Romano-British Occupation on Puddlehill, near Dunstable

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SUMMARY

The chalk ridge N of Dunstable called Puddlehill, part of the Chiltern Hills, was occupied intermittently by farming communities from the late Neolithic period to the 7th century AD.

The successors of the late pre-Roman Iron Age community appear to have continued to live there during the period of the Roman Conquest, and of the construction of Watling Street over the hill, through the area of occupation. A large fire on the summit may have been lit as a beacon to assist surveyors sighting the alignment of the road.

Occupation during the 1st and 2nd centuries AD was in two separate areas, in both of which there had been late Iron Age activity, and small dwellings were identified, as well as 'corn-driers', an oven and enclosure ditches.

Wheel ruts crossing the hill E-W contained Romano-British debris and 12 coins of the 3rd and 4th centuries. This road may have been an alternative route for the Icknield Way at that period.

INTRODUCTION

The sites described in this report were destroyed by chalk quarrying between 1951 and 1965. The excavation and recording of the archaeological remains were carried out with the kind permission and co-operation of the Associated Portland Cement Co, by the Manshead Archaeological Society of Dunstable as a rescue operation under the direction of C L Matthews.

The prehistoric remains were reported in Occupation Sites on a Chiltern Ridge Part 1 (Matthews, 1976). It was originally intended that the Romano-British and Anglo-Saxon occupation should be published together as Part 2 of this report. In the event the later period was published in Anglo-Saxon Studies (Matthews & Hawkes, 1985), leaving the Romano-British period to wait for a suitable opportunity, which has now presented itself in Bedfordshire Archaeology.

The present writer has compiled this report from field notes (some nearly forty years old) and a half-completed first draft by the late C L Matthews. Any mistakes, anomalies or omissions that may

have occurred must be attributed to the present writer and not to C L Matthews.

Roman Site 2 lies in an area rich in remains of earlier occupation (Matthews, 1976), while Roman Site 1 is in close proximity to both late Iron Age and Saxon features. This report, therefore, is the missing link between purely archaeological information and history, when we can begin to relate the physical evidence to recorded events.

PUDDLEHILL AND THE ROMAN CONQUEST

Puddlehill, 2 km N of Dunstable, is crossed by the Watling Street, which today passes through a cutting made in the hill in 1837 to speed the horse-coach traffic.

The modern road follows very closely the course of the original Roman road and recent work in the cutting has shown two gravel spreads in the bank, one 60 cm above the other, which are probably metalling of the Roman road and the 18th century coach road which passed over the hill.

On the hilltop, only a few metres from the Roman Watling Street, was a 'Belgic' homestead which was probably still occupied at the time of the Claudian invasion of AD 43 (Matthews, 1976).

Very soon after the invasion, the pre-Roman settlement of Verlam 20 km to the S, came under the control of the occupying forces with the construction of a fort by the river Ver. Excavations there have indicated that the transition to Roman rule was peaceful and have shown that shortly after AD 43 the Roman Watling Street was being constructed (Frere, 1972). The 'Belgic' stock-raisers and farmers of Puddlehill must therefore have soon experienced the shock of Roman troops and the upheaval of road-builders passing through their farms. If this caused them to abandon their farms it was only a temporary break, for occupation was continued on exactly the same two sites, but the new regime brought dramatic changes to the way of life for the farmer. New techniques in house building, pottery manufacture, the need to grow more corn and to dry it (probably to pay taxes) were to provide a different ground plan for the archaeologist to uncover.

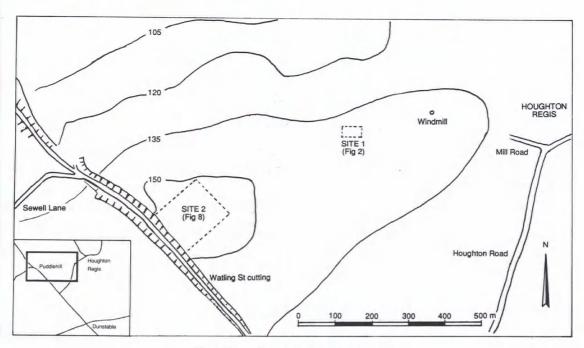


Fig 1 Location and general area map.

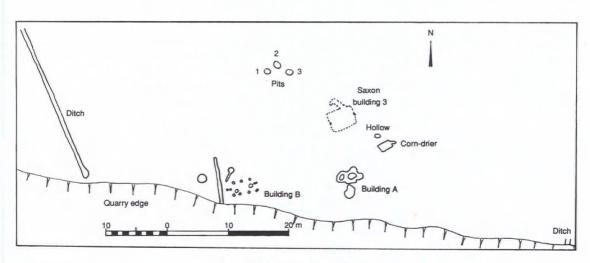


Fig 2 Plan, Roman Site 1.

THE EXCAVATIONS

Two areas of Romano-British occupation were identified. Buildings on site 1 are identified by letters, those on site 2 by numbers, to conform with the original field notes.

ROMAN SITE 1 (TL 009237) Fig 2

Site 1 lay 650 m NE of the highest point of the Watling Street cutting as it exists today on a line between there and a windmill stump which is still extant up Mill Road, Houghton Regis. It comprised two buildings (A and B), associated hollows and ditches, and a corn-drier. This first site was and is probably more extensive but the chalk quarrying had removed a lot of the hill to the S before archaeological excavation began and with the ending of chalk winning in the area the rescue excavation was halted. The site is in very close proximity to a series of late Iron Age ditches (Matthews, 1976 p176) and also a later Saxon site (Matthews and Hawkes, 1985; see particularly Figs 1 and 2).

Roman Building A

This was a 1st to 2nd century structure which survived only as a number of hollows worn in the natural chalk. It has been suggested on the grounds of the lack of specific structural remains i.e. post holes or sleeper beam trenches that this was not a structure at all, just an area of hollows. However, the reader is referred to building 2 on the second site (see below) which was only recognised as having existed by the concentration of pottery and a fortunate circumstance. The concentration of pottery was evident here also and the hollows appear to have originated through wear rather than as deliberately dug features. To focus the frequency and amount of wear required to create such hollows in a very small area of an otherwise open space, factors limiting and concentrating movement must have been involved. Walls, however flimsy, are the most likely explanation. Sleeper beams let only into the topsoil, would after centuries of worm action and later ploughing, leave no trace. The density of personal items should also be noted.

The pottery which is identical in character to that from the beacon fire (see below), includes sherds from poppy beakers and Nene Valley wares plus a few fragments of Samian. A large quantity of shell-gritted material was also found, in particular 2 large storage jars.

A number of the small finds (included in Fig 7) from the building such as the toilet set, brooch,

bangle and the flat stone which together with the longer copper alloy rod may have formed a cosmetic palette and pestle suggest habitation by a woman. This 'hut', like building B below, is perhaps rather small for year round occupation but would be quite adequate for seasonal use. Intermittent use might explain why so much pottery accumulated, possibly over a long period with nobody bothering to tidy these occasional shelters.

Building A may be the accommodation set aside for a female worker who did the cooking for the field hands and who filled in any spare time with a little weaving, using the double-ended bone pins found here, assuming, that is, neither was a hair ornament.

No coins were discovered in the hut itself, but 3 coins (see coins from ruts) of the mid-fourth century together with the remains of 4 or 5 late-Roman (shell-gritted) pots were found in the overlying stratum.

Roman Building B

This structure lay 17 m W of building A and appears to date to a similar period: 1st to 2nd century. It was a post-built structure with the long axis oriented almost E-W (Fig 3). Six post holes, (3 on the N side, 3 on the S) indicate the main structure was slightly rhomboidal and measured approximately 2.5 m x 3 m. The S wall was extended a further 1.3 m to the E by a double post hole paired with another double post hole halfway across the E end. These would seem to represent a porched entrance facing away from the prevailing wind.

Two small circular pits were found within the area of the building but may be of a different date. They were both very shallow: one was dug 28 cm into the natural chalk, the other only 13 cm. The deeper (see inset section A-A in Fig 3) was filled with ash and dark loam suggesting a fire place. However, unless it was sited to take advantage of ventilation afforded by the entrance, its position would seem somewhat inconvenient, if contemporary.

If, as the amount of pottery found indicates, it was a dwelling, like building A it was the meanest of hovels, and likewise perhaps just a shelter for the use of field hands as occasion required.

The building contained 139 identifiable rims. These include 17 plain jars, 44 cooking pots (10 with recessed rims), a flagon, 3 bowls, 4 mortaria, 4 storage jars, 14 dishes and a beaker. In addition there are bases and body sherds of Samian, poppy beaker, a grey ware with traces of paint and one amphora.

