. (138)

### (B) Plain samian.

Phase 1:  
context

- 111 F18. FLAVIAN. SG. Rivetted.  
F37. c. AD. 80–100. SG. Rivetted.
- 105 F18/31. Had-Ant. Rivetted. CG.  
F33. Had-Ant. CG. Stamped CAPELIAN[  
F33? Late 1st cent? SG.  
F35/6. Flavian. SG  
F35/36. Flavian. SG.  
F37. Had-Ant. CG
- 107 F35/6. Flavian? SG? Rivetted.
- 184 F18. Trajanic. M de V.
- 234 F35/6. Trajanic. M de V. Rivetted.
- 264 F37. Antonine. CG.  
F33. Had-Ant. CG.
- 265 F33. Hadrianic. CG.
- 328 Scrap. Second century. CG.
- 342 Chip. Second century. CG.
- 346 F35/6. Flavian. SG.
- 406 F18. Flavian. SG.
- 415 F18. First century. SG.  
F18/31. Had-Ant. CG.  
F33. Antonine. CG.  
F35/6. Trajanic. Martres de Veyre.  
F38?. Antonine. CG.  
F40?. Antonine. CG.  
F43. Antonine (late). CG.
- 419 F18. Flavian. SG.
- 510 F27. Trajanic. M de V. Rivetted.

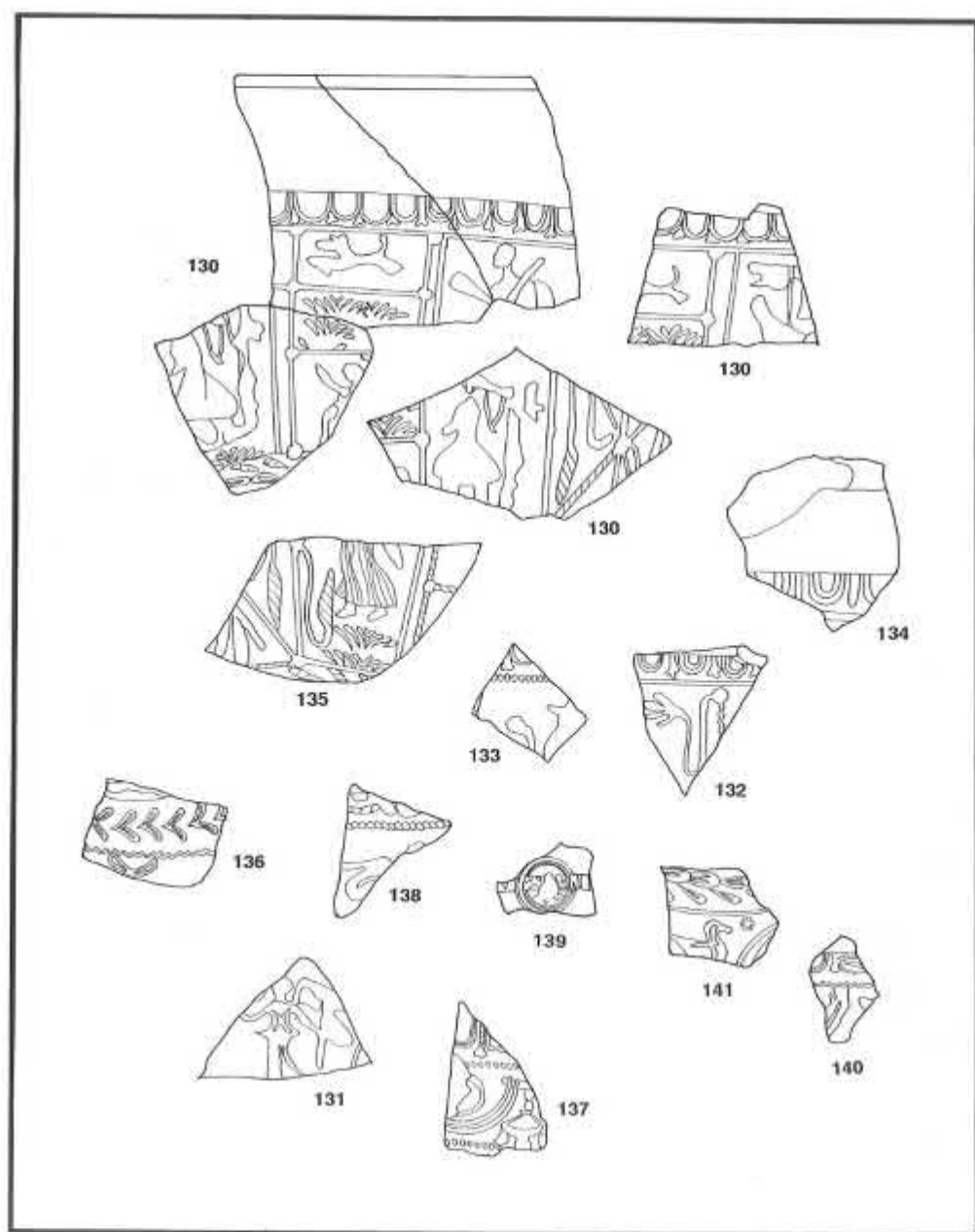


Fig. 18: Decorated Samian (1:2).

- F18/31. Hadrianic. CG  
F18/31R.  
F35/6. Trajanic. M de V.
- 526 F18 (2). Flavian. SG.  
F37. Flavian. SG.
- 623 F15/17. Flavian? SG.  
Phase 2:  
context
- 240 Chip Second century. CG.  
F37. Second century? CG.
- 250 F33. Antonine CG.
- 236 Flake. Trajanic. M de V.
- 403 Chip. Trajanic. M de V.
- 440 Chip. Flavian. SG.
- 604 Curle 11. Trajanic? M de V?
- 606 F36. Antonine. CG.  
Bowl. Antonine? CG.
- 607 F31? Late Antonine. CG.  
Chip. Second century. CG
- Phase 3:  
context
- 612 F45 Late Antonine. CG.
- Phase 3a:  
context
- 202 F31. Antonine. CG.  
Ludowici Tg. Later Antonine. EG.
- 204 F45. Late Antonine. CG.
- 207 F27. Flavian. SG.  
Chip. Second century. CG.
- 332 Chip. Trajanic. M de V.
- 602 Chip. Second century? CG?  
F33. Late Antonine. CG.
- 615 Chip. Trajanic. M de V.
- Phase 3b:  
context
- 505 F38? Antonine. CG.
- 617 Chip. Second century. CG.
- Phase 4:  
context
- 217 Chip. Second century? CG?
- 330 F31? Antonine. CG.  
Flake. First century. SG?
- 331 Form 35/6? Flavian? SG.  
Chip. Second century. CG. Blackware.

- 428 Form 79 or Tg. A flat base, stamped ~~PAVLLI~~ Paullus v of Lezoux. This stamp is from a recut die, the original of which gave PAVLLI. The extraneous strokes showing in both versions of the stamp were presumably caused by cleaning of, or damage to, the die. Stamps from the earlier version occur in the late Antonine samian from Pudding Pan Rock, so the recut die is unlikely to have been in use before c AD.170, at the earliest. c AD.170/180–200. SG. (139)

- Chips. Antonine. CG.
- 614 Form 37. Antonine. CG.  
Form 35/6. Trajanic. M de V.
- Phase uncertain:
- 135 Bowl. Antonine. CG. (no other pot)
- 144 Form 37. Antonine. CG. (no other pot)
- 152 Form 37. Hadrianic-Antonine. CG. (no other pot)
- 246 Form 18. First century. SG.
- Unstratified:
- 200 Form 31R. Late Antonine. CG.  
Form 37. c. A.D. 75–95. SG.  
Form 18. Flavian. SG.  
Form 33. Second century. CG.  
Jar. Antonine. CG. Blackware.  
Form 18/31. Hadrianic. CG.  
Form 31. Antonine. CG.
- 205 Curle 11. Trajanic. M de V.

## SAMIAN POTTERY FROM FENNY STRATFORD BYPASS

### (A) Decorated

#### Context

- 100 Form 37. The ovolo is Rogers B 109, ascribed to BVTRIO, CATVSSA, GRANIO & Potter P-18. The remaining decoration appears to be a striped bud of some sort. c AD. 125–145. CG. (140)
- 173 Form 37. Too little for ascription; the decorative style comes from f.29, and the basal wreath is that shown by Knorr (K19, Textbild 5) for bowls stamped internally by IVCVNDUS, SEC VNDVS & VITALIS at this period. c AD 70–90, SG. (no other pot) (141)

### (B) Plain

- 100 Curle 15. Antonine. CG.
- Unstratified. Form 33. Antonine. CG.
- 101 Form 18R Trajanic, Martres de Veyre. (no other pot)



- 102 Chip. Antonine. CG. (no other pot)
- 9022 Form 37 Antonine CG.  
(residual finds from area around hoard) Form 31  
Antonine. CG.
- 9001 Form 31 Antonine CG.  
(Unstrat.) Form 18/31 Antonine CG. Form 33  
Antonine CG.
- 9021 Form 33 Antonine CG. Phase 1/2?

