

# Nore Hill, Chelsham: a newly discovered prehistoric enclosure

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*A previously undiscovered earthwork in south-east Surrey was identified from the air in 1982 and surveyed in 1984. The results of a trial excavation in 1985 together with finds of Bronze Age metalwork by metal detector users suggest a Later Bronze Age date for the enclosure with subsequent Iron Age and Roman activity. Documentary sources for the most recent history of the site are also discussed.*

## Introduction

In the winter of 1982/3 Captain Derek Jones, a helicopter pilot, photographed an earthwork on Nore Hill, Chelsham (TQ 381 575) which he had noted while flying over the site (fig 1). He brought the photographs to the attention of John Matthews and Mary Saaler, of the Bourne Society, and so enquiries began as to the nature of the earthwork. It was originally suggested that the earthwork was the result of gravel extraction, but their investigations showed that this had taken place near to, but not on, the site itself, although re-landscaping following gravel extraction had taken place on the north-west edge of the site (fig 1: Matthews 1987, 42).

Further aerial photographs taken by Captain Jones in the winter of 1983/4 clarified the shape of the earthworks (see Matthews 1986, 41 for an example). The earthworks were surveyed in March 1984. At the same time finds of Bronze Age metalwork and a Roman coin were made available for study by the West Kent Metal Detector Club; their findspots are plotted on fig 3. A general account of the preliminary research at Nore Hill can be found in Matthews (1987).

The survey results and the metalwork found by metal detector users suggested the existence of a prehistoric enclosure, and so in March and April 1985 trial excavation of the site was carried out to elucidate its nature and date.

## Geology and relief (figs 2, 3)

Nore Hill is sited within the range of valleys of the North Downs and is a promontory jutting out into the steep-sided Halliloo valley to the south and south-west. It overlooks more gently sloping land to the north and north-west and is only overlooked by higher ground on the east. The highest point of the site along the east perimeter is at a height of 242m OD. The crown of the hill occupies the extreme south-west edge of an outcrop of the disturbed Blackheath beds which overlie chalk and are ringed by a shallow deposit of Clay-with-flints overlying the sands and gravels. The soils are acidic (pH value: 5.9, from a soil sample from A07. Fig 4, layer A20).

## Documentary research by John D Matthews

The name 'Nore' is apparently derived from the Middle English 'atten ore', 'at the slope or hillside', and is first mentioned in the 1402 rental for the Titsey and Tatsfield manors (Gover *et al* 1934, 315). The next known reference is over 400 years later (Manning & Bray 1809, 422). The 1844 Tithe and Apportionment map (SRO P16/2/1-35) shows the site as pasture with some 'rough' to the north-west of the earthwork. The use of the site as pasture is recorded in a land conveyance of 1890 (SRO ref 61/13/7) and in the diaries of Solomon Windross, farmer of nearby Beech Farm in the 1890s (held in Caterham Valley Library). The diaries give the first reference to Barnard Road and this road is also shown on the 6" OS map (1897 edition). The