The only notable small find was a lead plug (Fig 7

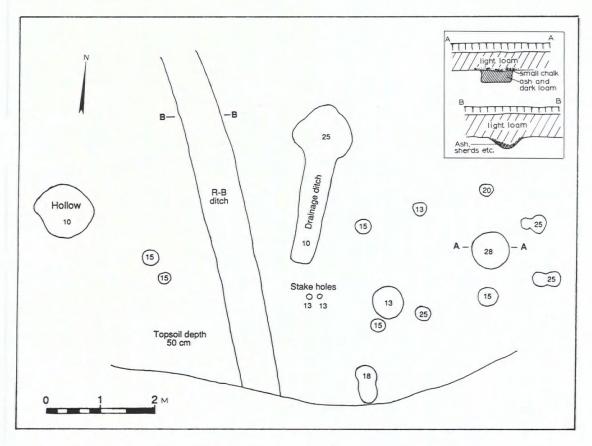


Fig 3 Plan, Building B. Numbers are depths below natural in cm.

no. 44), perhaps used to seal a knot-hole in a wooden bucket.

The Corn-drier

This was of the same order of size as those on site 2. Its only notable feature is that the stokehole or flue is at an angle to the NE side of the body. It was identified as Roman by the pottery.

The Pits

Various pits and hollows containing Roman material were discovered in the area. Some pottery from the cluster of pits to the N of building A is illustrated below. A rather curious 'tadpole-shaped' feature is shown next to building B. The 'tail' cut 10 cm into natural chalk runs into a pit (15 cm deeper) at one end. It looks as though it was meant to collect water but unless it was somehow gathered from the

roof of building B (possibly by gutters) there is no obvious source.

Pottery descriptions

Where applicable parallels are noted as follows: Ver - Verulamium (Frere, 1972, 1983 and 1984); Ox -Oxford Roman Pottery (Young, 1977); KHL - King Harry Lane (Stead and Rigby, 1989).

Fig 4 Building A and miscellaneous features

- 1 Flagon in a hard white ware. Note. The 'flange' is damaged. (Ver 401, AD 105-130). Building A.
- Bowl in fine white ware. Copy of Dr 37. (Ox W42.1, AD 150-300). Building A.
- 3 Bowl in coarse ware with shell grits. Fired brown/black. (Ver 327-30, AD 75-105). Building A.
- 4 Jar fired biscuit. Heavily shell-gritted, Building A.
- 5 Flagon in a hard sandy white ware. (Ver 567, AD 130-50). Corn-drier.
- 6 Hard grey ware. (Ver 285, AD 75-105). Corn-drier.
- 7 Bowl in orange sandy ware. Burnished. Corn-drier.
- 8 Red-grey vessel with grey core. Depression N of corn-drier.
- 9 As no. 25 (These pots are illustrated in the Verulamium

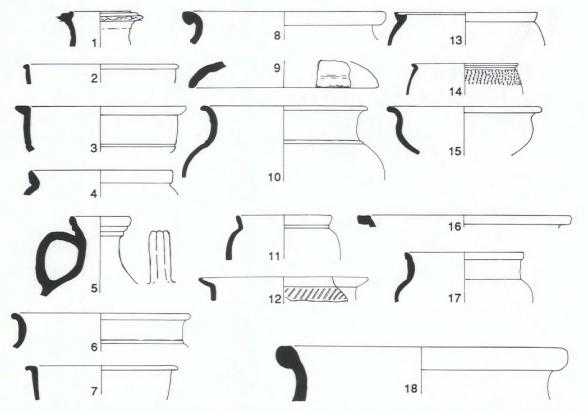


Fig 4 Site 1 pottery. Building A and miscellaneous features. Scale 1:4.

report as bowls). No. 9 was burnished on the inside which perhaps suggests that this was the use. However, the vessels are early and seem to be following the native tradition as lids. (Ver 22, AD 60-75). Pit 1.

10 Light blue-grey sandy ware with lighter core. (Ver 158, AD 60-75). Pit 1.

11 Hard sandy dark grey ware. Pit 1.

12 Red-grey vessel with grey core. Burnished decoration below rim. (Ver 35, AD 75-130). Pit 2.

- 13 Jar, heavily shell-gritted. Grey paste fired biscuit. Rim recessed for lid. Native ware. (Ver 81 (fabric) 82 (rim), AD 49-75). Pit 2.
- 14 Beaker in fine ware with band of rouletting on shoulder. Orange paste, with light brown slip. (Ver 423, AD 85-105). Ditch.
- 15 Bowl in grey sandy fabric, Fired black/buff. (Ver 319, AD 75-105). Ditch just W of building B.
- 16 Bowl in hard sandy grey ware. (Ver 337, AD 85-105). Ditch just W of building B.
- 17 Brown vessel in a sandy paste. Soft fabric similar to the native wares. Burnished. (Ver 49, AD 49-60). Building B (depression N of post holes).
- 18 Storage jar in a 'soapy' grog-tempered ware fired brown. Some sand also present in a dark grey paste. Building B (depression N of post holes).

Fig 5 Building B

19 Mortarium in buff sandy ware. Light brown/translucent grits.
20 Mortarium in hard, finely granulated pinkish-buff ware.
Sparse brown grits. (Ver 548, AD 90-135), probably made at Verulamium.

- 21 Dog dish, dark grey smooth paste. Burnished black.
- 22 Bowl in black sandy ware. Burnished on outside. Grey core.
 23 Bowl in fine white ware. Copy of Dr 37. (Ox W54.2, AD 100-300).
- 24 Bowl in fine white ware. (Ox W53.1, late 1st-early 2nd C).
- 25 Lid in coarse sandy ware. Fired black and red. Light grey core. (Ver 222, AD 60-75). See also no. 9.

26 Jar in a heavily shell-gritted fabric. Fired biscuit,

- 27 Coarse shell-gritted storage jar, fired brown on a grey core.
 28 Hard light grey sandy ware with rouletted pattern. (Ver 155, AD 60-75).
- 29 Butt beaker with zones of lattice pattern. Dark grey sandy ware. Coating of white paint on inside. (Ver 62, AD 60-75).
- 30 Jar, body sherd with stamped 'impressed line' lozenges. (Ver 822, AD 150-60).

31 Jar? Decorated body sherd.

- 32 Sherds in hard light grey ware with zones of deeply grooved stamped patterns.
- 33 Bowl fragments with reeded rims. Fired biscuit. (Ver 671, AD 130-50).

34 As no. 35. (Ver 121, AD 60-75; KHL Fig 76 no. 2).

35 Narrow-necked jar in fine sandy dark grey ware. At Ver occurs AD 60-130.

36 Jar in hard sandy ware. Red paste, fired grey-brown.

- 37 Poppy beaker in silver grey ware with lighter burnished slip. (Ver 598, AD 130-150).
- 38 Sandy ware fired black from grey paste. Fine combing on body of pot. (Ver 481, AD 105-115).
 39 Beaker, in a soapy fabric. Grey paste fired brown. Burnished.
- (Probably native ware.)
 40 Crudely made light grey ware. (Ver 297, AD 75-105).

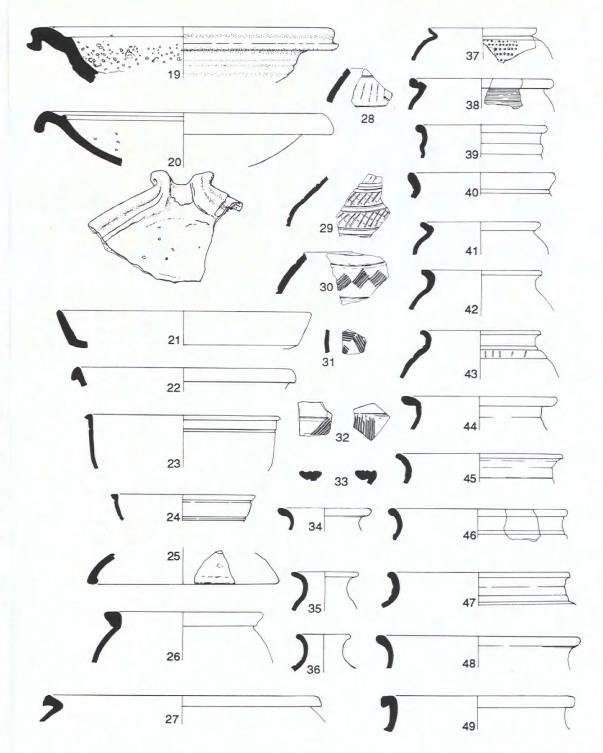


Fig 5 Site 1, pottery from Building B. Scale 1:4.