## THE TILE

by C. Woodfield

The small quantity of tile recovered in the course of the excavations (some 100 pieces omitting post-Roman material and smaller fragments) is still sufficient to alter the accepted view of the poor quality of building in walled Magiovinium, from whence this material, by its size and condition, must surely have come as hard core or fill. The presence of at the very least parts of some 25 pilae and/or sub-floor or other constructional tiles, and some 4 box flue tiles indicates the construction (or repair) of at least one substantial heated building between the later first and the fourth century. The survival of *opus signinum* and mortar was noted in a few cases. The material is too scrappy for detailed analysis but it is nevertheless clear that nearly 70% of the tile was in first and second-century fabrics. Curiously, the proportion of pilae and sub-floor tiles to roofing tiles appears then to be in the region of 4:1. With the later tile fabrics the proportion was in the region of 1:2, this itself being high, although that may be due to a bias in recovery of this material.

Much of this material came from Phase 3a (probably hard core deriving from repair work to the hypocaust system of a Phase 1 and/or Phase 2 major building or buildings, required after a mid third century recession such as that attested in the Towcester suburbs, and at Stanton Low (Brown, Woodfield and Mynard 1983; Woodfield and Johnson 1989, Woodfield, 1992). There was also a little tile from Phase 3b, and more again from Phase 4 in the later years of the Roman occupation, when it is more likely to represent hard core from decaying buildings. The tile occurred mostly in plot boundary ditches, contexts 207, 217, 330, 331 (where it was found in association with building stone), 428, 504, 523, oven 516, 602, 614 and 615, raising the ques-

tion of deliberate filling of these plot boundaries in the late third or fourth century, although it is always possible for hard core to slip into ditches from its use on adjacent surfaces. It did in fact occur as hard core for apparently industrial working surfaces in Phase 3a (contexts 204 and 505), and from a Phase 3a slump into a Phase 1 pit, 414. The small quantities of tile recovered in the 1980s remain unpublished but David Neal informs the writer that tiles from heating systems were present, the small quantity suggesting to him that perhaps no more than a mansio bath suite was involved.

## Tile fabrics and forms

A table of all the tile occurs in the site archive, but the basis for the conclusions given above are here summarised.

Fabric distinctions between variant types of basically red sandy fabrics were not attempted, given the time and small quantity of material available. They will virtually all date from the later 1st and 2nd centuries, although it is possible that the small quantity of coarser, darker, more highly fired, often bluish tiles date from the Severan period. There were no tiles in cream iron-free fabrics, although buff sandy tiles occurred in very small quantities. Soft pink grogged and shelly tiles are known to date from the third and fourth centuries (although a little is possible in the late second century.) There was no trace of colour-washed tiles. The very small quantity of tile (8%) recovered in the Soft pink grogged fabric (the type that is most frequently recovered with colour wash) is paralleled by this fabric's shortage in the pottery assemblage.

When listing forms, it was assumed that fragments of tiles of 30mm and greater thickness were most likely to be pilae or subfloor; those where the corners survived to confirm identification did in fact lie between 28 and 35mm thickness, 30mm being the norm. Fragments of over 35mm thickness seemed very likely to come from sub-floor tiles (the thickest tile was 41mm), but there are problems with broken up hard-core material, and the existence of the large tiles used in wall construction is not impossible. The recognisable tegulae seemed normally to be between 15 and 20mm thick, but could occasionally be as thick as 30mm, and conversely some pilae were as thin as 24mm. Tile

fragments between 20 and 29mm were therefore labelled UC (uncertain). One example of sub-floor tile, in the early red sandy fabric, occurred in a Phase 3b boundary ditch fill (218) with the ubiquitous Roman tileyard dog footprint. Leslie Cram (Reading Museum) writes: 'The dog's hindfoot registered on top of the track of the forefoot as in normal walking or trotting gait. The measurement of the width of the hindfoot is 35mm, which is just below the mean of 40.1mm of dog track widths from the Roman town of Silchester.'

## THE ROMAN COINS AND THE SCEATTA

by P. Woodfield

Ninety coins were recovered and submitted for identification. These were all Roman imperial except for two, an early Anglo Saxon sceatta, discussed in more detail below, and a Victorian Maundy 4d of 1854. There were in addition six coins that were totally illegible about which no estimate of date could be made. These eight have been excluded from the figures given. Also excluded are the iron coin dies, and the hoard of copper alloy blanks and pellets which are published elsewhere (Zeepvat 1994).

The coins were recovered both by conventional archaeological method, and by local metal detectorists.

### Roman coins

A full list, arranged in order of context, is included in the site documentation.

### Context

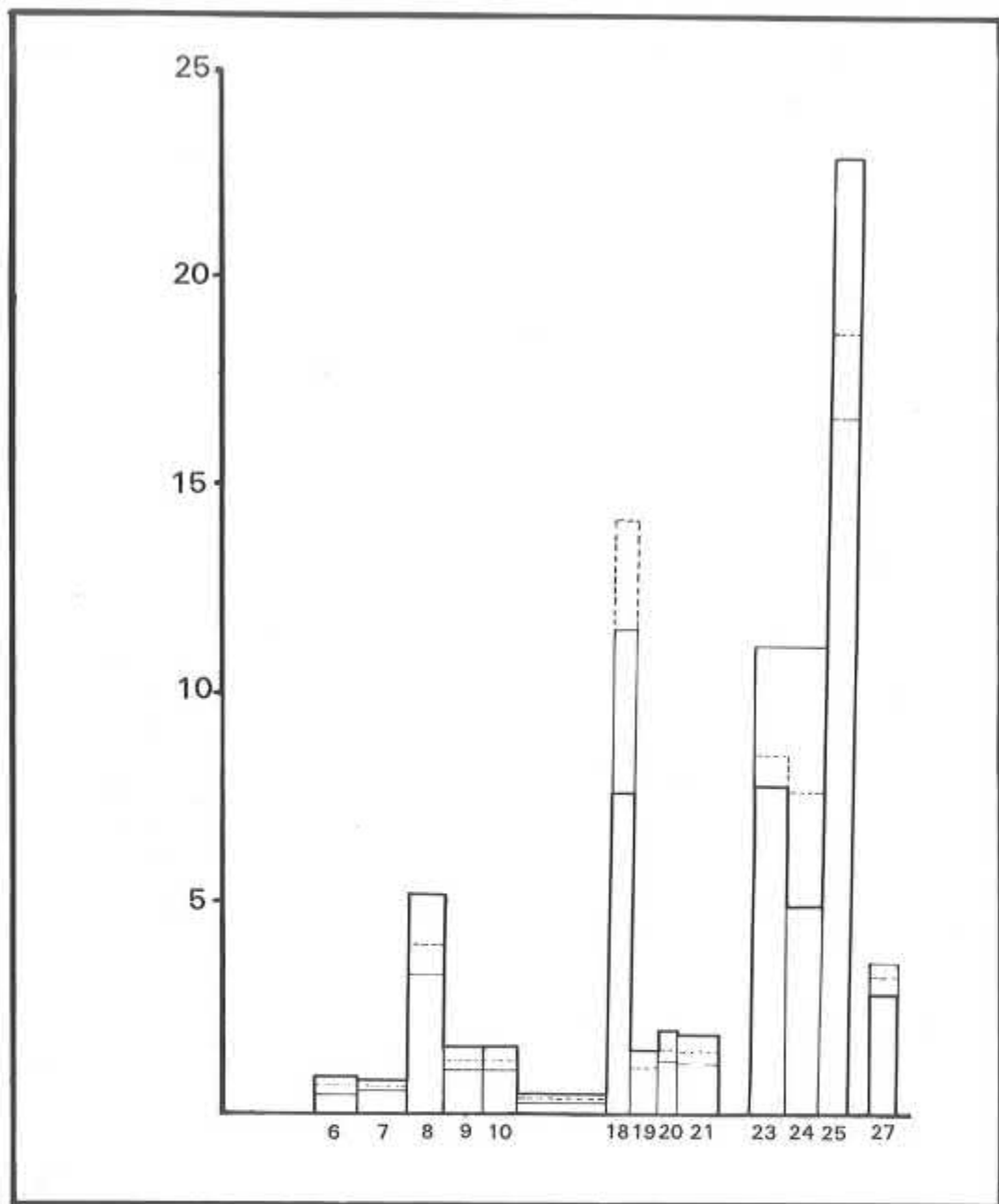
- 206 Of the stratified coins, the ten coins from context 206 strongly indicate a later fourth century group, with one residual Constantinian (SF 1164 – an irregular piece) and a very fine coin of Tacitus – the condition suggesting that it was kept as a keepsake rather than being a survivor in contemporary currency. This accords with the evidence of the associated context 428 which provides a further three Valentine I coins.
- 208 Also stratified, provides two fourth-century coins (SF 1021 and 1060), which on the basis of the pottery appear to be intrusive.
- 238 The solitary silver coin, a denarius of Geta Caesar

of 199–202 was recovered (by metal detector) from this ditch.