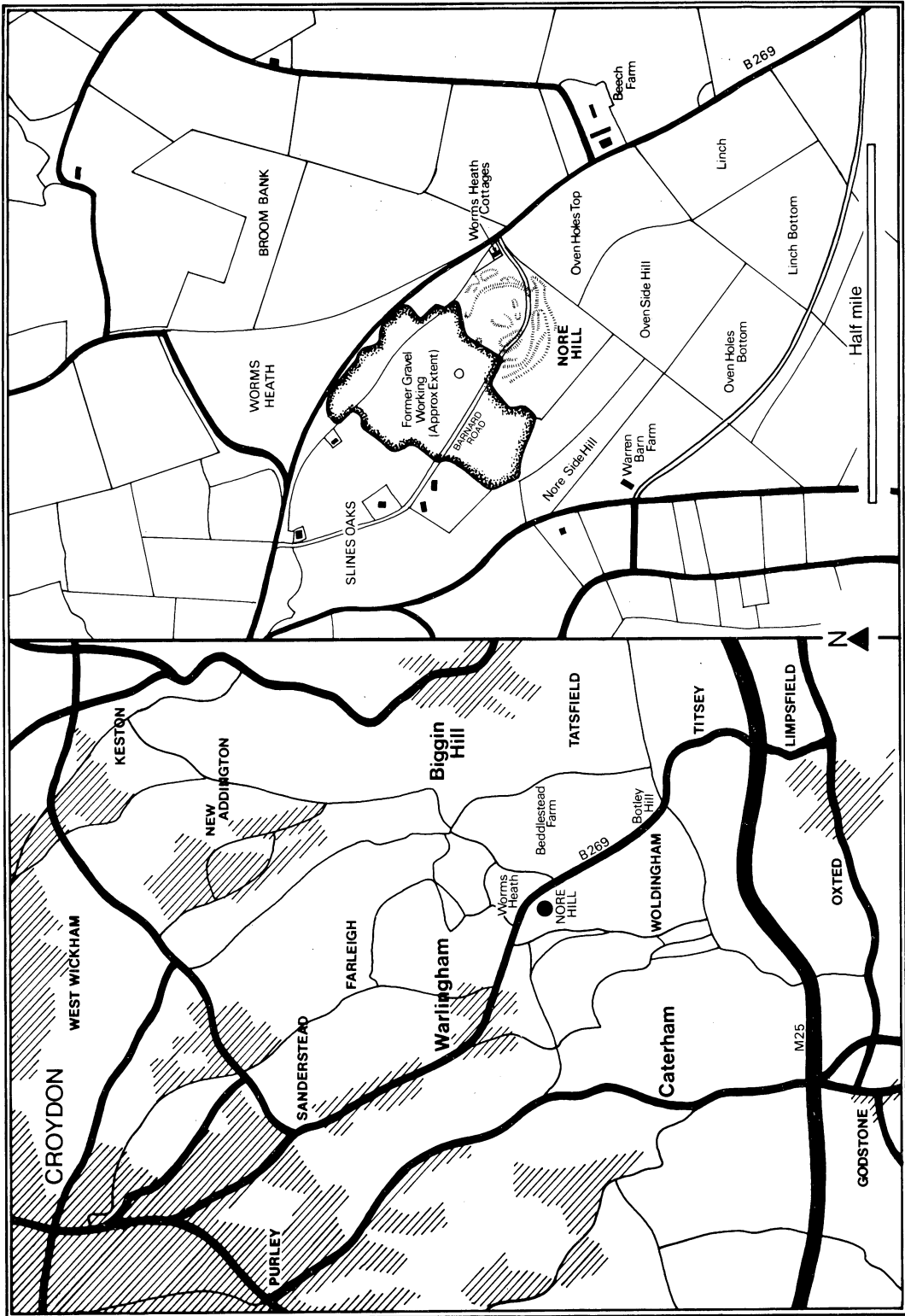


Fig 1. Nore Hill, Chelsham: (left) location map, (right) location of site and adjacent gravel workings (drawn by David Williams)

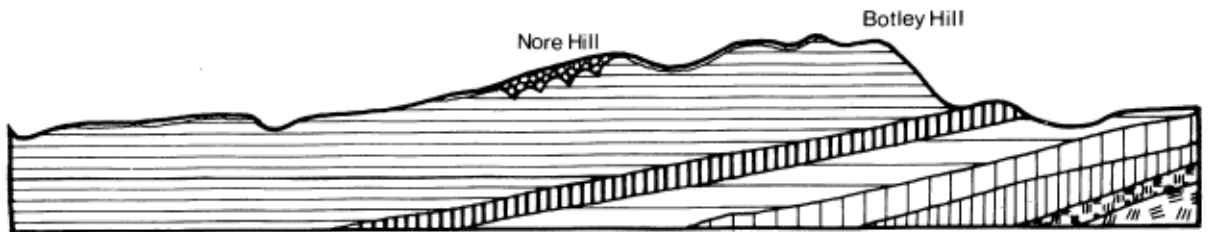


Fig 2. Nore Hill, Chelsham. Geology (drawn by David Williams)

