

# Archaeology at an ironstone quarry in the Haringworth-Wakerley area, 1968-79

By D A JACKSON

Relatively modern quarrying for ironstone in Wakerley and Haringworth parishes has a long history, but not until 1968 was any archaeological observation carried out while the work was in progress. Early in 1980 quarrying by the British Steel Corporation came to an end, and it is now appropriate to describe the archaeological work carried out at the quarry by the writer over an eleven year period. The programme was sponsored by the Department of the Environment.

This report is in three parts. Part 1 brings together both the published and unpublished work and presents it as a resumé of eleven years archaeological observation and excavation; this has the added advantage of incorporating the negative evidence. To bring this work to a conclusion, Parts 2 and 3 of this report describe in detail previously unpublished Iron Age and Roman sites excavated at the quarry.

The illustrations used in this report have been drawn by Dorrie Orchard of Northamptonshire County Council Archaeological Unit. Thanks are due to Roy Turland for his report on the Roman pottery and to Stephanie Fells for her note on the slag.

## PART I

### GEOLOGY AND TOPOGRAPHY

An area over one mile long and up to half a mile wide was observed during the period under discussion; the surface geology of the whole area consisting of Lincolnshire Limestone. Topographically the region studied can be divided into two areas. To the north the ground slopes from south-east to north west (250 to 350 OD) and forms the upper slopes of the valley of the River Welland: the river itself lying some half a mile to the north-west. Most of the archaeological sites and features were situated on or near this sloping ground. South-east of the valley slope, the ground levels out and forms a flat plateau; in the area studied most of this higher land was largely devoid

of archaeological features.

### METHOD OF OBSERVATION

The top soil was removed with box scrapers and whenever practical this work was observed whilst in progress. By walking behind the scrapers, features of any size or definable shape are unlikely to have been missed, but at times it was only possible to examine the bedrock after the soil clearance was completed. When the latter happened parts of the natural limestone, where covered with deposited material, and features such as isolated pits and postholes may have been obscured. In some places, particularly on the west side of the area observed, the ground had been previously disturbed during construction of an aerodrome during the last war. Nevertheless, given 100% exposure of the bedrock, it is felt the picture presented here would not have been radically changed.

### THE NEOLITHIC AND BRONZE AGE (FIG 2)

Activity during these periods is attested by the discovery of pits of both early Neolithic and late Neolithic Beaker date, near the top of the valley slope, and by Bronze Age features in the area of the Anglo-Saxon cemetery (Jackson 1978). Other undated pits may have been of these periods, whilst some pits with natural fills may not have been detected. Several sherds of residual Bronze Age pottery as well as worked flints were found during the excavation of the Iron Age settlement in Wakerley parish.

### THE IRON AGE PERIOD (FIG 2)

There was abundant evidence of activity in this period. The extensive settlement in Wakerley parish was excavated from 1972-5 (Jackson and Ambrose 1978) and another site was found in 1978 about 1 mile to the south-west (Part 2 of this report). In 1976 a single early Iron Age pit, 1.2m in diameter and 700mm deep, was found near the top of the valley slope. The pit, which had been left to silt up naturally, contained 48 small sherds of pottery. Also in 1976, a scatter of postholes,

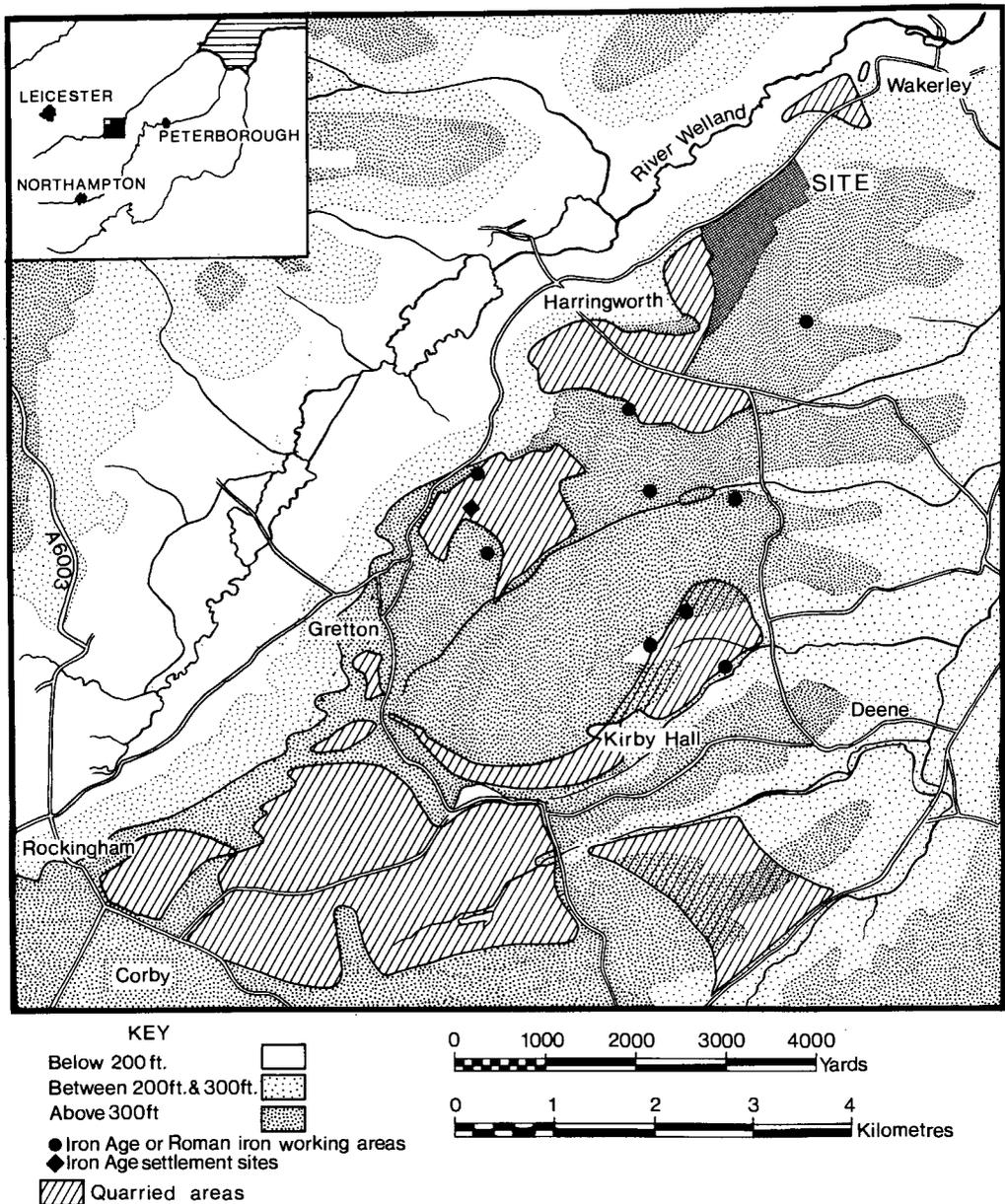


Fig 1 Harringworth: location map.

some containing later scored ware pottery, was found in the same area as the earlier pit. No associated ditches were found with these features.

#### THE ROMAN PERIOD (FIG 2)

Activity in the Roman period was mainly confined to the north-west, or lower slopes of the area studied. Wall foundations were found in Harringworth parish (Part 3 of this report), as well as extensive industrial and agricultural

activity on the former Iron Age site some 600m to the north-east. Iron working was widespread, some of which may have pre-dated the Roman period (Jackson and Ambrose 1978).

#### THE ANGLO-SAXON PERIOD (FIG 2)

An Anglo-Saxon cemetery containing 85 6th century burials was excavated in 1968 and 1970. Some 400 objects were found associated with the burials (report forthcoming). Later in 1975, a

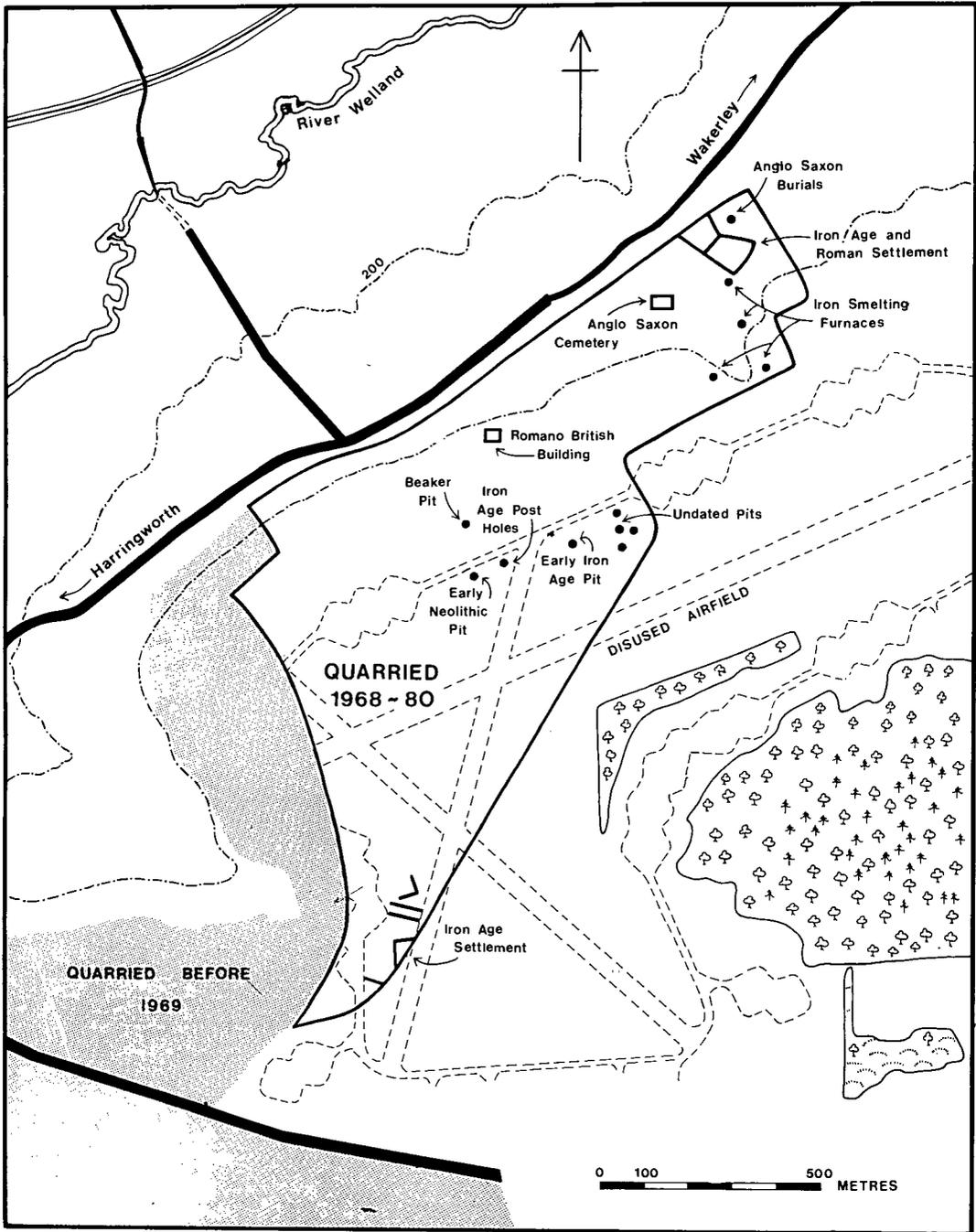


Fig 2 Harringworth: distribution of sites in the quarried area.

further 10 7th century burials were found some 200m north-east of the cemetery (Jackson and Ambrose 1978).