- 216 a ditch, the fill of which contained two worn sestertii of Marcus Aurelius (SF 1027–8 stuck together). Such worn large aes are believed to have continued in circulation to the mid to late third century.
- 349 fill of ditch 324; contained three coins, of Commodus, Postumus, and Constantine I, the last two, unlike the sestertius, being in very good condition, the antoninianus retaining a goodly portion of a silver wash. With such a small and mixed group a date for the deposit must remain open, although 320–330 could be suggested.
- 229 fill of ditch 230; contained a very poor coin of the late first to second century about which no deduction can be made.
- 256 fill of 257 contained only two coins (SF 1109 and 1108), an irregular Constantinian issue and a Valentinianic coin suggesting a later fourth-century date.
- 330 contained two coins, a follis and a late fourth-century type unidentified, indicating another late fourth-century deposit.
- 346 by contrast produced one very finely preserved coin of Gallienus of 253–268, but despite the condition at loss, the evidence of one coin must be taken with considerable caution.
- 353 fill of a sub-circular pit 352, produced a mid fourth-century coin which could not be identified more precisely.
- 523 primary fill of ditch 522, contained a dupondius of AD 154 in fair condition.
- 614 a ditch dated to the late Roman period on the basis of the pottery, produced four coins: an irregular radiate, an irregular minim (below 10mm), and a Constantine I standard coin of Trier of 330–341. It also contained a sceatta (see below). The location of the finds within the section of the ditch is not recorded.
- 618 contained an antoninianus of Causarius in excellent condition at loss although the coins of this reign often do show rather less circulation wear than other periods. Heeding the danger of using one coin, a date after 293 must be indicated.

### Total coin loss

All finds available at the time from this particular area of Magiovinium, with the exception of the three hoards of blanks (Zeepvat 1994), were brought together to compile an annual coin loss per 1000 histogram (Fig 19). This was then compared, firstly



**Fig. 19:** Histogram of coins recovered from investigations on Little Brickhill and Fenny Stratford bypasses showing annual loss per thousand.

with the published histogram from a previous excavation on the other side of the road, also in the southern suburbs, well beyond the walls of the town, and secondly with suburban sites along the Alchester Road in Towcester, the next station north on Watling Street. It was thirdly checked against other histograms for groups of coins recovered in the South Northants/North Buckinghamshire area. The root mean square deviation was attempted (Reece in Frere 1984) but the numbers of coins within the Casey/Reece periods was so low (frequently no more than one) that the results, compounded with other mathematical problems, would probably be meaningless.

### Discussion

Despite the strong presence of early first-century pottery, this occupation is not reflected in the coin-loss. For the actual numbers of coins involved this is probably not significant as pre-Hadrianic coins often do not make an impact in the figures until above 150 total recoveries. Perhaps the occupants of pre-AD 120 were more careful with their money than their pottery, but it is very possible that the larger bronze, and silver, which would be the main finds, had been swept up in the recent years by metal detector users who have frequently worked the site. This last comment is somewhat undermined, however, by Casey period 8, AD 161–180, being that of Marcus Aurelius, which is unusually well represented compared with other suburban sites in the area. Perhaps this indicates a change in occupation in the later Antonine period associated with official interest in the laying out of the roadside plots. A regular level of activity seems to succeed this.

The period of the Gallic Empire, Casey 18, (Reece X and most of XI) shows an unprecedented outburst of coin loss, compared with other local sites. These finds are outnumbered by irregular radiates ascribable to this period. Clearly much was occurring here, although it is always possible that it reverted to no more than a trading field status.

The first three decades of the fourth century are surprisingly poorly represented, especially the period 317–330, which is normally a period of increasing coin loss.

The Constantinian period is, relatively speaking, only moderately represented, as if the area had not fully recovered since the last quarter of the third century. The absence of the standard types, and of commemorative coins, is particularly noticeable.

However, coin loss increases rapidly through 330 to the mid fourth century and significantly the period 364–378, the Valentinianic period, sees a quite remarkable increase in coin loss, such as would normally be seen earlier, in the period 320–350. A late peak in this period is characteristic of some quite rural sites in the area, such as the Peatnells site, Great Houghton, Northants and The Gullet, Potterspury, possibly a villa site on Watling Street, which also shares with both Magiovinium sites (ie the areas which are the subject of the present report and the areas described in David Neal's report) a high loss record in the period of the Gallic empire.

Lastly, although no coins were recovered of the decade 378–388, the loss remains high through to the end of the century.

The histogram (Fig 19) is drawn on the same basis as others for the area, using Casey's subdivision of periods of emission (Casey, 1974). The x-x axis is to a scale of years, indicating visually the comparative length. There are three plots, the heavy line indicating 49 securely identified coins expressed as the standard formula, omitting irregular issues, the dotted line the same number plus the irregular coins, amounting to a total of 64 pieces, and thirdly, a thin continuous line where the imprecisely identified coins which can with some confidence be ascribed to a general quarter century have been added, bringing the total to 78 coins. As stated above, totally illegible coins which cannot be so ascribed have been omitted. It is considered that as these irregular emissions are such a significant part of any British coin-loss picture they cannot be ignored. The bar-stacks have been recomputed each time.

The unstratified coin figures have not been assessed against other north Buckinghamshire sites here, but the indications are that this particular site is significantly low in the late third and early fourth century to 350, after which it returns to a standard pattern of late Roman activity.

The total coin list, with full coin details, is stored with the site documentation.

#### THE SCEATTA (FIG. 24)

The sceatta was referred to Dr DM Metcalf of the Ashmolean Museum, and grateful thanks are due to him for initial identification of the coin, and for discussion and help with this note. The coin is identified as a secondary sceat of Series N bearing the dragon obverse, generally of BMC (BMC 1887) Type 41, illustrated at Vol 1 Pl IV, no.3, but one where the front and back feet have become a series of parallel lines under the belly, as BMC (BMC 1887) Pl IV No 7. This design, however, also differs in that the animal does not have the usual straight tail lying along its back, but has a curly tail encircling a pellet, a design normally only associated with Type 40 No 172, and where the animal has its foot cocked over its head. The reverse design, of which only a small amount of the silver plating survives, bears a small asymmetrical cross nearly approached by a sector of a ring of pellets. This appears to be the bottom corner of the dress of a facing figure holding a long cross in each hand, i.e. that associated with BMC (BMC 1887) Type 40, not 41. With this information, and the eye of faith, one can read a single swelling of the copper core, confirming the body of a single standing, facing, figure.

Of particular significance, however, in this case, is that the coin is silver-plated on to a copper alloy base. Imitation within the sceatta series was rife, particularly, it is assumed, as the supply of silver diminished as the eighth century progressed. In the Milton Keynes area adjoining Magiovinium to the north, where intensive development has taken place over 22,000 acres since the spread of metal detecting, eleven denarial pieces have been recovered, [Ser B 1; Ser E 2; Ser J 2; Ser K/N 1; Ser L 2; Ser R 2; and one unidentified]. Thanks are due to R. Williams of the Milton Keynes Archaeological Unit for providing a list of finds recorded over the development period. Of these twelve, including the Series N coin from Magiovinium under discussion, one [Ser J] is said to be plated; one a forgery [Ser R]; one identified as 'debased', and the unidentified coin is of copper alloy: a total of five out of twelve appear to be unauthorised money of necessity.

Elsewhere, the majority of reported copies are of Series J, but Dr. Metcalf informs me that other plated coins of Series N are known, e.g. from the Swindon area, and from Caister-by-Norwich, both Type 41 die-duplicates, but such copies are extremely rare. The Magiovinium coin has been investigated under X-ray fluorescence, by courtesy of the Ancient Monuments Laboratory of English Heritage (the help of the Ancient Monuments Laboratory, and of Dr C Mortimer who undertook the analysis, are gratefully acknowledged). On the obverse, where the silver plating is better preserved, a distinct reading for mercury was obtained, indicative of the process of silver mercury amalgam. There was no significant presence of other metals, although a detailed quantitative analysis was not undertaken.

The fact that such coins were worth the effort for forgeries to be made and, presumably, successfully passed, is further proof that the sceatta coinage had become, by the second quarter of the eighth century, a well established medium of commerce over much of eastern and midland Britain, a conclusion that is borne out by the concentration of finds from Milton Keynes where there does not appear to be any significant explanation other than the recent intensity of development.

The presence of a coin from the second quarter of the eighth century in a presumably still open ditch, indicates that even if occupation had not actually been re-established here by the time of King Æthelbald, and St Frydeswyde in Aylesbury, Watling Street was in use for passing trade, at least through Middle Anglia. Sceattas have appeared elsewhere on or within three miles of its course, in Bedfordshire at Dunstable [Series D, R2], Totternhoe, [Type 41b]; and at Milton Keynes at Shenley, [four coins, series K or N,L,R and one unidentified]; Kents Hill [one Series R], and at the deserted villages of Old Wolverton [three: Series J,L and R], and Westbury [also three: Series B,E and J].

Further to the north on Watling street, outside the territory of the Middle Angles and into Mercia, the distribution appears to thin out, but a Series T coin appeared some while ago at Eastcote, near Towcester (Rigold and Metcalf 1984). The experience of Milton Keynes however must counsel cau-



TABLE: STRATIFIED COINS.