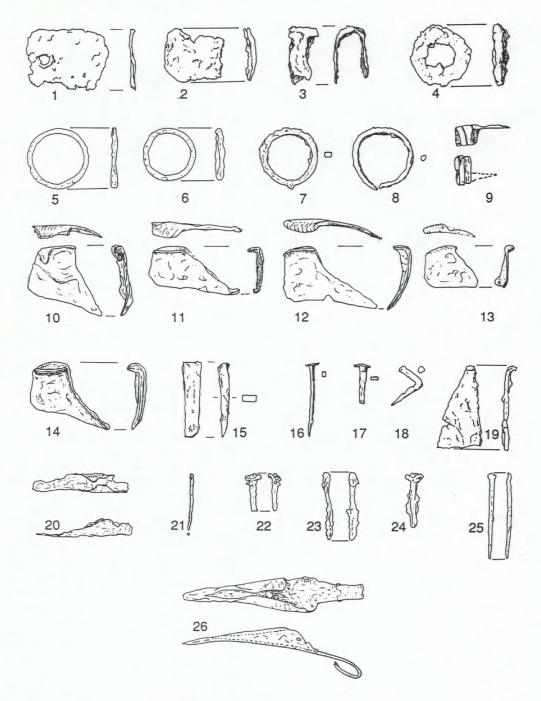


Fig 6 Sites 1 and 2, objects of iron. Scale 1:3.

41 Jar in coarse sandy ware fired dark grey on red sub-surface, grey core. (Ver 481, AD 105-130).

42 Coarsely granulated buff ware. (Ver 282, AD 90-105).

43 Jar in coarse dark grey ware with light grey core. Burnished vertical decoration. (Ver 269, AD 75-105).

44 Vessel with an orange paste and white slip.

45 Sandy ware fired black-brown. (Ver 276, AD 75-105).

46 Hard grey sandy ware. (Ver 451, AD 105-30).

- 47 Fabric as no. 40, unburnished. (Ver 449/55 (form), AD 105-30).
- 48 Fabric as no. 40, unburnished, (Ver 283 (form), AD 75-105),

49 Hard dark grey sandy ware. (Ver 648, AD 130-50).

Not illustrated: amphora (rim only). Dressel 20, in a hard very sandy orange fabric. (Ver 10, AD 105-30).

Objects of Iron (including those from site 2)

1 Flat sheet, roughly rectangular, 6.5 x 5 cm with a hole punched in the centre of one end. Building 1.

2 Flat sheet, roughly rectangular, 5 x 4.5 cm. Slightly curved in one plane. Building 1.

3 Flat sheet. Folded, making a staple-like object 5 cm high and 2 cm wide, Building 1,

4 Flat washer. External diameter 5 cm with a 2 cm hole. Building

5 Ring, 5 cm diameter, circular section. Building 1.

6 Ring, 4 cm diameter, circular section. Building 1.

7 Ring, 4.5 cm diameter, rectangular section. Building 1.

8 Ring, 5 cm diameter, penannular (through corrosion?) with circular section. Building 1.

9 Two ox-goads. Complete example 4,5 cm long, both Building 1. Two others from this building and one from Building A were also found.

10 to 14:

Tines (of a bed harrow?) Identification suggested by the present author, but thought by the excavator (C L Matthews) to be ploughshares. In Frere 1984 Fig 38 no. 24 and also in Neal, Wardle and Hunn 1990 Fig 133 nos. 483-4 similar objects are seen as wings of hipposandals. See fuller discussion under finds from Building 1 below.

10 (6 x 5 cm) Blade curved to right, flange also to right. Building

11 (7 x 3 cm) Blade straight, tip bent to right, flange to right. Building 1.

12 (7 x 4 cm) Blade curved to right, flange also to right. Building

13 (4 x 3 cm) Blade curved to right, flange to left, Building 1.

14 (6 x 5 cm) Blade curved to right, flange also to right. Building

15 Wedge, 6 cm long and 1.5 x 0.8 cm at the head. It has a rectangular section with a 'chisel' tip. Building 1.

16 Nail, 6 cm long with a small flat head, and nearly square section. Building 1.

17 Nail, 3 cm plus long with small flat head and a flat rectangular section. Building 1.

18 Nail, 5 cm long, bent, no head but widening slightly with squarish section. Building 1.

19 Flat sheet in the form of a right-angled triangle, 7 x 3.5 cm sides. The tip of the narrow angle is bent over. Building 1.

20 Winged socket. The size suggests an implement such as a pruning knife or reaping hook but note similarity to no. 26 below. Building 1.

21 Eyed needle, 4.5 cm long 2 mm diameter. The pierced end is flattened. Material apart, it is identical with modern examples. Building 1.

22 Nail, 3 cm plus long. Small head, square section. Building A. 23 Nail? 5.5 cm long. Both ends have thickened corrosion, no head. Building A.

24 Nail, 4.5 cm plus long. Small head, heavy corrosion. Building

25 Nail or Pin? 7 cm long 3 mm square, one end pointed the other slightly spatulate. Building A.

26 Winged bar-share, 16 cm long with the last 2 cm bent over and broken across attachment hole. A second hole in the body may be the result of corrosion. From the cart ruts on site 2. An identical object may be seen in Frere 1972 Fig 61 no. 17 from a context dated AD 280-315.

Not illustrated: 28 boot nails. Building A.

Objects of Copper Alloy, Bone, Lead, Stone and Glass (including those from site 2) Fig 7

Copper alloy toilet set. Building A.

27 Nail cleaner, 6 cm long decorated with crossing zig-zag lines with circles at the ends.

28 Tweezers. Plain, 5.7 cm long.

29 Flannel holder? Decorated with a zig-zagging zig-zag line on the outside. An unknown length appears to be missing. Its purpose is also unknown but if it was a functional part of the toilet set then a cloth or sponge holder is suggested. A bangle or bracelet with hook and eye ends is another possibility except that although now bent twice it does not look as though it was ever circular. Rather, in fact, if the bends are both ancient and purposeful, that it made a square loop suspended at one corner with a hook to close it.

30 Half a loop. Probably the keeper ring for the set.

31 Copper alloy brooch 5 cm long. Complete and made from one piece of metal with a 'knot' type spring. Plain catchplate. Building A.

32 Copper alloy disc, diam 27 mm. Although of a size to be a coin the faces are plain and do not appear worn down. Building A.

33 Copper alloy rod, 11.5 cm long tapering from 6 mm to 2 mm. Circular in section it has flat ends with rounded edges. Building A.

34 Copper alloy rod, diam 6 mm. One end is pierced and thinned down with angled shoulders. The other end is broken.

Building A.

Copper alloy bangle or mount which is decorated with continuous stamped? slightly hooked wavy lines. The interior was originally smoothed as were the edges. A section of indeterminate length is missing. Building A.

36 Copper alloy rod, 5.7 cm long. Circular section slightly tapered with maximum diam 1.5 mm. Building A.

37 Copper alloy wire fragments. One appears to be a small

(unclosed) chain link, Building A. 38 Copper alloy ring, 2.2 cm diameter, seamless with very smooth dark patina. 2 mm circular section. Building 1.

(Illustrated full size.) 39 Copper alloy mount, 1.8 cm long. Very crudely made, decorated with transverse grooves across body. All the holes were countersunk on the underside. The centre countersinking was cast and may have held a stone such as a garnet which protruded through the hole. The countersinking of the outer holes was done or at least finished by drilling, Building 1, (Illustrated full size.)

40 Copper alloy 'safety pin', 2.7 cm long. The catchplate is flattened to a knife edge and appears never to have had the hook-over to actually 'catch a pin'. It is possible however, this has been filed away and the pin bent back to create a makeshift toilet implement such as an ear scoop or nail cleaner. From a post hole possibly associated with corn-drier 1. Found with the glass bottle (no. 47 below). (Illustrated full size.)

41 Bone pin, 11.5 cm long. Maximum diam 8 mm, pointed both ends with highly polished tips. A hair pin or possible weaving implement is suggested. Another proposal is that this and 43 below are awls, but it would seem rather impractical to point a tool for perforating other materials at both ends and to make it in a material which is limited as to what it could penetrate. Building A.

42 Bone pin. One end is broken, the other end has two grooves round it just behind the pointed tip. Minimum length 6 cm

diam 2 mm. Building A.

43 Bone pin pointed both ends length 10 cm. Maximum diam 11 mm slightly flattened circular section. Smoothed all over. A weaving tool is suggested as it seems a little fat for a hair ornament. Building A.