No evidence of a settlement has been found in the areas quarried to the south and west of the

cemetery. However, some Anglo-Saxon pottery has been recovered from the surface of a field to the north-west of the Roman building, (information from D N Hall) and a single sherd was found during the excavation of this structure.

## CONCLUSIONS

The valley of the River Welland, in the Harringworth-Wakerley area, is largely covered with clay, but it appears that the stretch of limestone overlooking the valley was as attractive to early settlers as the gravel terraces of the river valleys. It is tempting to see the Iron Age, Roman and Anglo-Saxon sites, which overlook the Welland Valley, as part of a scattered, but continuous settlement.

The surviving evidence for the early prehistoric period was sparse, but there is sufficient proof of activity, and perhaps settlement, in this period.

However, there is no doubt that the area was occupied in both the Iron Age and Roman periods, with both industry and agriculture being practised. It is perhaps surprising that so few field boundary ditches were found in view of the large area observed. This could be because drainage over permeable rock is unnecessary, and most boundaries consisted solely of stone walls or hedges.

## PART 2

### THE IRON AGE SETTLEMENT (FIGS 2 and 3)

In 1974 a single Iron Age ditch, at the south end of the quarry (Ditch C Tr I on FIG 3) was located and sectioned but thereafter quarrying did not take place in the area again until 1978. Subsequently observation during soil stripping exposed a scatter of features extending over an area some 200m in length. Ironstone quarrying ended early in 1980 and features lying to the east of the planned area are no longer under threat from this activity.

Although the site was situated on a flat limestone plateau, it may have been deliberately sited at the head of a valley where it would have been close to a water supply and different geological outcrops.

### EXCAVATION AND OBSERVATION

Most of the archaeological features shown on the plan were initially detected by walking behind box scrapers when the topsoil was being stripped. Subsequently, with no resources available to employ labour or machinery, the objective of obtaining a plan and sampling the various features was carried out by the writer. It was not practical to re-clean the large blank areas shown on the plan, but the bedrock was left reasonably clean after the mechanical scraping, and it seems unlikely that anything other than perhaps scattered postholes were not detected.

## PHASE I

### *The two parallel ditches*

Two parallel ditches ranging from just under 5m to 6m apart, crossed the site from east to west. In the limited area excavated Ditch C averaged 1.1m deep into the bedrock, and Ditch D 1.2m deep (FIG 4).

The fill of both ditches consisted, in the main, of brown stony loam which produced no dating evidence. However, over limited areas both ditches had an upper layer of dark occupation earth, which contained pottery unlikely to be any later than the 3rd century BC (see the pottery report). Although it is possible that the deposit of dark earth contained only residual material, on balance it seems more likely that the ditches were dug at an earlier date, and that Phase I either covers a lengthy period of time, or represents two separate phases of activity.

Later scored ware pottery was found near the top of Trench C1 where the upper layers had silted-up naturally.

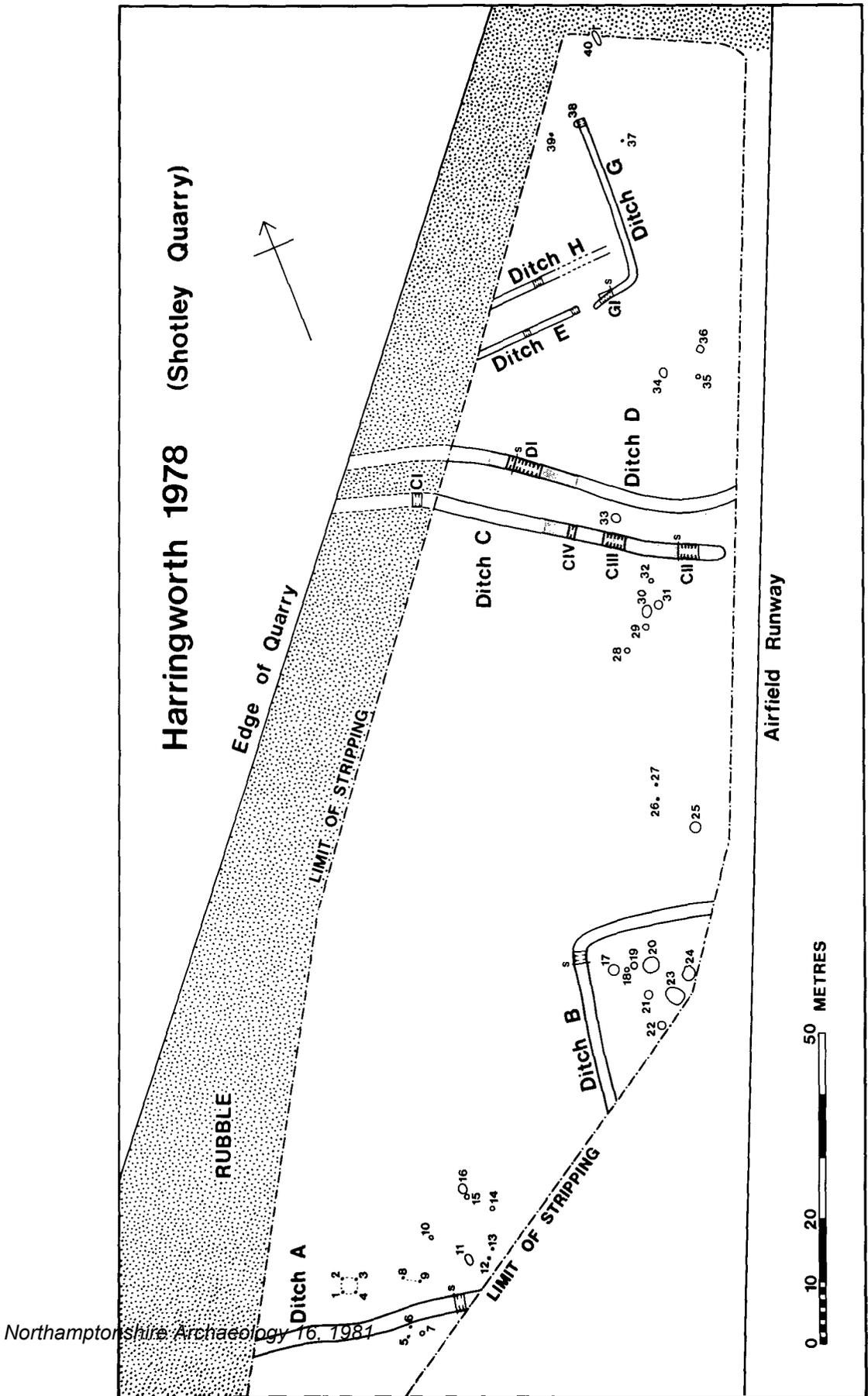
### *Indeterminate*

*Ditch A* This was a broad, flat bottomed ditch, some 1.1m deep with a very stony fill (FIG 4). It is possible that the ditch was part of a field or boundary system associated with the two parallel ditches. In the excavated section the only finds were a few fragments of pottery of 'early' type.

*Ditches E, G and H* Ditches E and G may have formed two sides of an enclosure, dating to Phase I. A few sherds of Phase I pottery were found in the excavated sections, and the end of the ditches had been neatly squared—a feature found in the pits of early Iron Age pit alignments. Ditch E was 600mm deep and had a very stony fill. Ditch G was 750mm deep at the south end, and 1m deep at the north terminal; it had been recut to a depth of 500mm in Phase II (FIG 4). Ditch H was very shallow and its function is uncertain.

*The Postholes* No dating evidence was recovered for the few postholes found on the site, although they most probably belong to Phase II. A four-post structure (Nos 1-4) and a two-post structure (Nos 8-9) were positioned near to ditch A, while several others, namely Nos 5-6, 12-13 and 26-27 may have been two post arrangements. The four-post structure was 2.2m × 2.05m in diameter. Three of the postholes were 350mm in diameter and 170mm deep while the fourth (No 4) was shallower and only just survived. The post holes in the two-post structure (Nos 8-9) were

# Harringworth 1978 (Shotley Quarry)



Northamptonshire Archaeology 16, 1981

Fig 3 Harringworth: plan of Iron Age features.