CONTEXT	NUMBERS	DETAIL AND COMMENT.
194	1	Irregular coin of 4th century.
206	10	1 x Tacitus in very good condition, 1 Constantinian, the remaining 8 all of the Valentinian period, after AD 350, including one very late, 394-423, the latest from the site. The condition of the Tacitus indicates a keepsake loss rather than residual.  Context 428 (below) confirms a Valentinianic date.
208	2	4th century, one being Helena.
209	1	Base silver denarius of Geta, 199-202.
213	1	364-378.
214	1	Sestertius of Marcus Aurelius.
215	5	Two Marcus Aurelius.
230	1	Very poor bronze of late 1st or 2nd century, possibly of Nero.
231	1	Irregular radiate of c.260-c.285
232	1	364-367
256	2	Irregular Constantinopolis and 367-375.
324	3	Commodus, Postumus and Constantine I, the last two in very good loss condition.
330	2	Before 324 (1) and late 4th century.
346	1	Antoninianus of Gallienus in very fine condition. 253-268
349	3	Commodus, Postumus and Constantine I, the last two being in very good loss condition.
353	1	Mid 4th century.
428	3	All Valentinian, c.364-378. Same as context 206.
523	1	Antoninus Pius, dupondius of AD 154.
614	4	A mixture, comprising an irregular radiate; a coin of 335-341; an irregular 4th century and an Anglo-Saxon silver sceatta.
618	1	Carausius, 287-293, excellent condition.

tion in interpreting distribution maps at this stage of knowledge.

## OBJECTS OF COPPER ALLOY

by J. Lawson, with comments from R Jackson, D Mackreth, IR Scott and G Webster

### FINDS FROM THE EXCAVATIONS

Ninety seven miscellaneous copper alloy objects were recovered, forty seven from unstratified contexts, the rest mostly from pits and ditches. Items that have not been illustrated include two fragmentary and undecorated pin shafts, a medieval rowel-spur, three pieces of copper alloy slag and eleven unidentified objects (details of which are filed with the site record). The bronze figurine of a ram, discovered during construction of the Fenny Stratford Bypass, is also described.

The tiny quantity of copper alloy slag does not provide sufficient evidence to suggest that copper alloy working took place within this area of Magiovinium at any date. The pieces must therefore have been redeposited from elsewhere in the town.

### Illustrated objects of copper alloy (Fig 20)

1. Decorated enamelled plate. Sub-rectangular strip of metal, tapering slightly towards one end, with everted side flanges pierced at centre top by a small rivet/pin hole. Floriate design within a blue enamel field; yellow enamel fills the scroll terminals. The metal is raised to form the decoration and to secure the cells of enamel. The inner edge of the metal border is toothed to improve adhesion between metal and enamel (see skillet handle from Kirkby Lathorpe in Butcher 1976, 46-47, Fig.48). 52mm x 30mm. Late first century. *SF 1019, context 208.*

Interpretation of this item is problematical, and we are grateful to Ralph Jackson, Ian Scott and Graham Webster who all provided comments, although what is written here is solely our responsibility. The item is apparently part of a larger, composite object, secured by a pin/rivet through the small perforation. As the piece is clearly decorative it may have been a decorative element of an item of household furniture such as a couch fitting or box attachment. Although superficially reminiscent of the lower part of a dagger scabbard (Scott 1985; Webster 1985), those that are bronze (which have been

found in the Netherlands, not Britain) are of thin metal forming a casing around a wood and leather sheath, and do not have enamelling; furthermore the side flanges of a sheath plate would be curved down, and not turned up, as is the case with the Magiovinium artefact.

### The brooches

by D. F. Mackreth

2. Plate brooch. The pin had been hinged. The plate is a lozenge with a recessed face now with traces of what may be decayed frit. There are no distinctive features to aid dating. Such plain brooches are not as common as might be thought and there is no "school" as yet to which they can be ascribed. The brooch is likely to be second-century in date. The pin and most of the catch are missing. 35mm x 25mm. *SF 1009, unstratified.*
3. Colchester Derivative. An axis bar through the coils of the spring passes through the lower of two holes in a plate behind the head of the bow; the chord is held in the upper hole. The wings are plain. The plate behind the head is carried over the top and runs down the bow as a ridge. There is a nick near the top which gives the profile of the brooch the appearance of having a hook like that on the Colchester group. Not a member of a definite group; there is little that can be said about this piece. Its date range is likely to run from the later part of the first century to cAD 150/175 when all British bow brooches derived from the Colchester types ceased to be made. Surviving length 22mm. Phase 4 context (fourth century). *SF 1069, context 614.*

### Miscellaneous objects of copper alloy

by J. Lawson (Fig 20)

4. Fragment of finger-ring with glass or enamel setting. Decorative mount survives; green glass inlay very fragmentary. Surviving part of hoop has simple decorative moulding. Estimated internal diameter 15mm. Parallels: cf. Crummy 1981, fig.50, no.1778 (post-Roman), Phase 1 context (mid second century). *SF 1123, context 208.*
5. Decorative mount. ?Zoomorphic loop resembles Celtic animal design. Internal diameter 10mm. Uncertain date. *SF 1066, unstratified.*
6. Tweezers. Tip of one blade missing. The blades are very slightly flared and the ends curve inwards. Length 45mm. Metal detector find in phase 1 context. (late first/early second century). *SF 1153,*

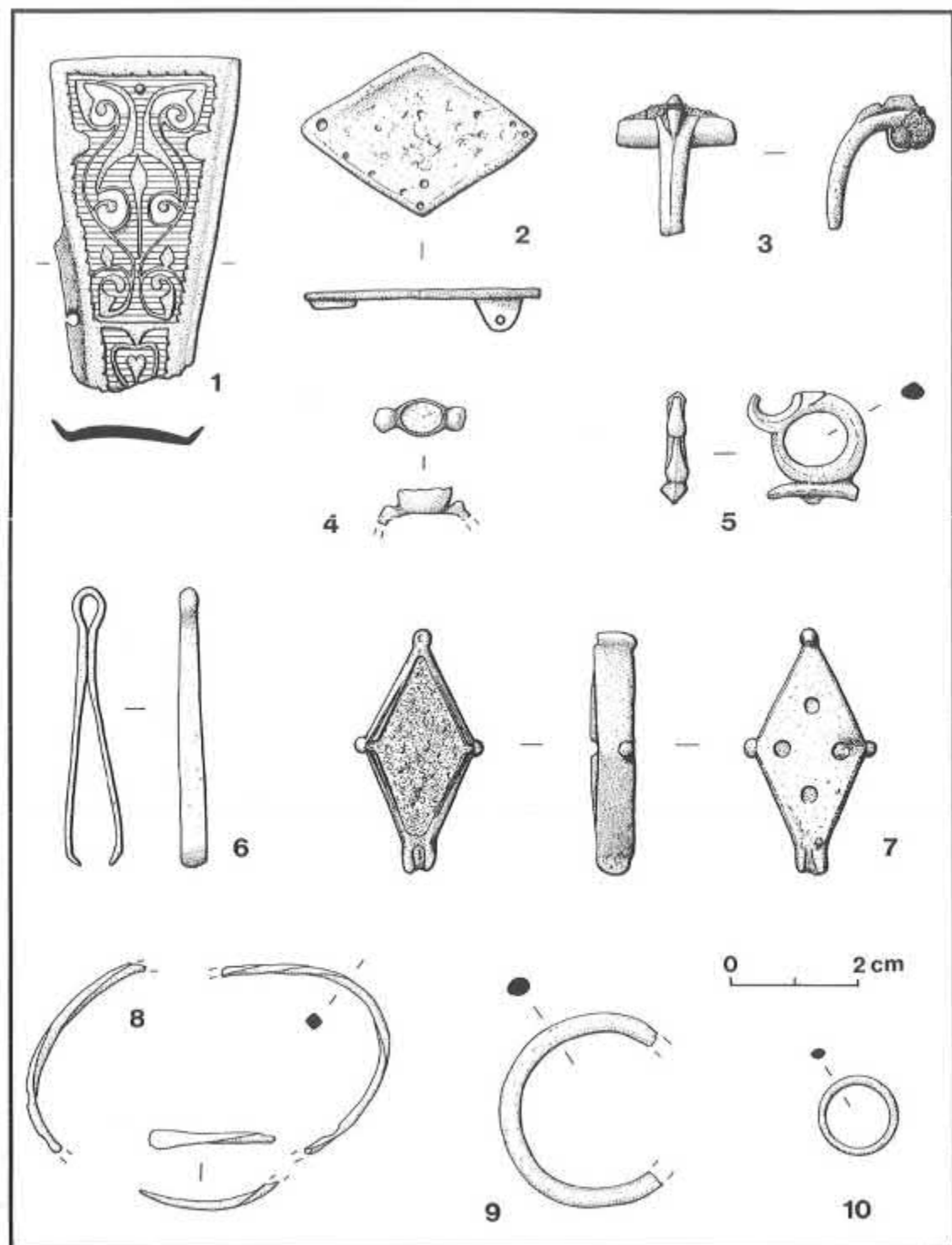


Fig. 20: Objects of copper alloy. (1:1)

context 354.