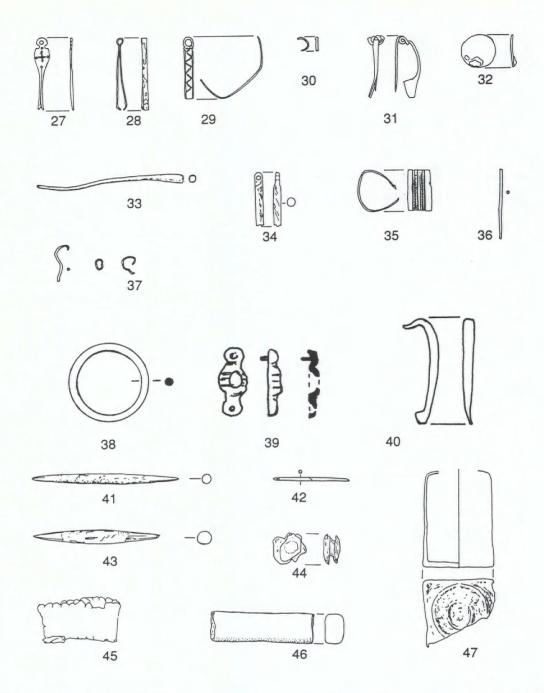


Fig 7 Site 1 and 2, objects of copper alloy, bone, lead, stone and glass. Scale 1:3 (except 38 - 40, 1:1)

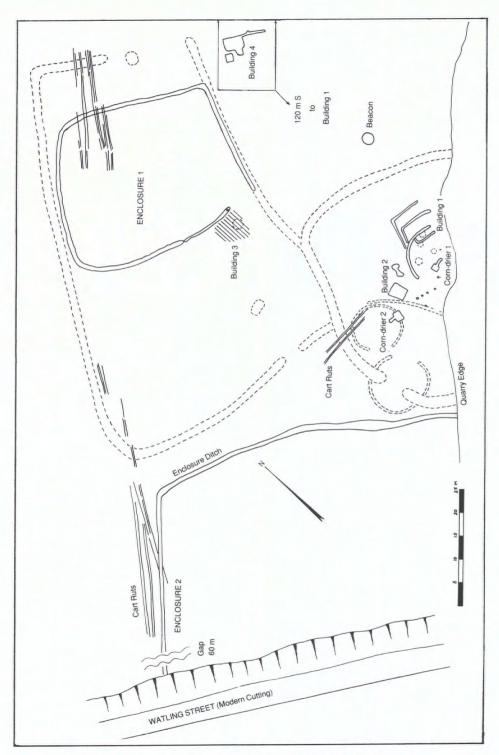


Fig 8 Plan of Site 2. Pre-Roman features are defined by broken lines.

44 Lead plug. Possibly made to stop-up a knot hole in a wooden

bucket. Building B.

45 Lead mount. Flattened but with an original circumference of at least 13 cm it is 3.5 cm deep. The slightly wider edge has a crude scalloped frilling. A drinking horn decoration is suggested. However, one might expect the plain edge to be at the lip of a vessel in which case a wooden jug seems likely. Building 1.

46 Hone stone. 8 x 2.5 x 1.5 cm with rounded long edges. It is a fine grained hard material possibly carborundum. Building

1.

Not illustrated: Fine grain sandstone, (half a large flat pebble) with one very flat but unpolished surface. Building A.

47 Glass bottle. 8 cm high to the shoulder (neck missing), 5.5 cm square. Of light soda green glass it has two concentric circles moulded on the base. From post hole possibly associated with corn-drier 1 (see under Corn-driers). Found with no. 40 above.

ROMAN SITE 2 (TL 005234)

Fig 8

Site 2 lay against the highest point of the E side of the present cutting and encompassed the high point of the hill (now quarried away) just to the E. The site consisted of a beacon fire, a series of primitive timber houses or sheds, two so-called corn-driers, an oven built into the side of a ditch and two or three ditched enclosures.

The Beacon Fire

This was sited on top of a knoll which formed one of the highest points of Puddlehill and would have been visible in all directions, particularly to the N and S. Northwards the ground slopes sharply to the Ouzel valley and the view from the hilltop extends for many miles. To the S the knoll is opposite the gap in the Chilterns through which runs the river Ver to St Albans (Verulamium).

The top of the small knoll had been stripped of topsoil and a round bowl-shaped depression 3 m across and 50 cm deep had been made into it (Fig 9). Within this bowl was a sooty carbonised filling 20 to 30 cm thick containing several forged nails and a few burnt potsherds. The depth of ashy material indicates that the fire had burnt for a considerable period of time and the forged nails within it suggest dressed timbers had been used to feed the fire.

The pit was sealed with a stratum of yellowish

subsoil containing many small fragments of Roman pottery probably the debris from subsequent occupation.

The Pottery

Fig 10

Pots no. 50 and no. 51 were found deep within the pit and are therefore certainly contemporary with it. A sherd of no. 51 was found in the ashy fili, burnt brick red. This fitted with other sherds of the highly-burnished black platter which lay on the natural chalk around the perimeter of the depression and outside the area of the fire.

The other sherds were found in the sealing stratum above the fire pit and are possibly the residue from subsequent occupation, but nos. 52, 53, and 54 are certainly native wares and the rest would all be at home in the decades AD 50 to 70.

50 Mica-dusted vessel. Fired reddish/yellow and decorated with round bosses. Smooth dark grey fabric. (Similar to Ver 29, AD 49-60).

51 Bowl in black ware with tooling marks inside and out. Part of the base of this pot was found in the ashy loam of the fire burnt brick-red. One other vessel of this type was found which was light grey in a soft fabric. (Ver 344, AD 75-105).

52 Jar in hard grey sandy ware. (Ver 186, AD 60-75).

53 Jar with internal recess on rim, fired black with a red sandy paste. Native ware.

54 Lid in sandy ware. Fired buff. One other lid was made from a smooth grey paste and fired red. See Fig. 4 no. 9.

55 Jar in hard grey ware. (Ver 387, AD 105-30).

56 Jar, (1 of 6) with out-turned rim slightly recessed for a lid. Fired red/black. Native ware.

57 Jar with turned out rim in a soft fabric. Fired grey.

58 Small beaker with zone of burnished lattice on body. Fired black. (Ver 848, AD 130-40).
59 Bowl in soft grey ware.

60 Jar in hard grey ware.

61 Flagon rim. Pink ware, light grey paste. A fragment of another flagon was pink with a cream slip. (Ver 408, AD 105-30).

62 Jar, body sherd in hard grey ware decorated with stabbed pattern above cordon. (Ver 151, AD 60-75).

53 'Cheese press', bottom with holes pierced before firing. Fired red with black outer surface. (Ox R78.4, AD 100-400).

Roman Building 1

This was a timber structure that had had many alterations during its lifetime. It had an earth floor and was partially built on the sill-beam principle.

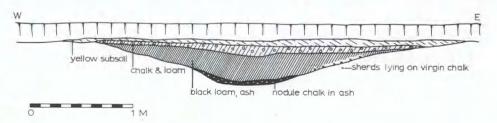


Fig 9 Section through beacon fire.

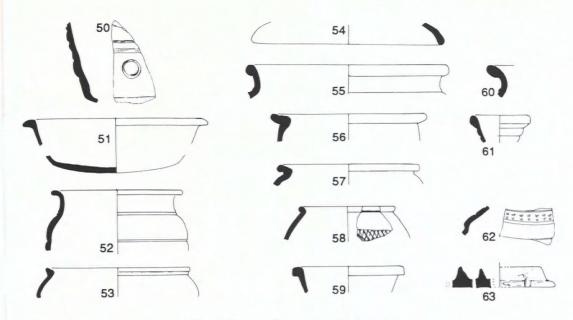


Fig 10 Beacon fire pottery. Scale 1:4.

The sill-beam trenches and a scatter of potsherds. many of them much trodden, were all that remained. Unfortunately the evidence proved insufficient to construct a complete picture of the building. It had apparently started as a round structure, represented by the curving trench on the plan. At a later date it was rebuilt into a rectangular structure, 8 m long and 5 m wide with possibly a porched entrance. The N wall of this structure showed as a curved sill trench. ending with a post hole. Later still, the N and W walls were replaced and the structure became 7 m wide. For this later structure a tree trunk or large branch had been used as the sill-beam for the W wall. The slot to contain this was 120 cm wide at one end thinning to 30 cm wide at the other. The beam trenches varied in width from 38 cm to 60 cm and were approximately 30 cm deep with a flat floor. It was also noted at the time of excavation, that no evidence of an E wall survived. Adjacent to the building was an irregular hole in the chalk 20 cm to 25 cm deep that contained a few potsherds in a dark loam fill.