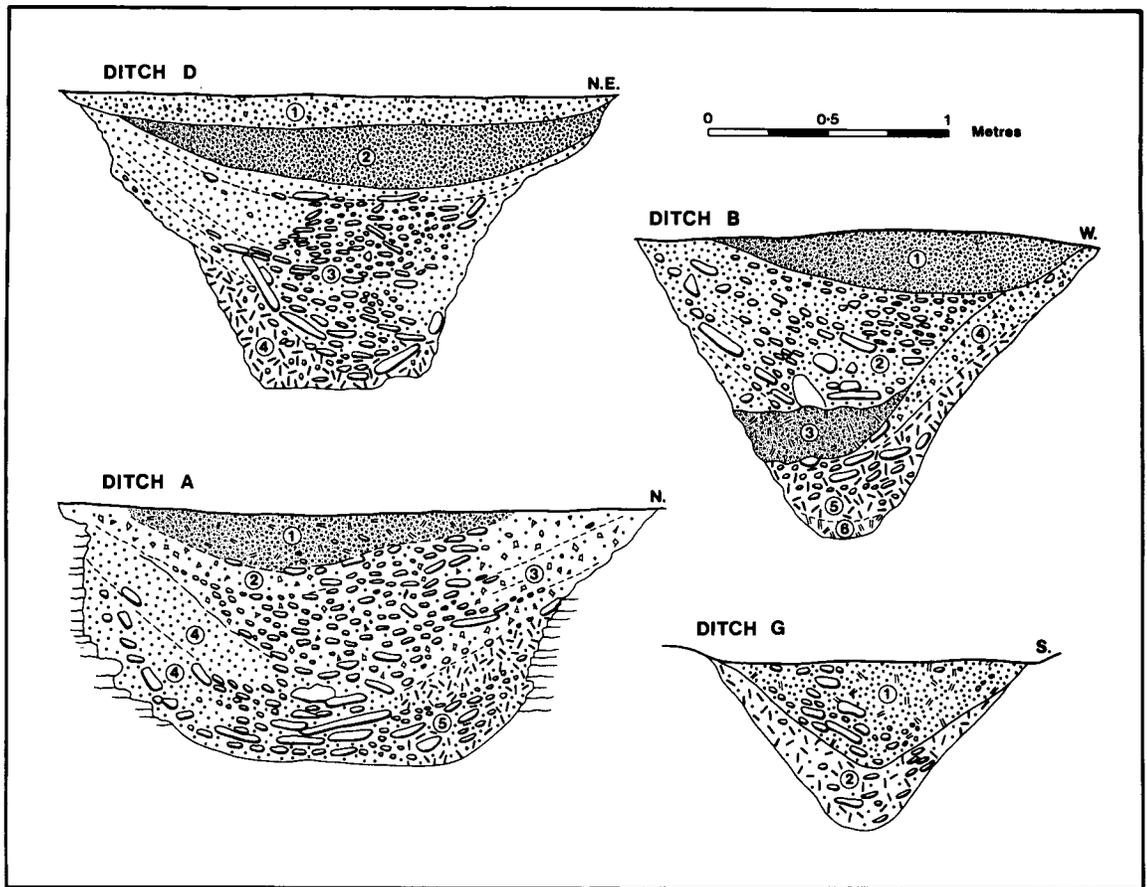


Fig 4 Haringworth: ditch sections.

2.8m apart, 370mm in diameter and 230mm deep. Other posthole dimensions were as follows: F5 300mm diameter, 150mm deep; F6 300 diameter, 150 deep; F12 300 diameter, 180 deep; F13 300 diameter, 90 deep; F26 480 × 380, 220 deep; F27 48 × 40, 200 deep; F37 230 diameter, 70 deep; F39 450 diameter, 320 deep.

*The Pits* On the ceramic evidence Pits 34-36 may pre-date Phase II.

#### PHASE II

The features assigned to Phase II are Ditch B, most if not all of the 25 pits, and a recutting of Ditch G. Pottery with scored surfaces has been used as the dating criteria, as this type of ware is very uncommon in the earlier Iron Age period in north Northamptonshire. Scored ware pottery was found in Ditch B, the recutting of Ditch G, and in Pits F11, 14, 16, 20, 21, 23, 29 and 31;

Phase II features can therefore be seen to spread over virtually the whole of the planned area.

*Ditch B* In the single section excavated Ditch B was 1.25m deep and has been recut at least once. The stony fill contained a small quantity of datable pottery (FIG 4).

*The Pits* Pits 17-24 appear to be in an enclosure (Ditch B) but the rest are scattered over a wide area. The dimensions and fill of the pits varied greatly and the details are tabulated below. Two pits, F33 and 36, however, worthy of further comment.

*Pit F33* This pit was positioned between the two parallel ditches and does not appear to be contemporary with them. The pit fill was unusually stony and sterile, suggesting that it may have been backfilled with material surviving from a bank.

*Pit F36* This pit was noteworthy because of the large uncut blocks of limestone it contained (the two largest weighing well over 1 cwt apiece). The natural limestone in the vicinity was shaley in nature and clearly the blocks had been brought some distance for a specific purpose.

#### DETAILS OF THE PITS

Feature No.	Dimensions (cms)	Depth (cms)	Filling and remarks
7	55	20	Brown stony loam
10	50	20	Filled with both burnt and unburnt stones.
11	180 × 95	43	Black ashy layer at base. Some green clay. Several smooth (?rubbing) stones.
14	70 × 60	21	Burnt stones in the top.
15	75	8	Burnt stones in brown loam
16	175 × 135	150 +	Many burnt grey pebbles and burnt clay in upper fill. Bottom not reached. Half-sectioned.
17	190 × 175	—	Not excavated.
18	55	7	Brown loam.
19	95	12	Brown stony loam
20	270 × 245	170 +	Sides eroded. Pit probably left open? Quarry. Bottom not reached. Quarter sectioned.
21	140	70	Many burnt stones and a layer of burnt clay. Brown stony loam. Half-sectioned.
22	140	—	Not excavated
23	300 × 240	120	Upper layer a dark loam with burnt stones. Loose stones below. Quarter-sectioned.
24	190	—	Not excavated.
25	170 × 155	41	Brown silty loam. Probably left open.
28	55	11	Clay lined, with a clay filling.
29	125 × 100	40	Brown stony loam. Half-sectioned.
30	185 × 165	—	Not excavated.
31	145 × 130	100	Mainly limestone rubble. Half-sectioned.
32	50	15	Brown loam.
33	160 × 135	52	Sloping sides. Very stony, yellow-brown loam.
34	160 × 100	35	Sloping sides. Brown loam. Half-sectioned.
35	55	6	Brown loam.
36	140 × 120	32	Sub-rectangular. Large block of stone in a mixed fill.
40	250 × 63	28	Shaped like a ditch? Brown silty loam.

#### COMMENT AND DISCUSSION

##### *Phase I*

Parallel ditches, when seen from the air, are often interpreted as trackways, but when two deep ditches run close together, as at Harringworth, it is most unlikely that they did indeed flank a trackway. It has been suggested that many double and triple ditch systems may have formed boundaries (Pickering 1978) and this is the most likely function of the ditches, or their bank(s), at Harringworth.

Two similar parallel ditches were excavated by the writer in the same year, on a quarry at Gretton, approximately two miles south-west of the Harringworth site (FIG 1) (publication forthcoming). At Gretton, as at Harringworth, occupation debris was found in the ditches, but at the former site radiocarbon dates centred on 270 BC and 450 BC suggesting that a possible 'dumping' of material took place at different times, with one ditch perhaps replacing the other. However, there is no firm evidence to suggest that the two ditches at Harringworth were not contemporary, but the possibility must be considered.

The lack of any convincing evidence for domestic occupation close to the ditches during this phase, despite the pottery recovered from their upper fills, was a phenomenon also observed at Gretton. However, at the latter site a complex of early Iron Age postholes was found some 100m from the ditches containing occupation debris. This could imply that the dark earth and pottery found in the Harringworth ditches, may not have derived, as might be expected, from occupation adjacent to or in the near vicinity of, the ditches but may have been transported some distance.

##### *Phase II*

The almost total absence of animal bones in the pits may suggest that the Phase II settlement was primarily concerned with arable farming. Also noteworthy is the abundance of burnt stones in the pits both within and to the west of Ditch B, and the paucity of pottery.

It is clear from the plan that the excavated features may be on the fringe of a settlement that lies to the south or south-east of the present site. In these circumstances any conclusions drawn from these limited excavations could be misleading and are here avoided.

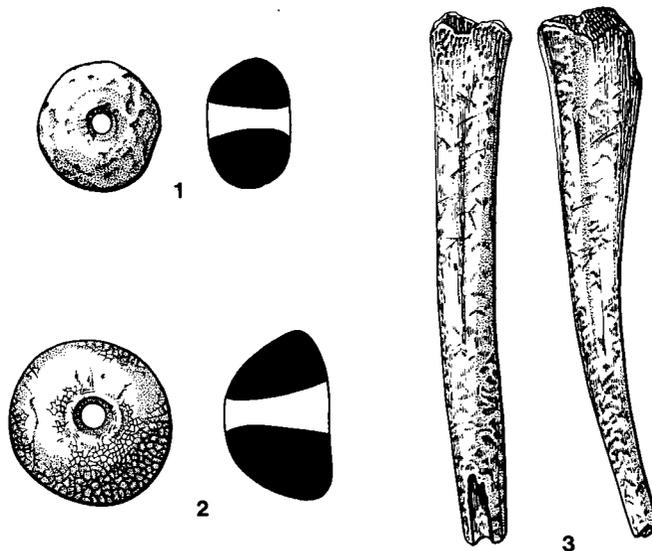


Fig 5 Harringworth: the small finds (1/1).

### THE SMALL FINDS (FIG 5)

#### FIRED CLAY

1. Spindle whorl. Diameter 33mm. Central hole 6.7mm D1 2.

#### BONE OBJECTS

2. Spindle whorl. Diameter 44mm. Central hole 9.12mm D1 2.
3. Gouge type object. Ditch B.
4. (Not ill) Sawn antler. 100mm in length. F36.

#### STONE

5. (Not ill) Crudely shaped sandstone quern or a rough-out for a quern. Roughly semi-circular in shape, diameter 300mm. A hole 12mm in diameter had been bored through the stone, widening out to 70mm at the top. Just off centre another small hole, 22mm deep, had been bored into the base of the stone. F31.
6. (Not ill) Similar stone to No 5. A small hole 45mm deep had been bored into the centre of the base. F26.
7. (Not ill) Piece of limestone, smooth, and worn concave. Possibly a grain rubber. F.11.