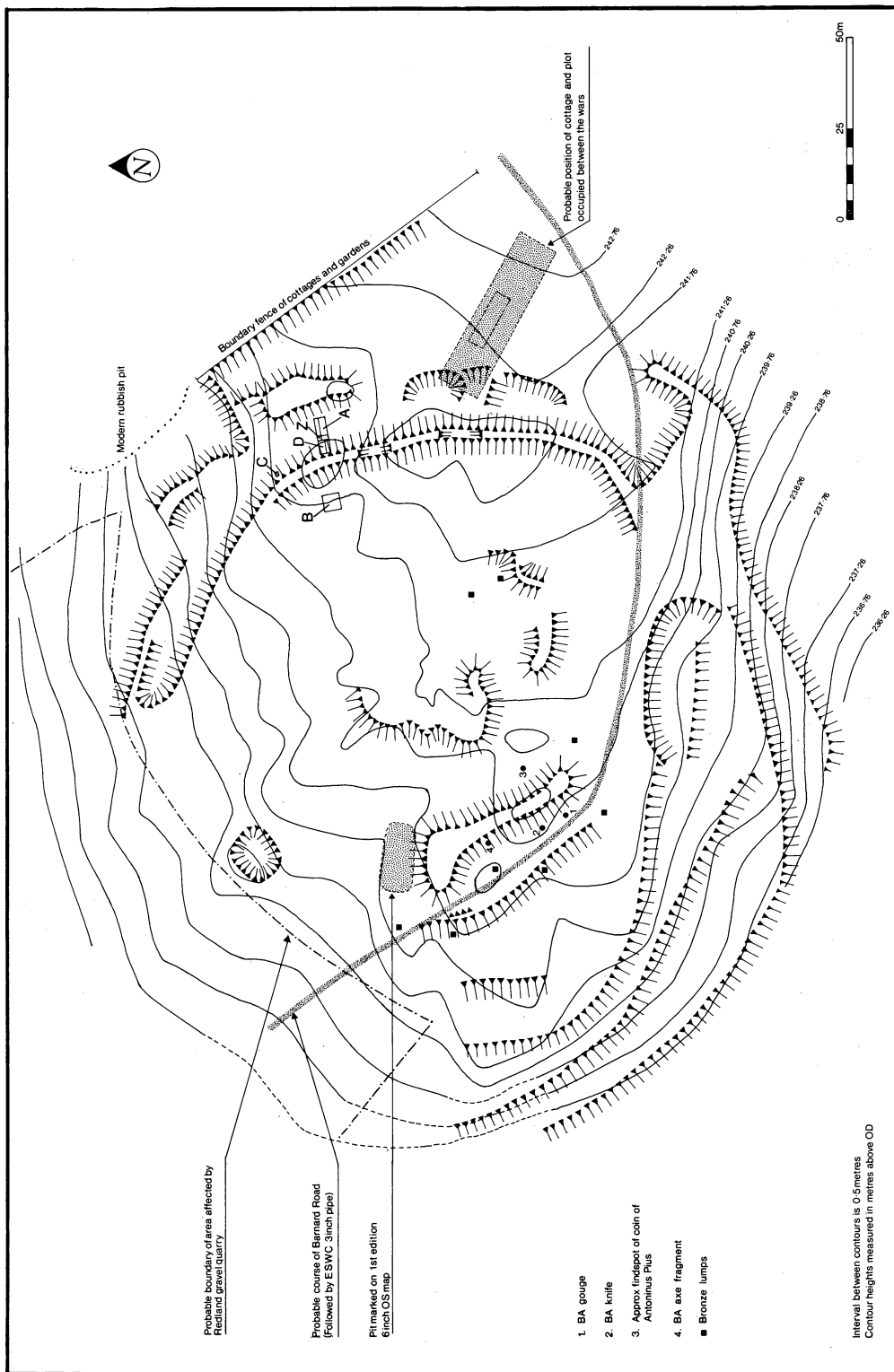


Fig 3. Nore Hill, Chelsham. Site survey, showing areas of excavation and metalwork findspots (drawn by David Williams)