This is a peculiar structure with its curving sill-beam trenches and it is difficult to make a reconstruction of the building particularly as there was no end wall apparent on the eastern side. It is tempting to see it as perhaps an open ended cart shed or grain store with adjacent corn-driers and cart ruts

approaching from the western side, but the spread of potsherds over the floor suggests that it was a dwelling rather than a farm building.

The finds

Covering the whole area of the building was a floor of small trodden potsherds. As the structure had a thin earth floor it was impossible to say with any certainty which sherds belonged to any period of occupation. Two iron rings were found tucked down the side of the curving trench and a copper alloy pin was found in the trench of what was presumed to be a porched entrance at one period of the building. Trodden into the earth floor was the skull of a dog. This had had its back teeth removed and the cavities were healed over. Presumably this was to give the dog a 'soft mouth' and allow it to be used for retrieving game.

The majority of the sherds were from cooking pots in a soft sandy fabric. Shell grits were used in the large pots and these vessels have a soapy texture. Representative examples are illustrated in Fig 11.

The two iron rings together with two others are all of a size and ideal for simple headstalls for oxen or horses. No less than four so-called ox-goads (two illustrated Fig 6 no. 9) were found within this building.

Also discovered within this structure were iron

objects, first identified as ploughshares, (Fig 6 nos. 10-13) but they appear much too small for this purpose. At Verulamium and Gorhambury similar pieces are seen as the wings of hipposandals, (Aubert type 1). However, several of those found here (another plus an ox-goad from Site 1 Building A) are in quite good condition and appear to be whole objects in their own right, ie not broken pieces of larger things. Moreover, if the tip of each is pointed forward the 'blade' of four of the five, (the other is straight) is curved slightly to its right, even the only one with the flange to the left (no. 13). Also each flange is at right-angles to the body of the object. If these pieces were broken from something larger, one might expect the fracture to occur at the angle and not create a false flange. It is also asking rather much of co-incidence that the 'wings' of one side only would be found, but no complete or any other identifiable fragments of hipposandal.

An alternative is suggested, namely that they are tines from a form of 'bed-harrow' (see later suggestion by Matthews, 1981 Fig 48 nos. 30 - 32) and protruded some 3-5 cm below a frame, each being held in place by a wedge (Fig 6 no. 15) and prevented from pulling through by the flange. Such an implement used on already broken ground would produce a fine tilth for sowing, and after cross-harrowing would neatly bury the seed.

On several of these objects the corrosion exhibits a tendency to flake or split the object into three layers.

Another iron object (Fig 6 no. 20) also indicative of agricultural pursuits is a very corroded winged socket with a partial 'blade' identified as a reaping or perhaps a pruning hook. A third alternative, the tip of a winged barshare similar to that found in the cart ruts is also possible.

Fig 11 Pottery descriptions

- 64 Jar and variant rim in a soft heavily shell-gritted soapy fabric. Fired biscuit to brown. (Ver 44 (form), pre AD 49).
- 65 Jar, fabric and firing as no. 64. (Ver 280 (form), AD 75-105). 66 Bowl in a soft sandy fabric. Fired biscuit to brown.
- 67 Bowl in hard silver grey ware. (Ver 958, AD 150-60).
- 68 Jar with a very everted rim in a soft sandy fabric. Fired biscuit to brown. (Ver 280-4 (form), AD 75-105).
- 69 Jar in a soft heavily shell-gritted 'soapy' fabric. Fired biscuit to brown. (Ver 280 (form), AD 75-105).
- 70 Beaker in sandy ware. Fired biscuit with white slip.
- 71 Jar with a recessed rim in a soft sandy fabric. Fired biscuit to brown. (Ver 666 (form), AD 130-50).
- 72 Sherd in hard grey ware with chevron pattern applied with a milled wheel. (Two vessels of this type were found.)73 Body sherd of a decorated bowl (Dr 37?) showing a fighting
- cock. Several sherds of plain Samian dishes were also found.
 74 Jar in a soft sandy fabric with a slight groove on the outside
- of the rim. Fired biscuit to brown. (Ver 647 (rim), AD 130-50).
- 75 Jar in a soft sandy fabric with recessed rim. Fired biscuit to brown. (Ver 666 (rim), AD 130-50).
- 76 Jar in a soft sandy fabric. It has a groove just below the neck creating the effect of a false or double shoulder. Fired biscuit to brown.
- 77 Dog dish in black burnished ware. (Ver 1007, AD 150-60).
- 78 Jar in a soft, heavily shell-gritted soapy fabric. Fired biscuit to brown.
- 79 Jar in a soft sandy fabric. Fired biscuit to brown.

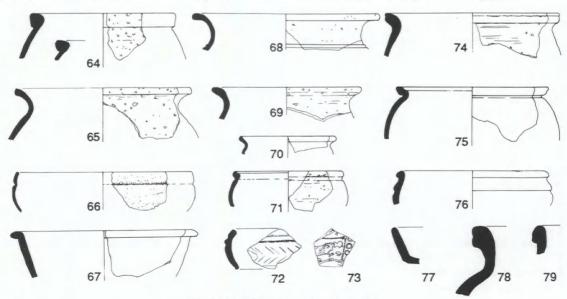


Fig 11 Building 1 pottery. Scale 1:4.

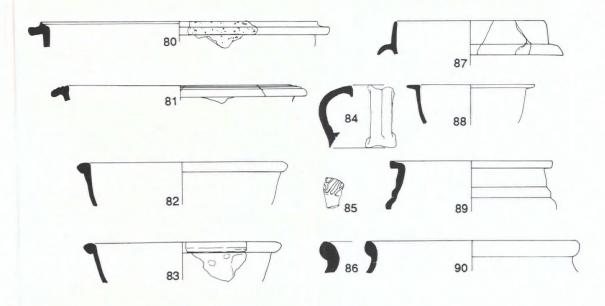


Fig 12 Building 3 pottery. Scale 1:4.

Roman Building 2

This was sited some $10\,\mathrm{m}$ to the W of building 1. It measured internally $3.7\,\mathrm{x}\,2.2\,\mathrm{m}$ and was probably a timber construction placed directly on the ground with no post or stake-holes to anchor it. Its earthen floor contained many trodden potsherds.

It is worth recounting how its size is known with such accuracy. A wide area of topsoil had been removed and within a limited area of 3.7 m x 2.2 m a number of trodden sherds were found with the trowel. This was not understood, as nothing could be seen in the wide expanse of uniformly yellowish subsoil, so the area was left for a period but on a visit to the site just before dawn one morning when the hilltop was protruding from the fog-filled valley, the area could be seen as a very dark patch. This was marked out with meat skewers and by the time the sun tipped the horizon the 'shadow' of the building had disappeared. When excavated, the natural chalk was found 5 cm beneath the soil and the skewers marked exactly the area of trodden pot-sherds. No post or stake-holes were were found in the chalk and the only evidence to show that a building had stood there were the sherds and the brief glimpse when conditions of humidity were just right.

This timber building set on the ground with its earth floor may have been a hen house or out-house,

but the scatter of sherds over the floor strongly suggests that it was used for human habitation.

Roman Building 3

This was sited some 35 m to the NW of building 1. It consisted of two floors separated by a slight chalk bank. One room measured 3.7 m x 3 m and showed as a depression 13 cm to 16 cm deep filled with a very dark loam. This was divided from room 2 by a chalk bank some 30 cm wide with a single entrance linking the two rooms. Room 2 was probably the same size as room 1; they had common boundaries, but one side had been destroyed by ploughing.

No post holes or any other form of walling was found bordering the sunken floors on three sides but on the E side they were edged by a sill-beam trench 45 cm wide and 30 cm deep. This trench was extended beyond the limits of the two floors which suggests that the building had originally contained more than two rooms. The trench, and hence the building, formed part of the western boundary of enclosure 1 on the north side of the entrance.

Within the building had been dug a rounded pit which contained a floor of baked clay. This clay had been deliberately shaped into a rectangle with sharp edges. It was 38 cm long, 30 cm wide and 5 cm thick. Note the similarity to the hearth or oven next to

building 4 below.

The dark soil in the depressions of the floors contained many sherds of trodden pottery.