#### THE SLAG

by Stephanie Fells (Department of Metallurgy and Materials Engineering, University of Aston in Birmingham)

The fragment of slag, found in Ditch D, is dark grey, rather coarsely crystalline with few vesicles; an attached lump of white-buff crumbly baked clay was probably part of the furnace wall. Mineralogically, the slag is typical of local early bloomery slags, consisting of dendritic wüstite (-35%) and large (-1mm) fayalite crystals (-55%) with small amounts of hercynite and devitrified glass matrix. Minor slagging of the furnace wall has increased the proportions of  $Al_2O_3$  and  $SiO_2$  in the slag within 5mm of the clay contact; this is reflected by an increase in matrix and hercynite, decrease in fayalite and

absence of wüstite. Slow cooling, indicated by the coarse crystallinity, and the presence of a fragment of the furnace wall suggest that the slag solidified within the furnace.

#### THE POTTERY

The amount of pottery found at Harringworth was quite small, some 285 sherds coming from Ditch D, 145 from Ditch C and only 60 from the features assigned to Phase 2. There was no noticeable difference in the pottery from Ditches C and D and it is therefore all described here as Phase I material. Most of the pre-Belgic Iron Age pottery found on the nearby site in Wakerley parish was similar to the Phase 2 pottery at Harringworth, but one pit contained wares similar to the Phase I assemblage (Jackson and Ambrose 1978, Pit 190 FIG 39, Nos 107-111). It is therefore probable that both sites were broadly contemporary.

#### Phase I

The Phase I pottery from Harringworth can be compared with assemblages from Gretton, which lies two miles to the south-west (publication forthcoming) and from Twywell which lies twelve miles to the south (Jackson 1973). Uncorrected radiocarbon dates of 290 bc and 260 bc are available for a ditch containing the latest pottery at Gretton and a date of 280 bc was obtained for the early phase at Twywell. Although similar in some respects the Harringworth pottery lacks the carinated vessels found at Gretton, as well as the scored wares found in the later material at Twywell. Chronologically it should therefore belong to a phase which is later than the Gretton material, but pre-dates the widespread use of scored wares.

Most of the pottery probably came from round bodied vessels, with the expanded rim, common at Twywell, occurring regularly here. One form that seems to be confined to the early-middle Iron Age in Northamptonshire, has a broad internal groove below the rim (no 8). This was common at Gretton and other examples have been found at Twywell (FIG 21, No 18) and

at Wellingborough (Everson 1976, FIG 4, No 12). Although decorated rims occurred frequently at Twywell, the sites at Harringworth, Gretton and Wakerley produced no pottery with evidence of finger or fingernail impressions on the rims. As these sites appear to span a period from at least as early as the 5th century BC to the end of the Iron Age we can deduce that this lack of decoration may be a regional variation.

#### *The Fabrics*

No attempt has been made to divide the fabric into groups, as all the pottery contained calcareous grits or shell to varying degrees and there were few other inclusions. Occasionally there was evidence of ironstone or other red ochreous material but none of the sherds had much quartz, obvious in fracture. Although in approximately 25% of the materials the shell inclusion was fine or sparse the surfaces of the vessels were not particularly smooth. This pottery could not therefore be classified as fine ware. The fabrics were not dissimilar to the Gretton material, but at the latter site the vessels tended to be smoother and the inclusions more evenly distributed.

#### *Date*

The phase I material from Harringworth retained some of the characteristics of the latest pottery from nearby Gretton, but it was somewhat coarser and produced none of the carinated forms found on the latter site. At Runnymede Bridge, Surrey, round bodied vessels occur in an assemblage dated to the 8th or 7th centuries BC (Longley 1976) and these forms continue throughout most of the Iron Age period. However, for reasons stated above it seems likely that the Harringworth pottery belongs to a phase just before scored wares became locally common. A date around the 4th or 3rd centuries BC would therefore not be out of place.

#### *Phase II*

The amount of pottery assigned to this phase was too small to be discussed in detail. No less than 50% of the assemblage was scored ware so it clearly belongs to the latter part of the Iron Age when vessels with this type of surface treatment were common in the region.

The illustrated vessel (No 42) is unusual. The three methods widely used for scoring or scratching the surface of vessels were:

- (1) wiping with a bunch of twigs or straw.
- (2) deeply scoring with a sharp tool such as a knife, and
- (3) making shallow grooves with a round or blunt ended tool.

The last method was popular for decorating vessels with curvilinear or other designs. The Harringworth vessel has all three of these techniques in evidence on the same surface.

#### CATALOGUE

##### *Pottery from Ditch C, Layer 1 (FIG 6)*

1. Ext, int and section: dark brown ware, bumpy ext surface; fine grits
2. Ext, int and section: dark brown ware; fine grits.
3. Ext: smooth brown ware: int: light brown; section: dark grey; sparse fine grits.
4. Ext, int and section: dark brown to black ware; fine grits.
5. Ext and int: dark brown ware; section: red/brown; fine grits.
6. Ext: smooth black ware; int: light brown to black; section: black; sparse fine grits.
7. Ext, int and section; dark grey/brown ware; moderately shelly.
8. Ext and int: smooth dark brown ware; section: black; fine grits.

9. Ext: dark brown ware; int and section: black; moderately shelly.
10. Ext, int and section: brown ware; moderately shelly.
11. Ext, int and section: grey-brown ware, bumpy surface; mainly fine grits.
12. Ext and int: light brown to dark grey ware; section: dark grey; moderately shelly.
13. Ext, int and section: smooth brown ware; fine grits
14. Ext: dark brown ware; int and section: dark grey; fine grits.
15. Ext, int and section: dark grey-brown ware; moderately shelly.

##### *Pottery from Ditch D, Layer 2 (FIG 6)*

16. Ext, int and section: dark brown-black ware; sparse fine grits.
17. Ext: light brown ware, bumpy surface; int and section: dark brown-black; few tiny grits.
18. Ext, int and section: brown-dark grey, bumpy surfaces; sparse fine grits.
19. Ext: brown with uneven surface; int and section: light brown to black; moderate to coarse shell.
20. Ext: brown uneven surface; incisions 10mm long below rim; int and section: dark grey; fine to moderate shell.
21. Ext, int and section: brown-dark grey ware; fine grits.
22. Ext and int: light brown to dark grey ware; section: dark grey; fine to moderate shell, some ochreous inclusions.
23. Ext: dark brown ware; int and section: light brown to dark grey; fine grits.
24. Ext, int and section; dark grey-brown; fine grits.
25. Ext: smooth dark brown ware; int: smooth, light brown to dark grey; section: dark grey; moderately shelly.
26. Ext and int: smooth but bumpy dark brown ware; section: dark grey; moderately shelly.
27. Ext: smooth dark brown ware; int: mottled brown; section: dark grey; fine to moderate shell.
28. Ext: light brown, uneven surface; int: brown to black; section: black; sparse grits.
29. Ext: smooth brown ware; int: brown and black; section: dark grey; moderately shelly.
30. Surface: uneven, buff-light brown: section: grey; very sparse grits.
31. Ext, int and section: dark brown/grey; fine grits.
32. Ext: brown ware; int and section: dark grey; moderately shelly.
33. Ext: reddish-brown ware; int: brown; section: grey-brown; abundant shell.
34. Ext: orange-brown ware; int: light brown to black; section: dark grey; fine grits and red ochreous inclusions.
35. Ext: smooth, perhaps burnished, brown ware; int: light brown to grey; section: grey; very sparse fine grits.
36. Ext, int and section: dark grey-brown; abundant shell.
37. Ext: dark grey ware, lined with closely set, shallow grooves or wipe marks; int and section: dark grey; abundant shell.
38. Ext, int and section: dark grey-brown ware; moderately shelly.
39. Ext: smooth orange-brown to dark brown ware; int: dark brown; section: dark grey; abundant shell.
40. Ext: brown ware; int and section: dark grey; sparse fine grits.

##### *Pottery from the Phase 2 pits (FIG 7)*

41. Ext: dark grey ware, surface scored with diagonal incisions; int: brown and dark grey; section: dark grey; abundant shell. Pit F20.
42. Ext: light brown to dark grey ware; surface scored with a