7. Base of lozenge-shaped seal box, hinged lid missing. Small circular lug at each angle – the terminal lug is as deep as the wall and the hinge element acts as a fourth lug. Two opposing notches in wall, to receive chord, lie directly over lateral lugs. Top of wall is moulded to receive the lid. Base has four perforations. 39mm x 20mm. Uncertain date. *SF 1029, unstratified.*
8. Three broken lengths of a plain, loosely twisted armlet. There are traces of what is apparently gilding. Estimated internal diameter 40mm; square section, thickness 2mm. Phase 1 context (late first/early second century). *SF 1042, context 511.*
9. Incomplete ring of uncertain function. Internal diameter 25mm; ovoid section, thickness 4mm. Phase 1 context (late first/early second century). *SF 1052, context 264.*
10. Small ring of uncertain function. Internal diameter 10mm; ovoid section, thickness 2mm. Phase 4 context (late fourth century). *SF 1165, context 206/428.*

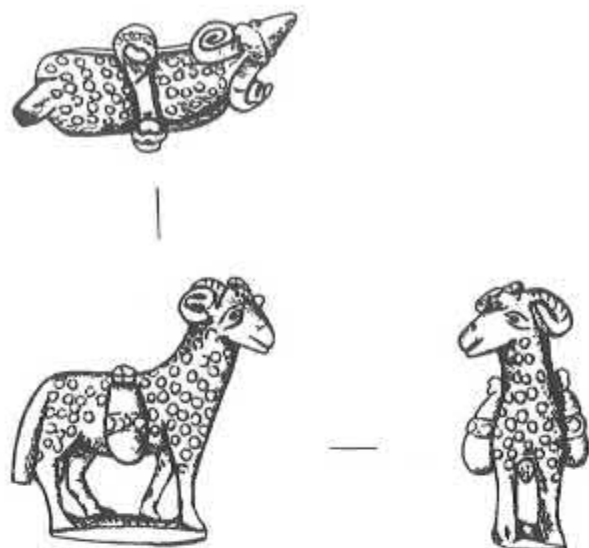


Fig. 21: Bronze ram from Fenny Stratford Bypass. (1:1)

#### METAL DETECTOR FINDS FROM THE FENNY STRATFORD BYPASS: *The Copper Alloy Ram (Fig 21)*

Although brief accounts of this item have been published previously, the item is included here for the sake of completeness. We are grateful to Dr Martin Henig, Visiting Lecturer in Roman Art at the Institute of Archaeology, University of Oxford, who provided comments which are incorporated in the following account, as well as to Bob Williams and Bob Zeepvat.

The object was retrieved during construction of the Fenny Stratford bypass from a pile of topsoil on the east side of the roadworks at approximately SP 8928 3321. The finder, Mr A Stewart, passed the item to staff of the Milton Keynes Archaeology Unit.

11. Copper alloy statuette of a ram, 32mm high. The fleece is rendered in a highly stylised manner, by means of small annular and penannular rings, in relief. The ram bears two panniers on its back, interpreted as two purses of Mercury, the master of flocks and herds. There are traces of solder on the underside of the rectangular base, suggesting that the piece may well be part of a larger group.

A ram with similar panniers, unprovenanced, is in

the collections of the Bibliothèque Nationale (Babelon and Blanchet 1895, 484 no 1185), and there is another from Carnuntum (Kozloff 1981, 199 no 188). There are also resemblances to a goat and a ram from Tongeren, Limburg (Faider-Feytmans 1979, 96; nos 113 and 114, plate 60), both without panniers. These are of about the same size and stand on flat rectangular platforms. Finally there is a ram from King Harry Lane, St Albans (Wilson DR 1972, 329–30 and plate 25 b and c) which together with a cock and a tortoise forms part of a complete statue-group of Mercury. The size and style of rendition of this piece, apart from the absence of panniers, are, in fact, not unlike those of the Fenny Stratford figure. None is of the same quality as the Magiovinium bronze, whose striking patterning and almond shaped eyes certainly suggest Gaulish or British work (see Henig 1995, 93–98).

In addition to these bronzes it is apposite to note a broken cult statue of Mercury in oolitic limestone from Uley (Henig 1993). Here too the god is accompanied by a ram.

The iconography of the ram indicates that the item was possibly a votive offering at a shrine of Mercury, god of flocks. The solder on the underside suggests that it was probably part of a larger group, as is the case with most of the items noted above. This bronze is a powerful symbol of the wealth of Britain, which in part literally came from the backs

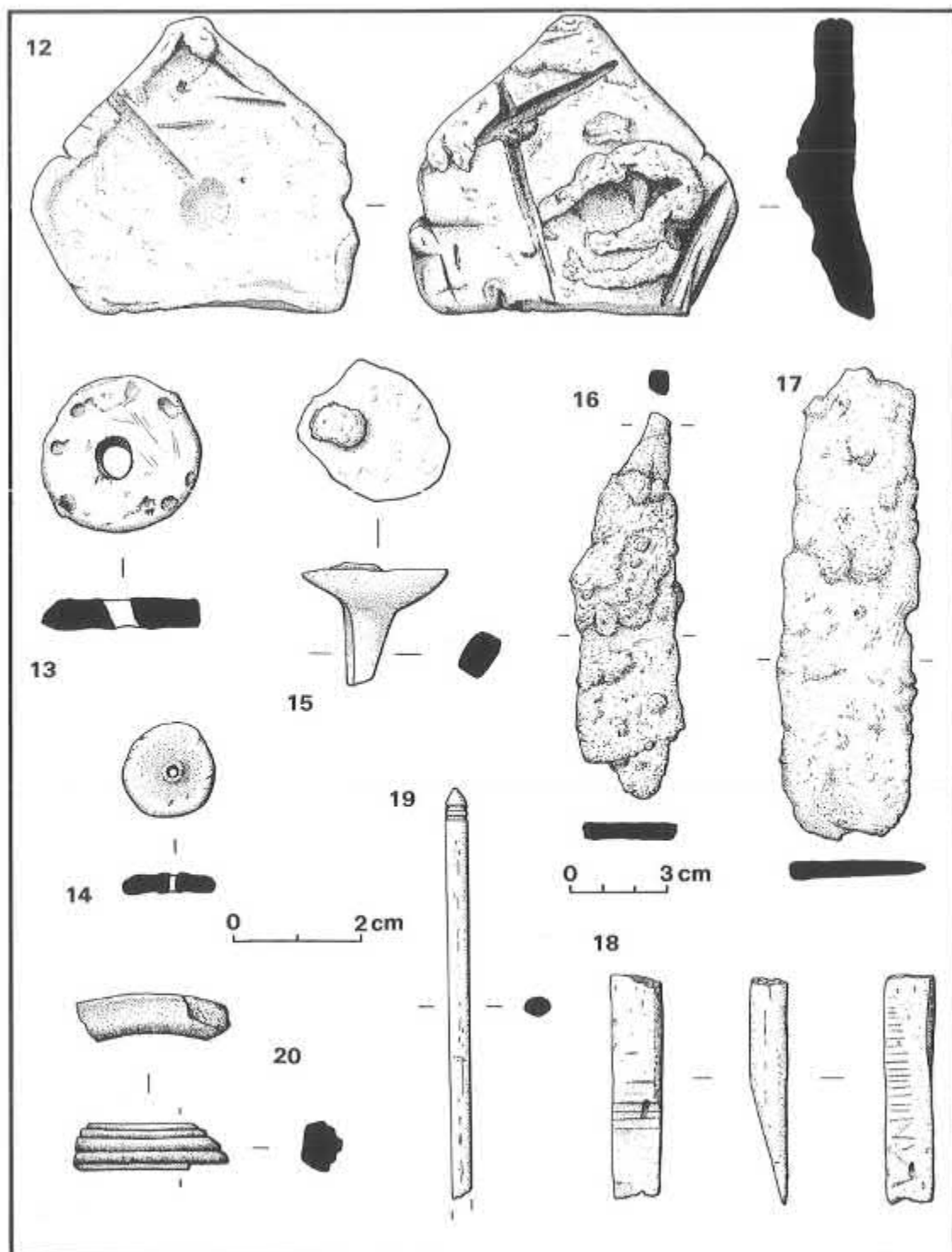


Fig. 22: Objects of lead, iron, bone and shale (1:1) and iron (1:2).



of sheep in the form of fleeces from which the famous *Birri Britannici* were woven.

## OTHER METAL DETECTOR FINDS ALONG THE LITTLE BRICKHILL BY-PASS.

A total of seventy-one finds, recovered during construction of the by-pass, were submitted by licensed metal detectorists. Thirty finds were numbered and their find locations marked on a 1:2,500 map of the area (filed with the site documentation). No additional archaeological features were noted.

The following finds were submitted to Bucks County Museum:

Twenty-two coins, of which at least thirteen are Roman; three medieval (Edward I?) pennies; a seventeenth-century coin/trade token; single sherd of decorated samian; a possible ingot of debased silver; small flat enamelled disc brooch of the second century (see Crummy 1981, type 252, no.80); gilded copper alloy mount (see Mynard 1987, fig.44, no. 105); a copper belt fitting; a silver/lead alloy vessel leg; a copper rowel-spur; one ampulla; one bell centre; 39 miscellaneous or unidentified objects of brass, copper alloy and lead. As these finds are all unstratified and are of minimal intrinsic interest they are not discussed further here.

## OBJECTS OF LEAD

by J. Lawson

Twenty-two lead objects were recorded, of which sixteen were recovered from stratified contexts. Most of the pieces were unidentifiable, possibly the waste products from lead-working (Fig.22 no.12). The few identifiable objects are illustrated.