Fig 12 Pottery descriptions

80 Bowl in heavily shell-gritted fabric. Fired pink and black. (Ver 497, AD 105-30).

81 Bowl in white sandy ware with reeded rim. Ver 506, AD 105-30.

82 Bowl with burnished finish. Fired biscuit. (Probably re-fired in hearth fire.) (Ver 960, AD 150-60).

83 Bowl in a smooth fabric. Fired pink. (Ver 960-1, AD 150-60).

84 Flagon handle in white ware.

85 Fragment of white ware mortarium with cypher stamp.86 Storage jar in 'soapy' shell-gritted fabric, Fired orange.

87 Flanged bowl, form Dr 38, in sandy ware. Fired brown. (Ox O48.1, 2nd C or later).

88 Bowl in light grey ware. (Ox R41, 2nd C or later). 89 Jar in very sandy ware with cordon at base of neck.

90 Storage jar in shell-gritted fabric. Fired biscuit.

Roman Building 4

This building lay some 120 m due N of building 1 and about 95 m from building 3. It survived as depressions in the chalk filled with dark occupation soil containing Romano-British sherds and nails. A certain amount of clay thought to be daub was also found. A lack of post holes suggests construction using sill-beams, with, as the clay indicates, wattle and daub walls of a structure about 4.5 m square with perhaps a porched entrance facing SW.

A trench cut 40 cm into natural chalk ran for at least 18 m SE from the E corner of the building in

line with one side of it. Between 3 and 4 m from the building the ditch is cut by what is described as a sleeper trench running nearly due N-S.

Just over a metre from the building the ditch had been widened on both sides and an oven built into the E side. This consisted of a rectangular slab of clay 28 x 20 x 5 cm surrounded on three sides by chalk blocks. A ledge, slightly higher, cut into the bank behind may have been the base of a flue. It would appear to be exactly the same method of construction as the 'hearth' in building 3. Even the relationship of the building to what is probably an enclosure ditch is similar.

Three Iron Age storage pits were in close proximity to the house and suggest a continuity of occupation if not of this building, then of one on or very near the same site, into the Roman period. The pottery associated with the building and ditch is illustrated below.

Fig 13 Pottery descriptions

- 91 Jar with rim recessed for a lid. Sandy ware with sand protruding from fabric. Fired grey. From ash in oven bulge. (Ver 660 & 666 (form), AD 130-50).
- 92 Jar in sandy ware with rim recessed for a lid. Fired brown. (Ver 666 (form), AD 130-50).
- 93 Jar in sandy ware. Fired grey. (Ver 660 and 666 (form), AD 130-50).
- 94 Jar in heavily shell-gritted fabric. Fired red black. (Ver 666, AD 130-50).
- 95 Jar in hard dark grey sandy ware.
- 96 Jar in sandy ware. Fired biscuit.

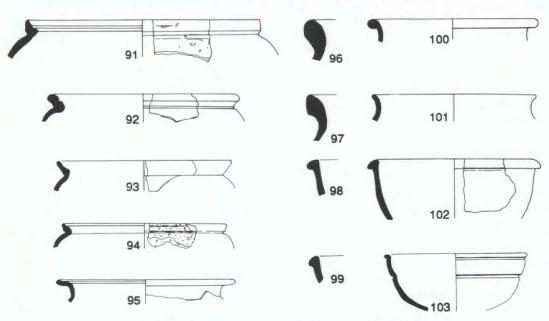


Fig 13 Building 4 and associated ditch pottery. Scale 1:4.

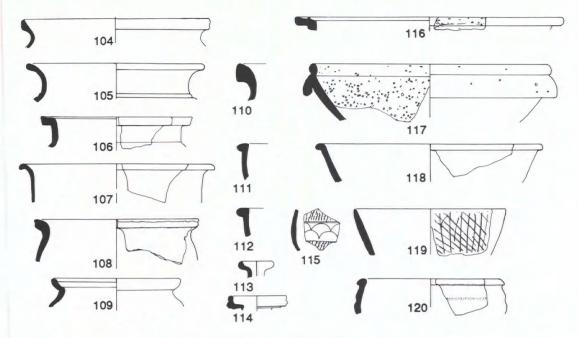


Fig 14 Site 2, Enclosure 1 ditch pottery. Scale 1:4.

- 97 Jar in shell-gritted fabric with soapy texture. Fired orange. (Ver 878 (form), AD 150-60).
- 98 Dish in sandy ware. Fired grey. (Ver 960 (form), AD 150-60).
- 99 Bowl in sandy ware. Fired grey.
- 100 Jar in coarse sandy ware. Fired grey.
- 101 Jar in coarse sandy ware but very eroded fabric.
- 102 Bowl in sandy ware. Fired black. (Ver 958-9, AD 150-60).
- 103 Bowl in sandy ware imitating form DR 37. Fired light red.
- (Ox O45, AD 100-200).

The Roman Enclosures

Adjacent to the farm buildings were two enclosures marked by shallow ditches. A third may be associated with Building 4 (see above).

Enclosure 1

This was the smaller of the two and was a rectangle measuring approximately 32 m wide and 37 m long with a single entrance in one corner.

It was defined by a slight ditch 1 m wide and 30 cm to 45 cm deep. On the S side the ditch had been dug through an earlier Iron Age ditch. The filling of the ditch was loam and chalk with chalk predominating and many potsherds with the greatest concentration on the S side nearest to the site of the buildings. No evidence survived to show how the entrance was closed. This enclosure had gone out of use by the 4th century (see below under road ruts).

Fig 14 Pottery descriptions

- 104 Jar with rim recessed for a lid, in sandy light grey ware. Sand protrudes through fabric.
- 105 Jar in smooth sandy ware. Fired light brown. (Ver 283, AD 75-105).
- 106 Jar in hard dark grey ware. (Ver 867/70 (form), AD 150-60).
- 107 Jar in soft grey ware. (Ver 316 (form), AD 75-105).
- 108 Jar in sandy fabric. Fired black outside and light brown inside. 109 Jar in hard smooth sandy ware. Fired blue/grey.
- 110 Storage jar, shell-gritted fabric with soapy surface. Fired orange. (Ver 667, AD 130-50).
- 111 Bowl in coarse ware fired dark grey.
- 112 Bowl in soft sandy ware. Sand protruding from badly eroded
- 113 Flagon top in white ware. (Ox W8.3, AD 100-240).
- 114 Flagon top in white ware. (Ox W8.2, AD 100-240). 115 Hard grey ware, fired pink with light brown slip. Zone of
- incised half circles between bands of rouletting. 116 Bowl in shell-gritted soapy fabric. Fired biscuit.
- 117 Mortarium in white ware with brown trituration grits. (Ox M10.3, AD 180-240). 118 Bowl in grey ware. (Ver 960-4, AD 150-60).
- 119 Bowl in sandy fabric decorated with faintly burnished pattern. Fired black. (Ver 1000, AD 150-60). 120 Jar/bowl in very light grey sandy ware.

Enclosure 2

This enclosure was bounded by a ditch similar to that of enclosure 1. It was approximately 1 m wide, varying in depth from a few centimetres to 60 cm. The ditch fill was mainly small chalk (containing many snail shells) except on the eastern side, in the vicinity of the huts, where the ditch contained more loam and many potsherds. Here also this ditch had

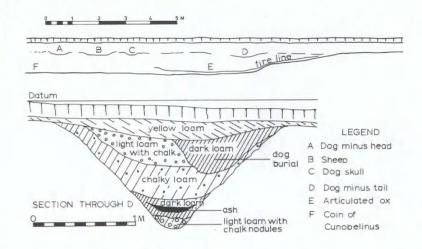


Fig 15 Site 2, Enclosure 2 ditch sections.

been dug into an earlier loam-filled Belgic ditch ⁽¹⁾ which would account for the difference in fill, if the bank that once existed next to it had silted back into the ditch. The size of this enclosure is unknown. 65 m of the ditch running NW-SE (parallel to the cutting) was excavated but the southerly continuation had been destroyed by quarrying. At the N corner the ditch turned through a near right

angle and was followed for 86 m to where it met the chalk cutting for the modern Watling Street and had been destroyed.

The NW-SE section of the ditch (the portion which had followed the line of the still visible Belgic ditch) had been used for animal burials (Fig 15). The skeletons of two dogs and a sheep were found. Dog 1 was lying on its right side and the front right paw



Plate 1 Corn-drier 1.

had been severed with a clean cut. The paw was found lying beneath the right leg bones. Two metres further along the ditch was the skull of a dog. This also had been severed with a clean blow. Another 2 metres along was the skeleton of a sheep. This was lying on its left side with its head between its front legs. One metre beyond, also along the ditch, was the skeleton of a dog with the skull missing.

Discussion on the Enclosures

The shallowness of the enclosure ditches suggests that they were supplemented by thorn hedges or hurdling. It would appear that the smaller of the enclosures is too small for a corn field, although it may have been used as a kitchen garden. However, it is more likely to have been a sheep pen.