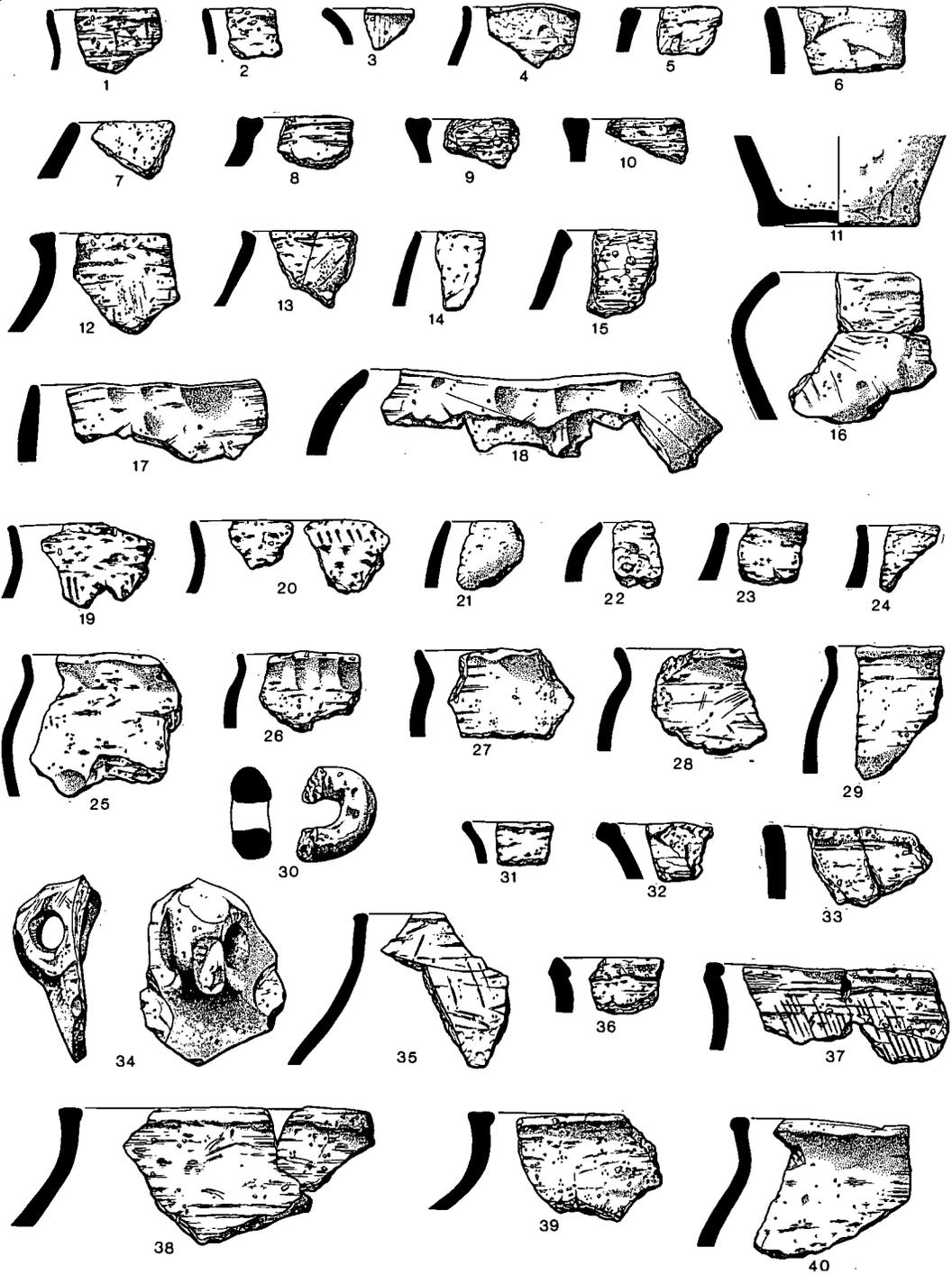


Fig 6 Harringworth: Phase 1 pottery (¼).

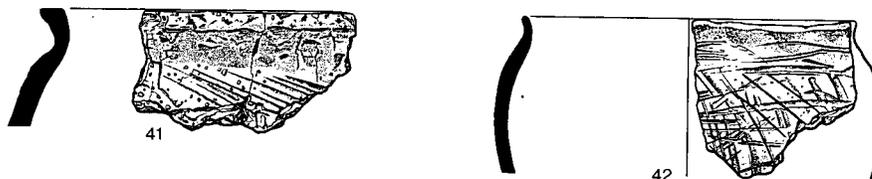


Fig 7 Harringworth: Phase 2 pottery (¼).

pattern of shallow gooves, a series of sharp incisions, and marks made by brushing with straw or twigs; int and section: dark grey; sparse grits. Pit F21.

stratigraphy so in most instances the features can only be described in the chronological sequence suggested by the pottery.

#### DESCRIPTION OF THE LAYERS IN THE ILLUSTRATED SECTIONS (FIG 4)

*Ditch D* 1, brown gritty loam; 2, very dark loam; 3, many stones in gingery brown loam; 4, stony yellow marl.

*Ditch A* 1, dark brown silty loam; 2—3, light brown gritty loam, stony in centre of ditch; 4, gingery-brown loam; 5, stony yellow marl and brown loam.

*Ditch B* 1, dark gingery brown loam; 2, stony, brown loam; 3, dark silty loam; 4, brown gritty loam; 5, stony yellow marl; 6, silt.

*Ditch G* 1, brown silty loam, 2, light brown loam with some marl.

### PART 3

#### A ROMAN SITE AT HARRINGWORTH

The Roman site at Harringworth lay some 600m south-west of the Iron Age and Roman agricultural and industrial site excavated between 1972 and 1975 (FIG 2). The area between the two sites was observed during quarrying but no other Roman features were noted that may have linked the two sites.

The Harringworth site was first revealed by quarrying in 1968. At this time several stone built kilns, or ovens, as well as other unidentifiable features were noted close to the Harringworth-Wakerley road (FIG 8). No archaeological work was feasible in 1968, but in 1972 it was possible prior to quarrying to excavate the remains of a possible 'aisled barn' and other structures that lay to the south-east of the earlier discoveries. Finally in 1978 the rest of the area was quarried and topsoil stripping exposed part of another building as well as ditches, pits and an iron smelting furnace.

#### DESCRIPTION OF THE FEATURES

The pottery assemblage suggests that there was activity on the site during much of the Roman period. However, there was little linking

#### THE 1978 EXCAVATIONS (FIG 8)

Most of the features found in 1978 appear to be earlier than the buildings excavated in 1972 and are therefore described first. They lay to the west of the site excavated in 1972, and between this area and the features exposed in 1968.

*Ditch A* (FIG 9) A linear ditch, on average 1.1m deep, where excavated. Pottery from the lower layers suggest it was dug in the early Roman period and finally filled in the 2nd century.

*Building 3* The corner of a 'building' of uncertain size, with walls 750-850mm wide. Only one or two courses of stone survived with 150mm of soil between the walls and the limestone bedrock. Internally, a layer of limestone rubble, fired red, represented the remains of a floor. No stratified dating evidence was found but the small amount of pottery from the area did not appear to be later than the 2nd century. The near parallel alignment of the building and Ditch A may be significant.

*Pit 1* A pit, 700mm in diameter and 350mm deep, with a fill of dark earth, slag, ironstone and burnt limestone. No dating evidence.

Just SE of the pit there was an area of burning and slag, perhaps the remnants of a furnace site.

*Pit 2* 600mm in diameter and 450mm deep. Some ash on the bottom of the pit but the rest of the filling was a brown loam. No date.

*Pit 3* 600mm in diameter and 200mm deep, filled with dark brown loam. No dating evidence.

*Pit 4* 700mm in diameter and 200mm deep; the sides of the pit reddened by heat and filled with stones fired grey. There was no evidence of iron working. No dating evidence.

*Pit 5* An irregular pit, perhaps a quarry, 2.4m long and at least 1.3m deep. Quantities of fired, and unfired, clay were found in the filling (see

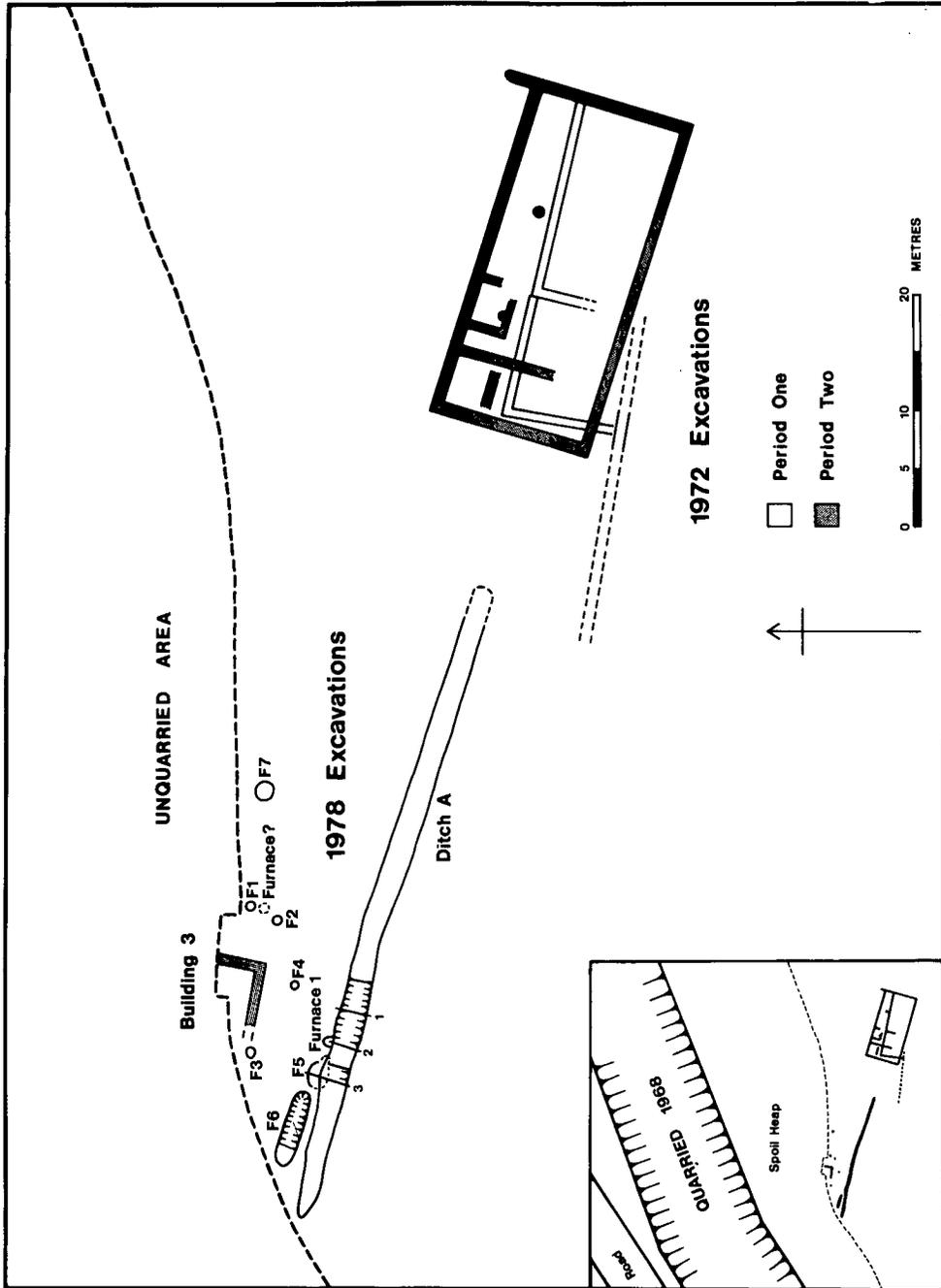


Fig. 8 Harringworth: Roman site: general plan.