East Surrey Water Company followed the approximate course of the road with 3" pipes some 50 years ago (information from the East Surrey Water Company).

A Government telegraph station of the early 19th century is recorded at Nore Hill by Brayley (1850, 192) and this report was echoed by later writers (eg Thorne 1876, 88) but extensive research has not confirmed this (Matthews 1986). Building work on the site has been restricted to the Worms Heath cottages, built in 1877, and a prefabricated cottage of the inter-war years just outside the earthwork which had a garden stretching across the banks. Both the prefabricated cottage and garden have been removed (the Fuller family, tenant farmers, pers comm; see also fig 3).

The site has been ploughed only once within living memory, but was not ploughed again as the crops were so poor. Prior to this, an attempt was made to level the bumps in the field and up to 4ft of soil was removed from the tops of the banks and redistributed around the field (Mr Fuller, tenant farmer, pers comm). The site is at present used as cattle pasture and for regular horse shows and eventing.

### Site survey (fig 3)

The earthwork survey was conducted by Mary Saaler, John Matthews and Andy Alldiss in a series of radial transects, the distances being measured by tapes, and the heights by surveyor's level. The earthwork was found to have been destroyed in the north-west sector but the north-east and east sectors appear to have been better preserved. There were traces of an additional outer bank and ditch to the north-east and a possible entrance to the south. The south-west sector is badly preserved and seems to be followed by the course of the 19th century Barnard Road. The enclosure is roughly circular with a maximum diameter of about 150m.

### The excavations (figs 3, 4)

Excavations were conducted to test the theory that the uneven terrain at Nore Hill was not due to gravel workings; to prove the existence of the suspected earthwork; and if possible to obtain some dating evidence.

The excavations were carried out from 26 March to 8 April 1985. The initial aim of the excavations was to locate the enclosure ditch by a series of small trial trenches. The outer edge of a ditch was first uncovered in trench A, the inner edge later in trench D. Trench A was originally 6m×3m, but after removal of 25cm, the width was reduced to 75cm. Trench D was originally 6m×3m, but the width was reduced to 1.25m as a result of the poor weather. The baulk between these trenches was found to lie over the centre of a ditch and was removed as trench Z at the end of the excavation. The ditch fill was removed in a series of spits; trench A was excavated as layers 01 to 13, trench D as layers 01 to 05, and trench Z as layers 01 to 05. Since the ditch was excavated in a series of spits, the excavated layers could not be exactly correlated with the section drawing layers (fig 4). For ease of reference, the section drawing layers are used in this report, but further details of the correlation are stored in archive. A 5m×5m trench (trench B) in the interior of the earthwork was partly excavated down to natural, and a small sample trench 1m square (trench C) was excavated on the east side of the bank.

### The results (fig 4 and table 1)

The major discovery was the ditch. It was found to be about 5m wide and 0.75m deep beneath the topsoil. It is likely that the ditch bottom was not quite reached (fig 4). The lowest silts were clean clays and very fine sands, some with large stones (A23, Z17, D27-30). A fragment of a burnt timber was recovered within one of the lowest silts of trench Z (layer 18) but the sample removed was insufficient for a radiocarbon date (S Needham, pers comm). The middle fills (A21-2, A24, Z13-16, D24, D26) contained more soil and the top of the ditch fill is represented by layers A20 and Z12, a distinct dark silt layer. Above this are more homogeneous silts

probably representing a slow accumulation of soil from the Roman period onwards until the formation of the present topsoil (A15–17, A19, Z10–11, D21–3). Layer A18 may be the tail of an outer bank; it comprised clean sand with large flints which could be upcast natural from a ditch, although the evidence is inconclusive. Trenches B and C were found to have topsoil lying some 30cm thick over the natural, and trench B showed traces of the recent ploughing. Although no features were found, there was a large quantity of burnt flint with some Later Bronze Age pottery sherds in trench B.