The larger enclosure was of several acres and may have been used for sheep grazing. The W side of the Watling Street cutting was examined, but a continuation of this enclosure was not found.

The discovery of the animal skeletons is of interest and may suggest that sheep-rearing was a major occupation of the farm. Perhaps the two dogs had been accused of sheep-worrying and had paid the penalty. Sheep when worried tend to give in easily and put their heads between their legs and die of fright. The one in the ditch was found in this position and it may have been brought to the farm after *rigor mortis* had set in.

Corn-Driers

Two of these were found at Site 2. Drier 1 (Fig 16 and Plate 1) lying about 7 m S of building 1 was the smaller of the two but in a much better state of preservation. The body of the drier measured 1.22 m x 1.27 m x 30 cm deep into the natural chalk. The floor of the drier had been supported on two columns made with flat slabs of chalk held in a chalky-clay mortar. (This clay has a natural outcrop in the banks of the Ouzel in the valley bottom.) The flue of this drier which projected eastwards, had been capped with flat slabs of chalk some of which had collapsed on to a domestic chicken's nest. The crushed egg-shells were found beneath the fallen stones. One corner of the drier had become worn. perhaps burnt out with constant use, and a repair had been carried out using a block of clunch stone. (2) Clunch stone was also found within the fill of the drier together with the local gault clay and this was probably the residue of the original flooring of the drier body. Traces of burning were found over the floor of the drier but the heaviest concentration was along the flue which was 1.5 m long with a worn area at its end. A short distance from the drier to the W was a line of four post holes with two other holes nearby. These may have had some connection with the drier in the provision of draught control. Within one of the post holes was a copper alloy brooch of simple type and part of a square glass bottle (see Fig 7 nos. 40 & 47).

Drier 2 lying 3 m to the SW of building 2 had been almost destroyed by ploughing but it survived sunk 15 cm into the natural chalk to show that the body of the drier had measured 2.15 m x 1.7 m with a flue 1.5 m long on the west side. A dark ashy loam covered the floor of this structure. There were no associated finds.

Oven-like Feature

Fig 17

This was an apparently isolated feature situated some 130 m NW of building 1. A section of an Early Iron Age enclosure ditch ⁽⁵⁾ had been re-excavated for a distance of approximately 3.5 m exposing the natural chalk sides of the ditch. Into this a hole of about a cubic metre had been dug to form an oven.

The floor of this miniature 'cave' had been covered with stones and flints about the size of a fist. These were found within the oven mixed with a black ashy loam and charcoal fragments. Rake-out from the oven covered the floor of the ditch to a depth of 30 cm. Within this ashy rake-out were many stones similar to those lining the oven, together with Romano-British potsherds.

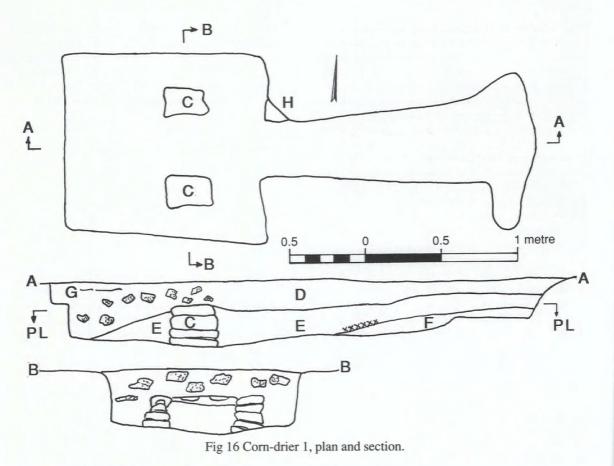
Charcoal from the oven was identified as follows: (4) Wood of mixed origin, but consisting mostly of oak (*Quercus* sp) and maple (*Acer* sp) both present in equal amounts. Also one piece of wood and a twig both apparently of willow or poplar but with the structure imperfectly preserved. One piece of hornbeam? (*Cappinus* sp?). One piece of yew (*Taxus* sp).

ROAD RUTS

Fig 8

Crossing the hill E to W were many cart-ruts of a roadway that must have existed from Roman times until it was diverted in 1782 by the cutting made through the hill to assist stage-coach traffic. On the W side of the site the ruts were found up to the edge of the modern cutting, that today carries the Watling Street.

On the highest point of the hill, where the topsoil is thin, ruts had bitten deep into the natural chalk but on the lower ground in deeper soil they were found as puddled earth. Surrounding soft soil could be removed by the excavators to leave the rut standing 25-30 cm high. The ruts were identified, some as



PL	level of plan	E	ash with clay
A-A	section looking N with column	F	burnt chalk
	superimposed	G	cement layer
B-B	section looking E	H	remade corner
C	clunch columns	xxx	eggshell layer
D	clay and stone with lumps of burnt		1991

Roman, some as medieval, by the coins and fragments of pottery found within them. On the western side of the site deep Roman ruts skirted the two enclosures and a second series of ruts left this track between the enclosures and led towards building 1. Another set of ruts, containing 3 coins of Gratian, Magnentius and Valens, (all 4th century) crossed over the ditch of enclosure 1 indicating that this feature had gone out of use by the 4th century. In (Matthews and Hawkes, 1985 p89), the coin of Gratian above is recorded as being found in a grave dated by association with others, as Saxon. The grave was crossed at one end by ruts in a cobbled

surface. Surviving notes do not positively exclude the possibility that the coin was was intrusive via the trackway, but it seems unlikely if the period of the grave, which seems reliable, is accepted.

As a grave find it gives a *terminus ante quem* for at least some of the ruts, if not the track, of about AD 375. However, that could argue for a very late road or a very early Saxon. A better explanation is lateral wander of a route of which the graves were originally 'roadside' burials. The over-running of a grave would then indicate continued use beyond the earliest Saxon period.

The number of coins lost suggests trade between

local inhabitants and passing traffic.

In addition to the coins a winged barshare was found (Fig 6 no. 26). Frere 1972, Fig 61 no. 17 from a context dated AD 280-315 is identical except that more of the tang survives.

E of the site the ruts led to Site 1 and existed at the time of excavation as a deeply rutted farm track for about 200 m where they then became a footpath skirting the N side of Houghton Regis. From here it lines up with the grass track of the Icknield Way that climbs the Chilterns some 8 km to the E.

To the W the track would skirt the S side of the Early Iron Age fort of Maidenbower and then continue as an existing green way to Totternhoe (the site of a large Roman Villa, the subject of a report elsewhere in this volume). Beyond this it would join the present Icknield Way where its passage across country would be restricted to a narrow belt of country by deep coombes in the hillside caused by spring rises from the Chiltern scarp. These cart ruts may therefore be part of the Roman winter Icknield Way. However, the absence of early coins in the ruts, the apparent lack of any metalling and the crossing of an enclosure might indicate that this part of an E-W route did not come into being until quite late, but why?

Evidence from the Roman cemetery in Durocobrivis (Matthews, 1981) such as multiple burials in the top of disused wells and the surrounding ditch, some juxtaposed with horse burials, suggests the possibility of an epidemic of some kind having occurred in the 4th century. There is a suspicion therefore (as yet unproven) that the town was abandoned for a period. Should such

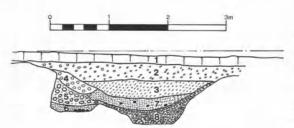


Fig 17 Oven section

- 1 Ploughsoil
- 2 Loam and small chalk
- 3 Ash and loam
- 4 Loam and chalk
- 5 Burnt chalk and earth
- 6 Ash and pebbles
- 7 Heavy ash with rake-out pebbles
- 8 Hard packed small chalk and loam

events have come to pass then giving the place as wide a berth as possible would be sensible. N-S traffic could have made use of the ancient green lanes passing W of the town. E-W travel on the other hand is constrained to the S by the hills. To the N a route across Puddlehill perhaps utilising where possible local tracks, offers a good alternative, close to water (the springs) with little additional distance involved. Refugees from the town could well be those, as suggested above, doing the trading possibly providing as best they could services normally available in Durocobrivis.

Coins found in, or associated with, the cart ruts. (* found over Building A)

Tetricus II AD 270-73. Antoninianus Ae 19mm Obv Young hd. radiate crown. C PIV ESV TETRICVS CAES. Rev Helmeted figure stg. l. SPES AVGG. R.I.C.270.

Carausius AD 287-93. Antoninianus Ae 23mm (silver wash) Obv Rad. hd. r. IMP C CARAUSIUS PF AVG. Rev Pax I. holding olive branch & sceptre. PAX AVG (SP in field) M. ML (London) R.I.C.118.