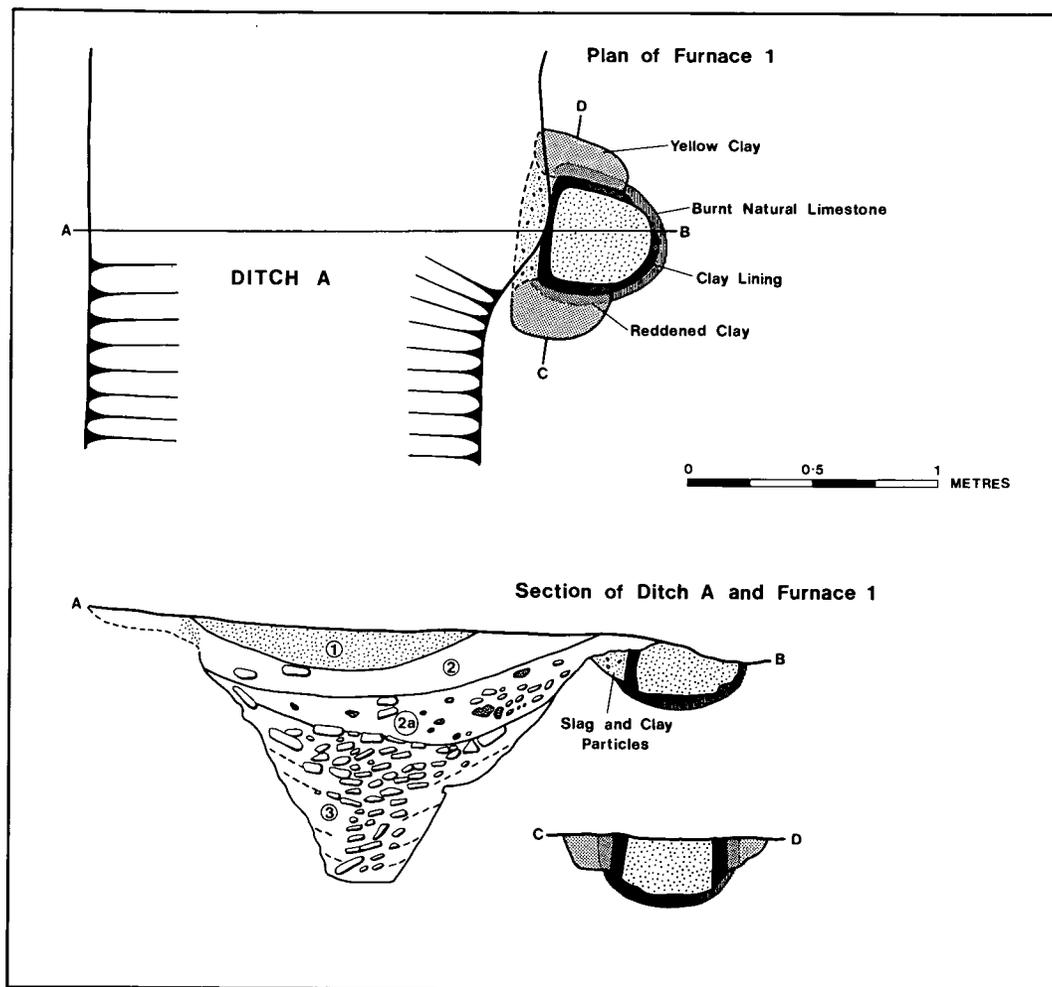


Fig 9 Harringworth: plan and sections of Furnace I and Ditch A.

Furnace 1 below). Earlier than, or contemporary with, Ditch A.

*Pit 6* A pit, some 6.8m long, or perhaps a short length of ditch on average 1m deep, with many large stones in its filling. 3rd or 4th century.

#### THE IRON SMELTING FURNACE (FIGS 8 and 9)

The remains of an iron smelting furnace of possible Iron Age date were revealed in 1978. The furnace which was D-shaped in plan, was some 350-400mm in diameter internally, and dug to a depth of 200mm into the limestone bedrock. The inner vertical walls of the furnace consisted of a clay lining which was fired hard and grey to a thickness of 50mm, whilst outside this lining both the clay packing and the natural limestone in situ were reddened by heat. On the east and west sides

of the furnace there was a packing of yellow clay which in plan appears to form two cheeks of an opening on the south side. If this is so, then the straight side of the D-shaped wall may be a later addition.

To the west of the furnace an irregularly shaped pit (F5) contained furnace debris in its fill. It may have been a quarry pit, perhaps contemporary with the furnace.

*Date and discussion* The furnace appears to be earlier than the adjacent ditch (Ditch A) and the latter can be dated to the early Roman period. The filling of the ditch contained debris eroded from the furnace (FIG 9, Layer 2a) and amongst this debris was a sherd of Iron Age scored ware which, if contemporary with the furnace, would date the structure to the pre-Belgic period.

Three main types of furnace were defined on the nearby Iron Age and Romano-British site in Wakerley parish, some 600m to the south west (Jackson *et al* 1978, 151-166), but there were no precise parallels to the Harringworth example. The form may fall between Type 1 at Wakerley, which was generally larger in diameter, and Type 2 of similar size but set in deeper pits. This view of their relationship would support a pre-Roman date for the Harringworth furnace.

Nevertheless this suggested date for the furnace is based on an assumption: that its position by the edge of the ditch was coincidental. If, however, the furnace was deliberately sited adjacent to the partially filled ditch (this perhaps explaining its straight side here) then the structure may date to the 2nd half of the 1st century AD. In comparison with the Wakerley furnaces it could then be seen as intermediate between Types 2 and 3, the latter having slag tapping pits.

#### THE 1972 EXCAVATIONS (FIGS 8 and 10)

##### *Method of excavation*

The site of a Roman building to the south of the 1968 discoveries was indicated by a spread of building stone and pottery on the surface of a nearby field. Subsequently an excavation was carried out using a grid system of 4m square trenches, separated by 1m wide baulks: most of the main building was excavated by hand from the surface but later a mechanical excavator was used to clear the topsoil at the west end of the site.

On completion of the excavation further trenches were dug mechanically to see if any other building survived, chiefly to the west of the excavated area. The only surviving feature to be found, a wall, extended westwards from Building 1 (FIG 8).

##### *Pre-building activity*

As most of the features were not stratigraphically linked with the buildings they are described below as indeterminate. Residual pottery of the late Iron Age—early Roman period suggests activity at that time but no features can be dated to this early phase. The only feature cut by the walls of Building 1 was a small shallow pit (F10). The same wall had also protected a layer of burnt subsoil at its southern end. It is possible that a nearby kiln or oven (F7) pre-dates both building phases, but the evidence is not conclusive.

*Building 1* The plan of the surviving foundations shows a building, or buildings, at

least 26.4m long and 8.8m wide internally. In plan the building was divided into two, with the smaller room or building measuring 9.8m × 8.8m internally.

The south wall of the building was traced for a further 14m running west from the south-west corner of the smaller room. It is therefore possible that the structures were part of a longer range of buildings.

The foundations of pitched stone were 800mm wide and survived to an average depth of 150mm below the ploughsoil. No floor levels survived and there were no internal features that could be shown to belong to this phase. A piece of thick colour coated pottery from a pit cut by the wall (F10) might (if one sherd is reliable evidence) suggest that the building post-dates the 2nd century.

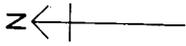
##### *Building 2*

*Summary* A large rectangular building, 28m × 12.4m internally overlay the earlier structures. The long axis of the building was aligned roughly east-west and there was a fall in ground level of approximately 800mm across the building from south to north. The building clearly had internal walls at its west end and two post pads, presumably for roof supports, were found on the north side. Part of a pitched stone floor survived at the highest point in the building, near to the south wall. A quantity of painted wall plaster found in the robber trenches near the south-west corner suggests that the building was, at least in part, domestic.

*The Excavation* In some places the walls could only be traced by a spread of mortar rubble on the bedrock, whereas elsewhere they were up to 500mm deep below the ploughsoil. Most of the building stone had been robbed away.

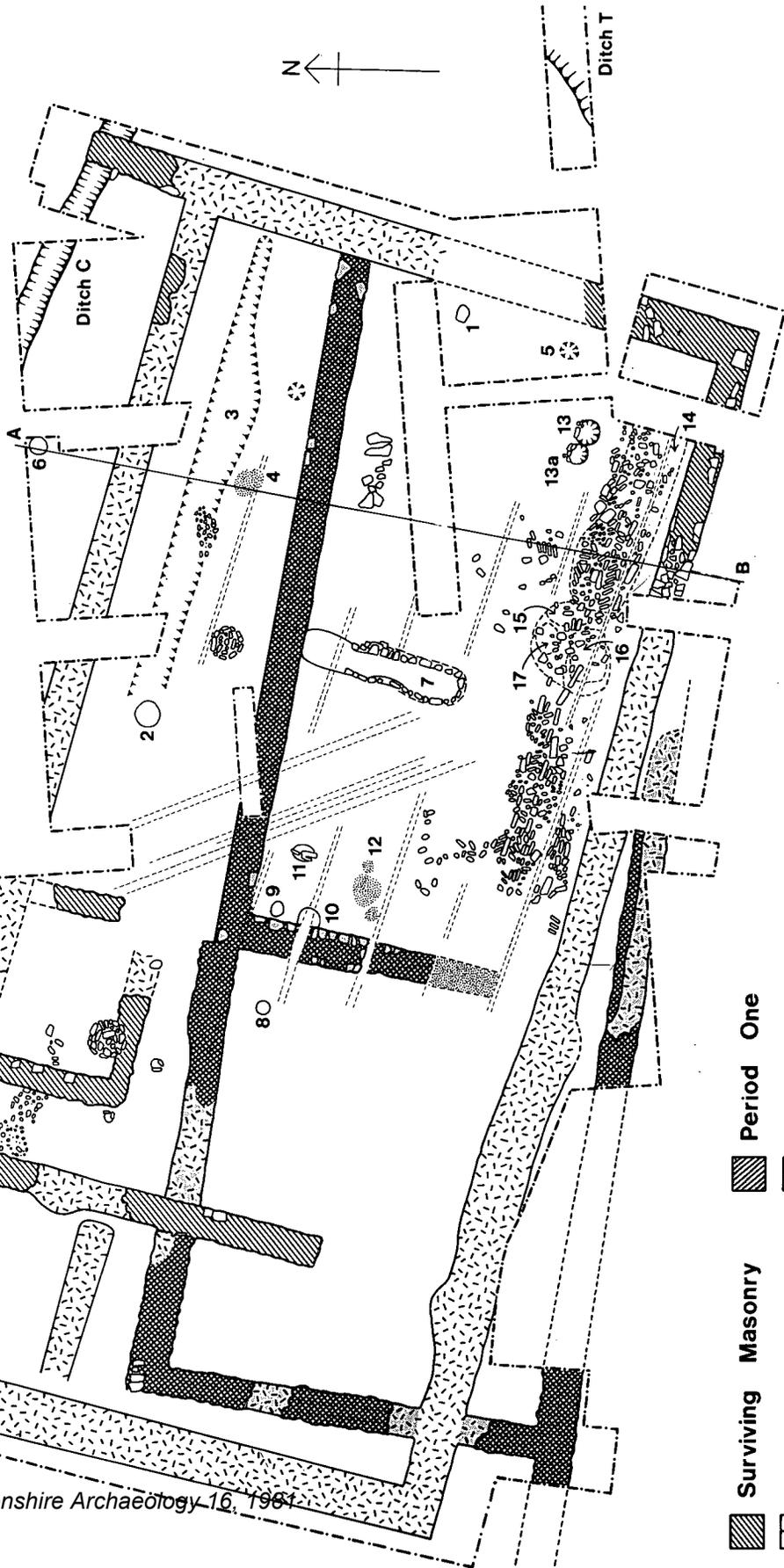
The flanking walls at the east and west ends of the building were 1m wide, compared to an average width of 800mm in the north and south walls. It thus seems likely that the former were more substantial and possibly built of stone. At the north end of the east wall the foundations continued a further 2.6m northwards beyond the corner of the building. As this was the lowest part of the building it may have been necessary to build a buttress there against the downward thrust of the slope. The only evidence of a possible doorway occurred at the east end where at one point no trace of the wall survived. Although there was no depth to the foundations on either