12. Sub-triangular block of waste metal with slashed and irregular surfaces. Greatest dimensions 49mm x 51mm x 6mm. Uncertain date. *SF 1038, furrow 233 (unstratified).*
13. Weight or spindle-whorl. Flat, approximately circular perforated disc. Diam 23.8-27.3mm, diam of perforation 5.3mm, thickness 5.4mm. Weight 20g. Uncertain date. *SF 1077, unstratified.*
14. Weight. Small, flat, approximately circular perforated disc. Diam 14.2-15.2mm, diam of perforation 2.3mm, thickness 3.7mm. Weight 4g. Uncertain date. *SF 1116, context 256.*
15. Rivet. Flat sub-circular head; rectangular shaft sec-

tion. Diameter head 22mm, dimensions of shaft 15mm x 5mm x 7mm. Uncertain date. *SF 1031, unstratified.*

Another item (not illustrated) consisted of a roughly circular disc with eccentrically positioned perforation. The edges have been bent, making the original shape difficult to reconstruct, but it may well have been a weight or spindle-whorl. Diam approx 30mm, diam of perforation 7-8mm, thickness c7.4mm. Weight 32g. *SF1037, context 229 (unstratified).*

## OBJECTS OF IRON

by J. Lawson

The number of identifiable iron objects is limited; of the sixty-eight heavily corroded objects, thirty nails were identified whose shape and size varies little. Their length falls roughly between 50-60mm and their square-sectioned shafts are usually 8-13mm thick. None has been illustrated. Two pegs, two heavily eroded blades and one post-Roman horseshoe were also identified. With the exception of ten objects all were excavated from stratified contexts.

Although iron-working was recorded by D. Neal in a different area of the town, there is no evidence to suggest that such activity took place here. Neither the twenty small pieces of iron slag nor the small number of sherds with surface accretions of what appeared to be iron oxide or hammerscale were excavated from contexts of an obviously industrial nature.

## Fig 22

16. Blade with slightly offset tang. 120mm x 35mm x 4mm. Phase 1 context (late first to mid second century). *SF 1118, context 415.*
17. Blade. Broken tip and tang. 145mm x 42mm x 8mm. Phase 2 or 3a context (late second to mid third or late third to early fourth century). *SF 1043, context 615.*

## WORKED BONE

by J. Lawson

## Fig 22

18. A wedge-shaped object of dense bone, sawn flat on one side and trimmed to a wedge on the other. Lateral surfaces polished. Sub-rectangular in sec-

tion. Broken at thicker end. Similar objects have been discussed by Crummy (1983, 150-152), who suggests the possibility that they were wedges used to break up long bones in order to provide splinters, which might then have been used for the manufacture of pins. Length 35mm, section 6mm x 8mm. Phase 3b context (fourth century; the Colchester examples were also dated to the fourth century, *ibid.*, 2-3). *SF 1081, context 197.*

19. Pin with plain slightly tapering shaft and two transverse grooves beneath a conical head. Tip broken off. 68mm x 4mm. Phase 1 context (late first to mid second century; dated to pre c. A.D. 200 at Colchester, Crummy 1983, 21). *SF 1120, context 415.*

## WORKED SHALE

by J Lawson

### Fig 22

20. Fragment of shale armlet. Revelled inner face, outer surface stepped giving ridged effect. Internal diameter approx. 60-70mm; D-shaped section, approx. 6mm x 7mm. Phase 3a context (late third/fourth century). *SF 1190, context 504.*

## OTHER OBJECTS OF STONE

by P Woodfield

### (A) Milling stones (not illustrated)

(Context 200, unstratified): piece of a runner stone 50mm thick with distinct downturned margin. Dia 525-600mm. Forest of Dean type gritty sandstone.

Context 428: fragment. Dia not ascertained. 58mm thick with upper surface worn smooth, underside pitched, but with a slot 35mm x 50mm, some 15mm deep cut into what appears to be the perimeter. This cannot, from its position, be the purchase for a mill rynd, and it seems probably it is part of a simple device for locking the bedstone into position.

### (B) Masonry

(Context 331) Piece of greensand building stone. Dimensions: 250 x 145 x 70mm. A c55° chamfer extends for almost half the length and full thickness. The 'top' appears to be lightly pecked, though uneven. The edge not chamfered has a very coarse lime putty mortar which spreads some 40mm up the under side. There are many ways in which such a piece of masonry could be used. In view of the extent of the mortar it is unlikely that it was an obtuse angle quoin, and possible that it was used for instance as a bedded stone-on-edge coping for a dry stone wall.

## GLASS

by D. Allen

Fragments from five Roman glass vessels were found, all of them blue-green in colour. Three are illustrated (Fig.23). Two are from mould-blown prismatic bottles, commonly used as containers during the first two centuries AD. Their body shapes may have been square, hexagonal, rectangular or octagonal, but the square was the commonest and longest-lived variant.

21. Base fragment of a blue-green bottle, probably square. Part of moulded basal design extant: perhaps a circle surrounded by a square. Dimensions of vessel indeterminable. *SF 1180; Context 615.*

Basal trade-marks occur in a very wide variety of designs. A square surrounding one or more circles is fairly common, as at Verulamium (Charlesworth 1972, 200, no8, Fig.75; i9).

22. Body fragment of a prismatic bottle of blue-green glass. *SF 1154; Context 406* (not illustrated)

There are two vessel bases, one of a globular vessel with simple flattened base, with a very faint pontil mark on the central underside. The other has a tubular base-ring, formed by making a fold on the lower vessel wall. Again there is a central pontil mark. Both base forms were commonly used on a wide variety of vessels, and are therefore insufficiently diagnostic to determine form or date.

23. Base fragment of a globular or bulbous vessel of blue-green glass; several bubbles within the metal. Base slightly flattened and thickened, with faint pontil marks on underside. *SF 1126; Context 526.*
24. Base fragment, and two separate wall fragments, of a vessel of blue-green glass. Pushed-in tubular base-ring, centre base rises to low point with pontil mark on underside. Diameter of base-ring 41mm. *SF 1181; Context 615*

The fifth fragment is an indeterminate body or base fragment, but is worthy of note because of its extremely poor quality, being full of large and small bubbles and other impurities. Such low-grade vessels do occur quite regularly, and whilst it is tempting to explain them as products of local manufacture, this is by no means proven.

25. Indeterminate body fragment of thin blue-green glass, full of bubbles and black specks. *SF 1127; Context 415.* (not illustrated)

# A SUMMARY REPORT ON THE ANIMAL BONE

by A. Locker

A small quantity of animal bone (1454 fragments) was collected, ranging in date from the late first to the fourth centuries. This was given a summary examination and specifically identifiable fragments were recorded. Some measurements were taken and any evidence of butchery, ageing etc. recorded.

The following species were identified: horse (*Equus* sp. domestic), ox (*Bos* sp. domestic), sheep (*Ovis* sp. domestic), pig (*Sus* sp. domestic), dog (*Canis* sp. domestic) and domestic fowl (*Gallus* sp. domestic).

Over half the bones came from phase 1, but from a large number of contexts which often contained very little bone individually, as is shown below:

Phase	No of bones	No of contexts
1	717	46
2	222	17
3a	193	9
3b	103	6
3	19	3
4	200	4

The later phases tend to have larger groups of bone from fewer contexts, although the quantities were still too small for more than generalised remarks.

The largest groups of animal bones were found in ditch and pit fills. Ox or ox-sized fragments occurred in most contexts and were dominant throughout the deposits. The sample was too small for comparison between phases, but some contexts showed particular concentrations of body parts, or an articulating joint. In 267, a pit fill from phase 2, the distal end of a tibia and the astragalus articulated, indicating a joint, the right hock. A pair of horn cores were found in 331, phase 3a, and from 415, phase 1 came a small collection of cattle waste from the extremities of the body. This waste material

Fig. 23: Vessel glass, 21 (upper), 22 (lower) (1:1).

consisted of four horncores, four mandible fragments and four phalanges which would not have provided any meat. These contrast with the chopped rib sections and remains of joints found elsewhere. Those humerus fragments that had shafts often showed evidence of knife cuts. The cattle were adult or maturing adults, judging from epiphyseal fusion and tooth eruption. No juveniles were identified. Although the cattle bone was largely broken or chopped, a few complete bones permitted estimation of withers heights:

Phase	Context	Withers = cms	
3a	331	119.0	Metacarpal
3	333	109.0	Tibia
4	428	117.0	Metatarsal
4	428	111.0	Tibia

(After Fock 1966 and Matolsci 1970)

These are within the range of sizes estimated from earlier excavations, but the sample is too small to suggest whether it is significant that these complete bones are only available from the later periods.

Fragments of horse bones occur relatively frequently at this site, as seen in previous excavations at Magiovinium, and this sample is no exception. A total of 64 fragments of horse were specifically identified from 23 contexts of all periods. Sometimes only loose teeth were present, but complete long bones allowed some estimation of withers heights:

Phase	Context	Withers = cm	
1	217 221.0mm	142.0	Metacarpal
1	415 246.0mm	131.0	Metatarsal
2	236 354.0mm	154.0	Tibia
3a	602 278.0mm	148.0	Metatarsal
3a	202 256.0mm	136.0	Metatarsal
3a	331 350.0mm	153.0	Tibia
3a	331 300.0mm	146.0	Humerus
4	428 364.0mm	159.0	Tibia1

(after Kiesewalter 1974)

The range is within that found for the previously examined material (Locker in Neal 1987, pp 108 – 115), and the same caution needs to be applied to the estimation of withers heights as for the cattle bones.