Constantine I AD 306-37.* Follis Ae 16mm (silver wash) Obv Helmeted bust 1. CONSTANTINOPOLIS. Rev Victory on prow. L.R.B.C.1. 655. (copy).

Constantius II AD 330-33. Follis Ae 18mm Obv Draped & cuirassed bust with diadem r. CONSTANINVS MAX AVG.

Rev Two standards between soldiers, Gloria Exercitus type. R.I.C.219 (copy?).

Constans AD 335-37. Follis Ae 14mm
Obv Pearl diademed hd. r. CONSTANS AVG.
Re. Single standard between two soldiers. GLORIA
EXERCITIS. L.R.B.C.1384. (copy?)

Magnentius AD 350-53. Maiorina Ae 23mm (silver wash)
Obv Draped bust with diadem r. DN MAGNENTIVS PF AVG.
Rev Emp. stg. (staff in l. hand, statuette of victory in r.) l.
FELICITAS REIPVBLICE.
M PSLG. Lyons.

Gratian AD 375-78. Centenionalis Ae 17mm Obv Draped & cuirassed bust with diadem. DN.GRATIANVS PF AVG.

Rev Emp. holding captive by hair r. GLORIA ROMANORVM. M LVGS. Lyons. R.I.C.18.

Valens AD 367-75. Centenionalis Ae 16mm Obv Draped bust with pearl diadem r. D N VALENS P F AVG. Rev Winged Victory stg. 1. hldg wreath. SECVRITAS REIPVBLICAE. M. TRP? Trier. R.I.C.21.

Valens? Probably as last. Ae 16mm (very worn & damaged) Obv Bust? r.

Rev Winged Victory stg. l. SECVRITAS REIPVBLICAE.

Valens AD 367-75.* Centenionalis Ae 18mm As first but different dies. M SIS? Sisica.

Valentinianus I AD 364-75.* Centenialis Ae 19mm Obv Pearl diademed bust r. DN VALENTINIANVS PF AVG. Rev As Valens. M Illeg.

One other coin was found in the vicinity of the cart ruts. This was a Greek coin struck in Phrygia about the time of Caracalla.

AD 211-217. AE 25mm. Obv Head to Rt. No legend. Rv ASKAEPIOS. Legend IEPAMONEITN. Mint Hierapolis.

Other coins found in the ruts:

Edward IV 1464-1465. AR groat. Reckoning counter 1610-1660.

Lead token, diam 15 mm. Hole pierced in centre partially destroying a date., probably 1664.

Lead token, diam 30 mm. Hole pierced in centre. One side has a cross made with five lines to each arm. The other side a large M or W.

Lead token, diam 50 mm. No marking. English token 1664, Iohn Whilley in Dunstable. English token 1667, William Elemend in Dunstable. English token 1685, Peeter Abraham of Luton. L695.

DISCUSSION

Close dating, and the sequencing or separation of events over what may be a short time span was difficult to determine by excavation due to the thin covering of soil on the chalk downs. Stratification was virtually non-existent and even the silting of ditches over short periods of time was of no help.

As an example, a slit trench rather like an Iron Age ditch was dug by the Home Guard in 1940 on the hill. This was re-excavated 21 years later, and after removal of briars and lank vegetation it contained an accumulation of only 8 cm of soil in the bottom. Had this been a late Iron Age ditch with broken Romano-British sherds trodden into the fill it would duplicate exactly the stratification of the Romano-British homestead.

One interpretation of the evidence could indicate a very short-term gap in the occupation and it would appear that this interruption coincided with a complete change from the traditional sources of pottery: from the softer native wares to the products of the new manufacturing techniques introduced by the invader.

Two areas on Puddlehill were occupied during the late pre-Roman Iron Age (Matthews, 1976) and native farmers with their herds of cattle were probably still in occupation when the XIV Legion marched through their farm, an event which could account for the ox-roasting (Matthews, 1976 Fig 113) and burning of their primitive huts. This could also have been the occasion of the great fire built on a knoll by their homestead. What happened to these peasant farmers of Puddlehill following the autumn of 43? Did they stay put and face the foreigners or did they become refugees until calm had returned to the land and the road builders had moved on?

The large pit on the high point of the hill appears to have been for a fire for fire's sake, yet it must have had a purpose. Otherwise it is difficult to understand why a small knoll had been stripped of its topsoil and a depression dug into it just to contain a fire. One theory must be that it was used as a sighting beacon during the building of the Watling Street. It is located in the right place, on the highest point of the hill and opposite the gap in the Chilterns followed by the Roman road from Verulamium. It would have needed to be kept burning for a considerable length of time and to make certain that the winds in this high place did not blow out the base of the fire it was situated in the made hollow. The presence of iron nails in the fill might be explained by the Roman road builders not hesitating to use any wood to hand. Timbers from an abandoned farm house would suit the purpose very well.

A second event likely to have caused a break in occupation is the Boudican revolt in AD 61.

At Verulamium excavation has shown that in all pre-Flavian levels 75% of the pottery was of 'Belgic' fabric. On Puddlehill the transition from 'native wares' to the much better fired pottery we call Romano-British appears to have occurred as an abrupt break with tradition rather than a gradual change over time as people began to reap the 'benefits' of the Pax Romana. This ceramic revolution could have occurred as a result of a temporary abandonment of the hill in the immediate aftermath of invasion but is more likely to have resulted from the Boudican revolt. The example of Verulamium above indicates that absorption of Roman technology was slow, in a rural setting such as Puddlehill it is likely to have been slower still. Following the Boudican disaster however, the area was probably depopulated to a large degree, either by the passing rebels on their way north after the sack of Verulamium or, as it is quite probable that many if not all the local inhabitants were in the host, their being wiped out in the battle which ended the

rebellion. Those surviving, or brought in to repopulate the area, are likely to have been people who had either already adopted Roman ways, or who now, reluctantly or otherwise, had little choice.

The gap suggested by the pottery evidence therefore is more likely to have been at the time of the Boudican revolt, when much if not all the farm stock might also have been taken or killed. This break, if it did occur, was probably of short duration because occupation was resumed on exactly the same two sites.

With Romanisation, the effects of which almost certainly intensified after the Boudican revolt and with the loss perhaps of livestock during the troubles, the native farmers' way of life changed completely. They now grew grain probably as a cash crop which they had to dry in corn-driers and which went to pay their taxes either in coin or directly in kind. Their house was a little more comfortable, but not much, they kept chickens, had more material things such as glass bottles, wore hob-nailed boots and the women folk had toilet sets, brooches and bracelets. The pottery was fired harder and was therefore more durable perhaps enabling the family to eat better cooked food.

The wider use of coinage, (a coin of Nero was found in the farmyard) probably more than any other single event, helped them to avail themselves of the material things of life.

The evidence of the pottery suggests that permanent habitation of both the Romano-British sites on Puddlehill did not last beyond the 1st and 2nd centuries. No substantial buildings were found particularly at site 1, but the great number of potsherds and also the personal items such as the toilet set, suggest that people were living on the site, though perhaps only on a regular seasonal basis. Their presence was presumably connected with agricultural activity. The skeleton of a sheep, apparently the victim of worrying by dogs, was found in the ditch of an enclosure on site 2, and it is suggested that the enclosures may have been pens or paddocks for farm animals. The 'corn-driers' found on both sites indicate that cereal crops were

being grown.

There is no direct evidence of 'habitation' on Puddlehill between the 2nd century and the later Anglo-Saxon settlement in the 7th century. Perhaps the Romano-British town of Durocobrivis lying just to the S simply absorbed the population of Puddlehill into itself. However, the coins in the cart ruts (see above) show that an E-W route over the hill was in use in the later Romano-British period, and the number of coins lost in quite a small area suggests that some sort of trading may have been carried on here, near its junction with Watling Street and it should be remembered that large areas of the hill had been quarried away before archaeological investigation began, and that other areas still remain undisturbed.

NOTES

1 Belgic Ditch 2 (Matthews, 1976, 33 Fig 113). Part reproduced here as Fig 15.

2 Locally known as Totternhoe Stone. It probably occurred as an outcrop at the western edge of the ridge during Roman times. It was used for internal structural work in the Roman villa at Totternhoe.

3 Enclosure III (Matthews, 1976 Fig 12).

4 Identified by Dr G Taylor, Royal Botanic Gardens, Kew.

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Plate 2 Photograph showing the excavation of Roman Puddlehill taken by the Royal Air Force. (© British Crown copyright 1991/MOD reproduced with the permission of the Controller of Her Britannic Majesty's Stationery Office.)