# Harringworth 1972



Ditch T

Ditch C



-  Surviving Masonry
-  Destroyed Masonry
-  Edge of Excavation
-  Period One
-  Period Two
-  Burnt Subsoil

Fig 10 Harringworth: plan of Buildings 1 and 2.

side, the fact that a 'gap' occurred opposite two internal postholes (F1 and F5) may be significant.

*The internal partitions* There appears to have been a rectangular room or apartment 8.8m × 4.4m at the west end of the building but this may have been divided into two smaller rooms at some stage. Evidence for this dividing wall consisted of a shallow trench, some 800mm wide, which may originally have contained a foundation of stone or timber.

Some 1.6m east of this apartment there was another small room abutting the north external wall. The internal dimensions of this room were only 3.8 × 2.8m. A large post pad cut the south wall of this room, but the evidence suggests that the rather flimsy remains of the wall were built around the pad.

*The roof supports?* Two post pads, built directly on top of the natural limestone, were found on the north side of the building. The westerly pad was 900mm in diameter, 7.9m from the west wall, and 2.25m from the north wall, the east pad being 800mm in diameter, 9.2m from the east wall and 2.5m from the north wall. The distance between the pads was 8.8m.

*Comment* Roman buildings of this size and shape are often aisled structures. If the Harringworth building was of this type then presumably there would have originally been two, five or eight roof supports on the north side and perhaps a similar number on the south side. The two post pads that survived were roughly evenly spaced on the northern side and it can reasonably be questioned as to whether this was coincidental, or whether the building was different in design from the average aisled structure. It may be significant that the pads were on the lower north side of the building where a probable buttress at the north-east corner suggests the building was in need of extra support. The roof was presumably of thatch or reeds as no roof tiles or stone slates were found in the vicinity of the building.

*The pitched stone floor* Part of a badly plough-damaged pitched stone floor survived along the east end of the south wall. The design of the floor was still visible, with rows of stone, pitched diagonally, alternating with lines of single stones running parallel with the south wall. It seems unlikely that a level floor extended over the whole building as this would have involved an infill 800mm thick along the lower north side of the building. Several features (F14-17, see below) were found below the floor which if

contemporary with the building would suggest the stone floor was not a primary feature.

#### *Other features*

*F3* This was a shallow trough, situated 1m from the north wall of the building and running parallel to it. It was filled with a friable greenish-brown loam and could have been associated with stalling for animals. The pottery from the feature was predominantly 2nd century so its relationship with Building 2 is in doubt.

*F1 and F5* Possible postholes which may have been associated with a doorway. F1 was a posthole 400 × 250mm in diameter and 110mm deep, but F5 survived only as a depression, 400mm in diameter.

*F13 and F13A* Two postholes with sloping sides on the south and stone packing on the north. Up to 550mm in diameter and 250mm deep.

*F14-F17* These features underlay the stone floor but may have been aligned along the south wall of the building. The small amount of pottery found dates to the first half of the 3rd century.

*F14* This was a trough, some 4.5m long, 1.5m wide, and up to 250mm deep. It was lined in places with slabs of stone.

*F15-F17* Just to the west of F14 there was an area of reddened subsoil, ash, charcoal, clay and mortar, of which features F15-F17 were clearly a part. F15 was a small pit, 200mm deep, containing ash, charcoal, and mortar, and F16 was also a pit, 150mm deep, but mainly filled with green clay. F17 was probably the remains of a hearth.

#### *Indeterminate*

*F7* F7 was a kiln or oven of a type which was very common on the nearby site in Wakerley parish (see FIG 16, F686, Jackson and Ambrose 1978). It consisted of an elongated pit or channel, some 4m long and 300mm deep, which was in turn divided into three sections, a chamber, central fire, and stokehole. The flue and chamber were built of stone with up to five courses surviving. They varied from 400 to 600mm in width. The stone was reddened by heat internally, and a thin layer of ash survived at the base. The feature had been partially filled with loam but the top appeared to have been deliberately consolidated with a layer of stone.

It is difficult to assign the feature to a phase within the development of the site. It is aligned with Building 2 and levelling of the feature with stone may have been carried out when the floor in

this building was laid. Despite this it is still possible that the structure pre-dates Building 1.

*F2* A pit, 600mm in diameter and 400mm deep. Mainly a dark ashy filling.

*F4* A spread of dark earth and charcoal containing 4th century pottery.

*F6* Pit, diameter 520mm, depth 200mm, dark fill.

*F8* Small pit, 300mm in diameter 200mm deep. Within the pit a complete colour coated cup was found lying on its side. (FIG 11, No6, 4th century).

*F9* Pit or posthole 350 × 300mm in diameter and 250mm deep.

*F11* Posthole 600 × 350mm in diameter and 250mm deep. Large packing stones. Some 3rd century pottery.

*Ditch C* An undated ditch, some 350mm deep which underlay the northern end of the proposed buttress. Dark brown loam.

*Ditch T* A partially excavated ditch or pit which produced sherds of 2nd century pottery.

### *Discussion*

Since the Phase 2 building at Harringworth was situated on sloping ground, and only two post pads survived, it could not be certain that the structure was of normal two aisled type. In terms of function, however, this is probably irrelevant and the building is likely to have been used in the same way as the average aisled house.

Most Romano-British aisled houses probably had some type of living accommodation (Smith 1963) and plans of the simpler type of aisled structure often show dividing walls at one end in a way similar to the Harringworth example. The presence of painted wall plaster in the robber trenches, at the same end as the internal walls, tends to support the assumption that the building at Harringworth was in part domestic and part agricultural.

There was evidence of activity on the site during much of the Roman period but because of their poor survival little can be said about the earlier buildings. The presence of the smelting furnace helps to confirm that iron working was widespread in the locality in the Roman and late Iron Age periods.

### *The link between the Harringworth and Wakerley sites*

Widespread Roman agricultural and industrial activity was found at Wakerley 600m south-west

from the present site. Since there was no clear evidence at Wakerley of Roman domestic structures the possibility remained that workers lived elsewhere and travelled to the site.

Large areas to the south of the Wakerley-Harringworth road have been observed during quarrying without revealing a major Roman site. Likewise, fieldwalking to the north and east of the Wakerley site has produced no evidence of any large buildings nearby. The painted plaster found in the robber trenches at Harringworth does suggest that either Building 2 or another dwelling very near was occupational, but no clear link between the two sites can be established.

However, one factor was established at Harringworth that may be significant when considering the Wakerley site. The Harringworth buildings were excavated from the surface ahead of the quarrying, and stone walls clearly had a much better chance of survival than at Wakerley where topsoil stripping took place prior to excavation. Both sites were situated on limestone and at Harringworth it was found that the foundation trenches did not penetrate the natural bedrock. Subsequently, when the overburden was removed by box scrapers prior to quarrying, virtually all traces of the building were obliterated. With this factor in mind, and considering the large amounts of pottery found at Wakerley, it seems highly likely that building(s), perhaps of the Harringworth type, once existed at Wakerley.

### CATALOGUE OF SMALL FINDS (Not illustrated)

#### *Coins*

1. Barbarous Radiate 3rd century. Unstratified (1972).
2. Minimus. Diameter 8mm. 3rd or 4th century. Unstratified (1972).

#### *Copper alloy*

3. Brooch. 'Dolphin' type. Collingwood Group H. 1st or 2nd century. Ditch A layer 1 (1978).
4. Possible fishhook, no barb. Overall length 75mm. At the opposite end to the hook the wire is folded into a tight loop. F3 (1978).
5. Tweezers. Length 59mm. Unstratified (1972).

#### *Iron*

6. Hinge pivot or split pin. Cunliffe 1971, FIG 55 8-11. F6 (1978).

#### *Glass*

7. Base of bottle. Blue-green. Diameter 52mm. Above floor of building 3 (1978).
8. Rim of bowl. Thin, almost clear glass. Other fragments possibly from the same period. Above floor of building 3 (1978).

### Bone

9. Pin. Length 108mm. Stem swollen 20mm from head of pin. End tapered to a blunt point. Head spherical. Diameter 5mm. F6 (1978).
10. Pin (broken). Apparently similar to No 8, but with a flattened head Unstratified (1972).
11. Needle. Length 77mm. Eye, rectangular, 7mm x 2mm; positioned 13mm from the end, which slightly widens and flattens out. F6 (1978).

Thanks are due to W R G Moore for identifying Nos 1, 2 and 3.

### THE POTTERY by R Turland

The excavations at Harringworth only produced small amounts of pottery, with most of the smaller features yielding very few sherds of datable material. Scattered throughout the site were fragments of colour-coated wares, the majority of these in levels that must be classified as unstratified. The general similarity to the colour-coated vessels published from the nearby Roman site at Wakerley (Jackson and Ambrose 1978) located 600 metres away towards the north-east, suggests a common source. With the main manufacturing area lying only 14 to 15 kilometres away and serviced with a Roman road which joins the Ermine Street just north of Durobrivae, it would be natural to assume the majority of this pottery was locally made.