No butchery marks were observed on horse bones. There was some ageing evidence from the teeth; many loose incisors retained the open infundibulum which seems to start to disappear by the time the animal is about eight years old, so these horses did not die of old age. Indeed none of the teeth showed excessive wear.

Sheep were specifically identified from 23 contexts, and certainly can be considered to have had a relatively minor role in meat production compared to cattle. All parts of the skeleton were represented in low numbers. Two complete metacarpals gave withers heights as follows:

Phase 1	Context 234	66.0 cms
Phase 4	Context 428	60.0 cms

(after Teichert 1975)

Only five pig bones were identified from four contexts, spanning phase 1, 2, 3 and 4.

The pit 234 in phase 1 contained the skeleton of a dog which had an estimated shoulder height of 44 cms (after Harcourt 1974) and was a mature slender animal. Another dog maxilla was identified from 217, a phase 1 boundary ditch fill.

A domestic fowl coracoid was identified from 603, a boundary ditch from phase 3a.

### Conclusion

The sample was dominated by cattle remains, representing both butchered waste and parts of the extremities bearing little meat. There was some burnt bone, mainly cattle, (e.g. pit 511 in phase 1). There is a relatively high quantity of horse bones which has also been observed in the bone from previous excavations here. Sheep and pig are relatively unimportant.



this individual is at the younger end of the 35–45 age range.

None of the ribs or vertebral centra were present and only part of the limb bones: proximal ends and part of the shaft of the right radius and ulna, and fragments of tibia shaft, astragali and one calcaneum. Except for one first phalanx the hands and feet were absent.

The fragmentary nature of the skeleton made sexing and more accurate ageing impossible.

From feature 435 a fragment of human tibia shaft was found amongst the animal bone.

The skeletal remains from the Fenny Stratford bypass watching brief have not been further studied.

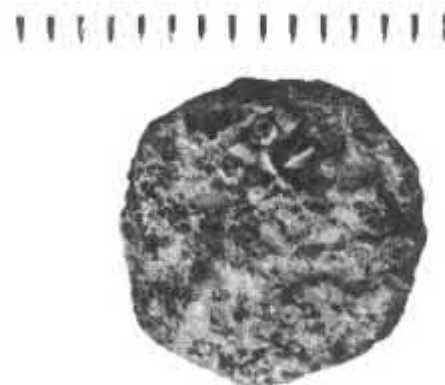


Fig. 24: Magiovinium: Series N Sceatta, 4 × scale.

## DISCUSSION

The location of Magiovinium in the Fenny Stratford area was first suggested by Horsley in the eighteenth century; by the mid-nineteenth century the position of the site had been firmly identified as Dropshort Farm, and by the end of the century the northern defences of the "station" had been recognised and profuse quantities of material discovered. Several excavations have been carried out this century which vary in extent and quality, the most recent work having been undertaken in advance of road construction. The early work has been briefly reviewed in the publication of David Neal's 1978–80 excavations (Neal 1987) which also includes a comprehensive bibliography prepared by Andrew Pike.

## *The Human Skeleton from Context 632* by A. Locker.

This skeleton was heavily fragmented and incomplete. The skull was broken into many pieces and the teeth were very worn, suggesting a mature adult. Using the state of molar attrition devised by Brothwell (in Hillson 1986, 197) it is suggested that

Considering the long history of investigations at Magiovinium, it is surprising that it has had so little in the way of impact upon the study of Romano-British "Small Towns", failing to feature in Rodwell and Rowley's collection of papers (1975), in Burnham's discussion of "small town" morphology (1987) or in Burnham and Wachter's recent (1990) important study. It is briefly noted in Cleary's (1987) account of extra-mural areas of



Romano-British towns, and Smith's (1987) discussion of roadside settlements.

The negligible impact that the site has had upon small town studies may be due in part to there having been far fewer investigations carried out within the walled town than in the extra-mural area. Nevertheless, activity in the extra-mural area cannot have been entirely unrelated to what went on within the walls, and it is possible to draw some conclusions as to the town's form and function, as well as to indicate general phases of activity.

In the discussion which accompanies his excavation report, Neal identifies seven phases which are summarised here:

- 1 Pre-conquest field system aligned exclusively east-west.
- 2 Construction of fort south of Watling Street (which itself seems to have originally been on a different line). The alignment of the fort may possibly have been dictated by the layout of the pre-existing field systems. The fort had fallen out of use by the Flavian period.
- 3 c70 AD. Re-alignment of Watling Street and cutting of road ditches.
- 4 A new field system is laid out, the boundaries of which are not precisely orientated along the new line of Watling Street, but which are possibly aligned with a (hypothetical) spur road leading to the fort. The system of ditched enclosures was shown to extend for over 500m to the east of what was to become the walled area of Magiovinium; some of these allotments contained the remains of the foundations of circular buildings, which continued in use until the late second century.
- 5 Around the Antonine period, the road ditches become filled in, and industrial activities take place.
- 6 There is a general clearance of the extra-mural area in the late second or early third century, after which new buildings eventually appear and further industrial activity takes place. It is suggested that large scale levelling operations

may be related to the provision of town defences at Magiovinium. Some form of official *fiat* may have effected the removal/rationalisation of the ribbon development and the removal of the external residents to within the new walls. After a period of inactivity the allotments are re-used, their ditches being re-cut and a series of access tracks from Watling Street inserted. Spreads of scorched clay point to the continuance of industrial activity.

- 7 Eventually some plots are abandoned and some parts of the extra-mural area are used as a cemetery. The coin series indicates that activity continued until the end of the fourth century.

A corner of the area of the presumed fort was examined in 1976 (Woodfield 1977). The dating of the assemblage of finds from this investigation to the Neronian period may indicate that the fort was associated with the tightening of military control following the revolt of Boudicca, although it is possible that the site was originally used to control the bridgehead on the advance route of Legio XIV. The fort was disused by the Flavian period and its ditches backfilled.

The evidence for the fort is not however entirely conclusive, as its excavator admits. A major difficulty is that David Neal, despite investigating an area on the line of the presumed defences, found no further evidence for either bank or ditch; however the circumstances of that investigation were difficult and not necessarily conducive to the detection of earlier features, whilst the opportunities for detailed recording during construction of the Fenny Stratford Bypass were severely restricted. The finds are similarly unhelpful; the presence of a single item of military hardware (the possible chape, described above), if indeed it is military, does not itself provide positive proof of a military presence at Magiovinium. Some of the items discovered during David Neal's work seem to have military associations (G Webster, *in litt*; the items as numbered in Angela Wardle's account of the copper-alloy objects are 31, 36, 46, 53, and 54; Neal 1987, 44-50), although none of the mounts and fittings need necessarily denote a military context here. The question of the fort is thus probably best left open at present. It has been suggested that the settlement at



Saffron Gardens was abandoned at about this time (Waugh, Mynard and Cain 1974), perhaps because its inhabitants were attracted by the economic opportunities presented by the fort, but explanation of the settlement's origin as a vicus outside a fort must remain a hypothesis.

It is however clearly the road, rather than any fort, which proved to be the more important influence upon the settlement's form and function.

Of particular interest in this respect is the extramural area. During the earliest phases, before the construction of the urban defences had emphasised the distinction between "inside" and "outside", the contrasts between what was to become the walled area and what was to become the extramural suburb may not necessarily have been especially marked. The walled area, however, seems to have included the junction of Watling St with the road to Harrold (exposed in Neal's site 18) and the defences probably envelop the area where the greatest concentration of commercial activity took place.

Whilst Neal connects a late second or early third-century clearance with construction of the town defences, it must be emphasised that the dating of the defences to this period is unproven. Certainly the defences of many urban centres were provided at this period, including those at Lactodorum (Towcester), which are dated to around AD 170 (Brown and Alexander 1982, 56; Woodfield 1992), but this does not prove that this was the case at Magiovinium. The question of the date at which defences were provided, and the reasons for their construction, are general problems in Romano-British urban studies (Frere 1984; Jones 1987, 87-90). The evidence for unrest in the late Antonine period in the wider locality of Magiovinium has recently been summarised (Woodfield and Johnson 1989, 264), and the possibility that defences were added at this period must be regarded as a high possibility.

The indications, then, are that Watling Street acted as a focus of activity and that this explains the essentially linear nature of Magiovinium. It is unlikely that commercial activity was restricted to the walled core of the settlement. Even the legal proscriptions of certain activities within towns (eg

smithing) may have been more evident in the breach than the observance. At Carmarthen, for example, there is widespread evidence for iron-smithing within the town walls (James 1990). The crossing of the Ouzel, although outside the walled area, may also have been a significant area of activity, and this is reinforced by the material excavated next to the river at the "Bathing Station Site" (Kettle 1957; Pengelly 1964).