It is obvious from the pottery that the occupation of the site has been long. All of the later features show an intermingling of earlier types amongst their assemblages and no attempt has been made to separate these earlier wares. Unfortunately, because of this contamination it is impossible to interrelate the various features examined or date them positively from these small deposits. However six vessels have been selected for illustration because of their completeness which suggests they may be the latest vessels within their group (1, 2, 3, 6, 8, 10). The other five drawn examples are worthy of publication in their own right.

#### INCIDENCE OF INCLUSIONS

Inclusions	Size	
a few	tiny	up to 1mm
some	small	1-2mm
many	medium	2-5mm
	large	5-7.5mm

#### DITCH A FIGS 8 and 9

The largest group of material collected came from this ditch and although only six metres of its entire length of fifty-five metres were excavated, it did provide 3.44 kilos of pottery for examination. Except for a few early sherds found within the primary fill, most of the pottery excavated was removed from the two upper layers. Contamination of layer 1 was possible due to the heavy plant used upon the site. Inspection of this pottery shows that just over 50% of all the wares recovered are in grey fabrics; a little over 25% have oxidised surfaces, while 16.9% are in shell loaded wares. Surprisingly only two sherds of Samian were found.

1. Many fragments from a small carinated bowl or cup in soft under-fired orange ware and colour-washed, with yellow/cream slip; a few, tiny, gritty inclusions. This bowl/cup displays a continuation of painted tradition with the remarkable mid-first century AD vessels found at

Rushden in 1971 (forthcoming) and except for the lack of decoration could easily have fitted into their assemblage. Probably late first century AD.

Ditch A, layer 1.

2. Several fragments from a globular jar in very hard well-fired grey-ware; many, tiny, white, sandy inclusions. This badly deformed jar with its rim and body misshapen in manufacture, displays rectangular panels of barbotine decoration, alternating with vertical groups of three applied circles. It has much in common with similar forms found at Fishbourne (Cunliffe 1971, FIG 90, Nos 72-73-75). Other examples from Verulamium show this form to be as early as cAD 60. Probably late first century AD (Frere 1972).

Ditch A, layer 1.

#### MEDIUM MOUTHED JARS

3. Globular storage jar in hard sandy grey-ware, decorated with a band of diagonal burnished lines across the shoulder area. This is a Romanized version of the high-shouldered Belgic influenced jar and possibly also dates from the last quarter of the first century AD.

Ditch A, layer 1

Many sherds from other medium-mouthed jars (not illustrated) were found within ditch A. The majority were in grey ware fabrics but others had been fired in an oxidising atmosphere. They are all distinguished by their slightly everted rims, sometimes accompanied with either a groove or thin cordon at the base of the neck. All late first century AD. Layers 1 and 11.

4. Rim fragment from large storage jar in hard buff/brown ware; many, small, black and white, soft granular inclusions. Around the rim are inscribed (after it had been fired) the letters RA GRA, probably referring to its contents.

Ditch A, layer 1.

#### SHELL LOADED COOKING POTS (not illustrated)

Ten vessels in this fabric were noted within the upper levels of Ditch A each with heavily sooted exteriors. All but one of the vessels have grooved rims for lids and were probably made within the first two or three decades after the conquest. One sherd in the same fabric is hand made and is possibly of native manufacture, pre-dating all the other examples. A very small calcareous handle may also be early.

#### OXIDISED WARES (not illustrated)

The rim sherds from two late first century flagons were recovered but no body sherds of these vessels were evident. A large fragment from a similar type of medium-mouthed jar to illustration number 3 displayed multiple chevron decorations executed by stabbing with a comb-like tool. Last quarter of first century AD.

Ditch A, layers 1 and 2.

#### PIE DISHES (not illustrated)

Only two of these dishes were present in grey ware. It was from the final filling that each of these vessels were found and the possibility that they may be intrusive cannot be ruled out. One rim sherd is very similar to an early Antonine dish found at Brixworth (Woods 1970, FIG 10 No 29) and may well be the latest piece to be found in Ditch A.

Ditch A, layer 1.

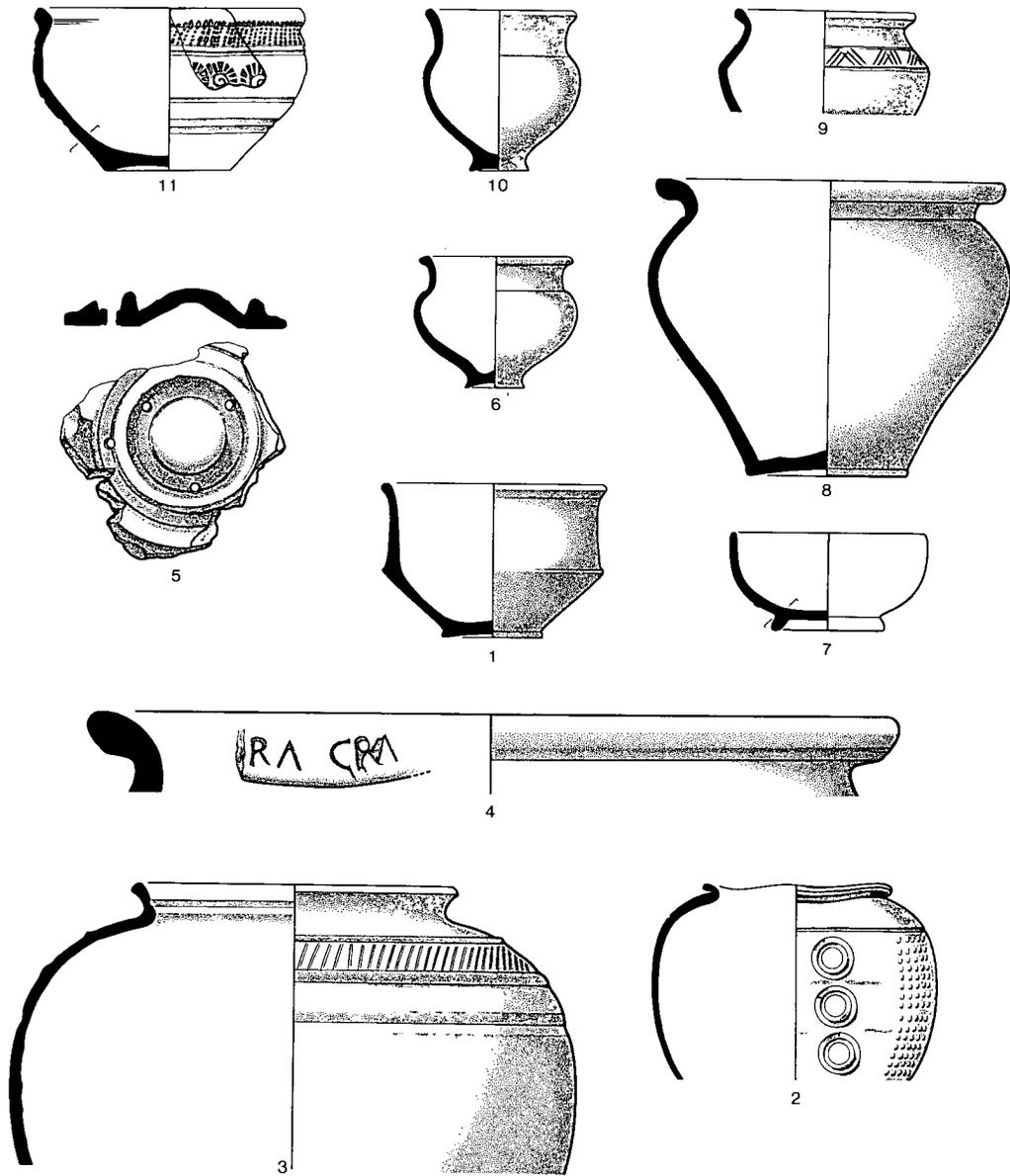


Fig 11 Harringworth: the pottery (¼).

#### CONCLUSIONS

The pottery collected from Ditch A suggests a late Flavian date for the main fill, followed by a slow levelling off period early in the second century. Sherds of later wares have found their way into the depression still existing during the Antonine period but these are intrusive. No colour-coated pottery was found in this feature, suggesting that it had completely filled up prior to the nearby industry becoming established.

*Northamptonshire Archaeology 16, 1981*

#### MISCELLANEOUS POTTERY FROM OTHER FEATURES

5. Fragment from upper section of cheese press in hard sandy grey ware with lighter core. Perforations pushed through from the flattened upper side registered the bone or wooden handle of the tool used.
6. Small cup in hard well-fired grey ware; a few, tiny voids with a few, tiny, black inclusions. Probably late third to

- fourth century AD. F4.
7. Small imported colour-coated bowl in hard pinkish fabric with black-brown metallic coat, commonly referred to as Rhenish. However, a number of factories producing this ware are known in North-eastern Gaul. First half of third century AD. Posthole F11.
  8. Many fragments from wide-mouthed jar in hard white/grey fabric with black/brown colour-coat; some, tiny, dark (some, tiny, ironstone) inclusions. Fourth century AD.
  9. Small medium-mouthed jar in hard grey ware with multiple incised shoulder decoration; some, tiny calcareous inclusions. Firing complete and thorough. Late first century AD. F3.
  10. Small cup in hard cream/white fabric with orange colour-coat (Pottery Colour Chart, Yellow/Brown A4). Fourth century AD. F8.
  11. Three small sherds from an unusual stamped and rouletted bowl in hard grey-white fabric with grey colour-coat. The decoration of successive stamps around the girth of this vessel is enhanced by its curious five-pronged tool impressed rouletting across its rim and neck. Three hitherto unknown but incomplete stamps survive, displaying a central embossed half-coil design surrounded with a circle of radiating, sub-triangular impressions. Bowls of similar form and fabric are known from the Stanground Park area. However, there is no evidence that this vessel originated there. It is highly probable that another unknown local site, somewhere within the Peterborough area was producing these stamped wares sometime during the first half of the third century AD.

Thanks are due to J R Perrin and Dr G Webster for their comments on this vessel. F14.

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