The layout of the land allotments suggests that development along Watling Street was not a piecemeal affair. Certainly the plan of the Magiovinium allotments appears more regular than those at Towcester where the boundaries, although generally consistent in overall orientation, and apparently utilising a module width of around 19m, may be associated with a villa estate rather than the town itself (Brown, Woodfield and Mynard 1983). There is insufficient regularity in the widths of the Magiovinium plots to allow us to be absolutely certain that a standard measuring unit had been used in their layout. "Local" units could differ quite markedly from the notionally standard *pes Drusianus* (if indeed the *pes Drusianus* was ever used in Britain; see Duncan-Jones 1980; Millet 1982) or *pes Monetalis* (Grenier 1958); however, as Neal has noted (1987, 9), many of the plot widths conform to a "single" (16 to 20m wide) or "double" (33 to 39m wide) module, and the same degree of regularity is maintained across the area under consideration in this report. The "double" module width would correspond to 1 *actus*, or 120 pM (for a consideration of the metrology of property boundaries see Walthew 1978). There are also instances where a width of  $\frac{1}{4}$  *actus* (such as plots 28 and 29) or  $1\frac{1}{2}$  *actus* (such as the plot 31/32 before its fission into two plots) seems to have been used; units of  $\frac{3}{4}$  *actus* occur elsewhere amongst the urban plans of Roman Britain (Walthew *op cit*).

Neal also suggests the existence of three parallel primary ditches controlling this co-axial system, such that the two outermost ditches lay at about 108m (which is approximately 360 pM, or 3 *actus*) either side of a central ditch (Neal 1987, 9). It should however be remembered that whilst the position of the central ditch is reasonably secure, the extent and precise alignment of the two outer ditches are far from certain. Inspection of Neal's plan shows a further point of interest: that at the western end of

his excavation one of the east-west ditches lies exactly halfway between the central axis and the northern edge of the system (ie 54m or about 180',  $1\frac{1}{2}$  *actus*). Interestingly it is this "halfway" ditch, rather than the outer ditch, which seems to have influenced the location of some of Magiovinium's cemeteries (see below).

The frequent recutting of ditches resulted in a number of the boundaries shifting their position, sometimes by as much as several metres. In some instances the repositioning of the ditches may have been undertaken solely in order to be able to dig through firmer ground, and the effect is one of gradual shift. However in other instances (eg the boundaries between 27 and 28, and 28 and 29) the displacement is sufficiently large to suggest the adoption of a new line, perhaps after a particular boundary had fallen temporarily into disuse. In these cases existing elements of the ditch system may have acted as a template in such a way as to ensure that so long as a standard unit (or a near approximation of it) was used the "new" boundary would be close to its precursor. Some boundaries seem to have been more prone to repositioning than others, but it is not possible to determine on the basis of metrology the sequence in which the elements of the allotment layout were executed on the ground.

The evidence therefore points towards a degree of planning which seems to have been based on units derived from an *actus* of 120 pM, and that the system may have incorporated units of  $\frac{3}{4}$ ,  $1\frac{1}{2}$  and 3 *actus*, but it is hard to be any more specific about the matter.

The investigations described in this report suggest that some modifications to Neal's plan may be in order, in that certain extensions of property boundary ditches which are postulated on his figure 3 were found to be absent within the area of the most recent excavations (cf our figure 4).

In addition, the excavations presently under consideration produced relatively little data for the programme of removal of buildings and subsequent levelling with sand which is attested by Neal (Neal 1987, 18), except perhaps in the area of trenches 3 and 4.

It is not possible to relate the pottery to particular phases of ditch cutting/recutting with any ease. Residual pottery is clearly a problem on a site of this nature. Observations in the field suggest that it is likely that ditch silts would have accumulated rapidly; there are therefore likely to have been many more recuts than could actually be detected within what were, for the most part, relatively uniform fills. In certain instances recuts had evidently been dug fractionally to one side of earlier cuts, and these instances are noted above, but in general the data does not permit any analysis more complex than the observation that most of the ditches appear to have been in use throughout most of the settlement's existence. There are, however, a number of features dating to the late first or early second centuries that are subsequently replaced by ditches which are parallel but a little distant to one side. These features are almost all narrower than the ditches which replaced them. The replacement ditches seem to have been open for a longer period of time, and are larger than the earlier ditches because they were prone to gradual enlargement as they were recut. There are suggestions too that some of the ditches were open after others had been abandoned, and one ditch (427) may well have been a later, fourth-century, imposition upon the layout of boundaries (see above, p.13). There is, however, little to confirm any expansion or subsequent contraction of activity along Watling Street. Although there is possibly a concentration of material from the mid to late fourth century in the eastern part of Trench 1, there is also a group of late first to early second-century features in the same area, some considerable distance from what was to become the walled area. This spread of material extends at least as far as trench 4 to the east, but large areas of the front-ages along Watling Street remain unsampled and it is not possible to determine the full extent of activity to the east of the walled area within any particular period of time.

It is difficult, if we accept Neal's phasing, to believe that this co-axial plan was laid out after the re-alignment of Watling Street. The road towards the fort which Neal cites as a primary element in the layout is purely hypothetical (as is its alignment, which would clearly have to have been appreciably different from that of the supposed fort) and it seems implausible that a major landscape feature such as Watling Street would have had less influ-

ence on subsequent topography than a minor road whose usefulness would probably have ended with the slighting of the supposed fort.

The 1990 investigations on the Fenny Stratford bypass revealed the presence of another cemetery. This area had, however, been severely disturbed by the contractor's operations. Orientation, where this could be determined, was north-south, whilst the only dateable finds associated with the cemetery were third or fourth century. The full extent of the cemetery is of course unknown. It appeared, however, that the inhumations were situated to the south of the area of regular land allotments. The relationship between cemetery location and settlement boundaries is of some interest at Magiovinium. It is accepted that cemeteries were normally situated outside settlements, as the dead were seen as a source of pollution, but exceptions do occur, of which infant burials are the most commonly encountered. At Magiovinium, finds of burials in the late 1950s at the Bathing Station site (Tapper 1955) were evidently cut through the floors of Roman buildings, apparently during the third or fourth century. Casual discoveries made in 1993 (Farley 1993) are probably associated with this group. David Neal's work produced evidence for several cemeteries. Site 17 Area 1 contained a cremation cemetery of the Antonine period which continued in use until probably the late fourth century, with the funerary rite changing to inhumation. The available evidence, including two radiocarbon dates ( $1660 \pm 80$  bp [Har 2935],  $1550 \pm 90$  bp [Har 3174]; no calibration is published (Neal 1987, 22)), suggests that the inhumations had a north-south orientation in the late third and early fourth centuries (and are thus probably contemporary with the similarly orientated Fenny Stratford bypass inhumations) and an east-west orientation by the late fourth century. This cemetery was some 60m north of Watling Street and within the area of regular enclosures.

Another cemetery, also containing both cremations (fourteen) and inhumations (eight), was situated in Neal's Site 17 Area 2. This was also 60m from Watling Street, although immediately outside one of the main east-west ditches which, it is suggested above, was exactly halfway (11/2 actus) between the central axis of the enclosure system (along Watling Street) and its northern edge.

Neal also recovered evidence for six smaller cemetery groups. The first of these was a rectangular mortuary enclosure containing a cremation (undated, but reminiscent of the late Iron Age square barrows of Northern England) and with a secondary inhumation of probable fourth-century date. This was situated some 100m north of Watling Street, but its relation to the settlement limits was difficult to determine. The second was a group of infant burials in the upper part of the ditch flanking Watling Street. The other four were distinct cremation groups ranging in size from a single individual to eleven cremations. They were situated at distances of 60m or more beyond the edge of the main road leading north from Magiovinium. The dates for these, where available, ranged from the Flavian to Antonine periods. Neal suggests that these were family groups interred to the rear of individual allotments.

To summarise: the evidence from Magiovinium points towards the existence of several small cemeteries, some of which were "informal" family groups buried beyond the plots of land fronting Watling Street and the other main roads, rather than in large public cemeteries. Burial does not always, however, seem to have taken place outside the limits of the town as defined by the furthest extent of the various property boundaries.

The presence of other features in the same general area as the Fenny Stratford bypass inhumations, south of the town, was also noted. Unfortunately, the circumstances under which they were recorded and the area available for investigation were not such as to lend themselves to any satisfactory analysis of the relationship between the inhumations and the other features, which would have helped to shed light upon the question of the physical limits of Magiovinium.

The 1991 excavations produced indirect suggestions about the nature and date of activity elsewhere at Magiovinium. Mrs Woodfield notes earlier in this report the relatively high incidence of tile debris, deriving from presumably substantial buildings, in contexts dated to ceramic phases 3a and 4. She suggests that the phase 3a material represents a general refurbishment following a mid third-century "recession" (for which the evidence is regional rather than specifically local), whilst the phase 4

material is associated with Magiovinium's terminal decline.

The artefact assemblage does not add significantly to the socio-economic pattern adduced by Neal. Urban sites, like their rural counterparts, exhibit a wide spectrum of wealth and status; the evidence from Magiovinium does little to indicate that the settlement was located very far from the "poor" end of the spectrum, but this is of course a twentieth-century judgement, and moreover one based on what may well be an unrepresentative sample of the settlement.

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