TABLE 1. Description of layers on fig 4

*Layer*    *Description of layer*  
*no*

A15	Earthy soil with small and medium stones=modern topsoil; same as A17 and Z10.
A16	Dark yellow clay and sand, medium stones=medieval and post-medieval topsoil; same as part of Z11.
A17	Light brown sand and clay, soil patches, small and medium stones=modern soil; same as A15.
A18	Dark yellow sand with medium and large stones=? tail of outer bank.
A19	Light brown clayey sand, small and large stones, large conglomerate lumps=post-Roman silting; same as lower part of Z11.
A20	Dark brown to black clayey silt, small stones=Roman silts; same as Z12 and part of Z11.
A21	Dark yellow sand with patches of silty soil=? Iron Age silting.
A22	Yellow sand, medium stones=LBA/IA silting; same as Z14 and Z15.
A23	Yellow sand, small and medium stones=LBA and EIA silting; same as Z18.
A24	Yellow clay and sand, small stones and conglomerate lumps=? LIA silts.
D21	Earthy soil and sand with small and medium stones=post-medieval topsoil; same as part of Z11.
D22	Yellow sand, small stones=? medieval and post-medieval silts; same as part of Z11.
D23	Dark brown soil and sand, small stones=? medieval and post-medieval silts; same as lower part of Z11.
D24	Dark brown soil and sand, small stones=? IA and Roman silts; same as Z13.
D26	Clay, sand and silt, very small stones=LBA/EIA primary silts; same as Z16 and Z17.
D27	Orange clay and silt, no stones=LBA/EIA primary silts; same as Z17.
D28	Light brown clay and silt, no stones=LBA/EIA primary silts; same as Z17.
D29	Grey silt and clay, no stones=LBA/EIA primary silts; same as Z17.
D30	Orange clay and silt, no stones=LBA/EIA primary silts; same as Z17.
Z10	Ploughsoil; same as A15, A17 and D21.
Z11	Dark brown soil and sand, small and medium stones=post-Roman, medieval and post-medieval silts; same as A16, A19 and D22–3.
Z12	Dark brown soil, small stones=Roman silts; same as A20.
Z13	Medium brown sand and silt, very small stones=IA and Roman silts; same as D24.
Z14	Light orange sand, small stones=? IA silts.
Z15	Grey black silt, medium stones=LBA/EIA primary silts; same as A22.
Z16	Clay, sand and silt, small stones=LBA/EIA primary silts; same as upper part of D26.
Z17	Grey silt, no stones=LBA rapid silts; same as D28–30, and lower part of D26.
Z18	Silt sand and clay, medium stones=? LBA/EIA rapid silts; same as A23.

## The finds

### PREHISTORIC POTTERY by Lesley Adkins

Forty-five pottery sherds of prehistoric date were examined, weighing a total of 302.07g. Many of the sherds are small and abraded; some of the surfaces are lost, probably through the action of the acidic soil, and consequently evidence of surface treatment is generally missing. Most of the sherds are body sherds and are too small for their form and date to be certain, but similar pottery fabrics from nearby sites (eg Beddington: Adkins *et al* forthcoming; Carshalton: Adkins & Needham 1985) indicate that this collection of pottery ranges in date from the Late Bronze Age to the Late Iron Age. Fabrics tempered by flint, grit, shell and grog are all represented.

The sherds from the earlier silts of the ditch (A12, A13, Z04; fig 4, layers A21–3, Z17–18) are all Late Bronze Age in date, although more precise dating is not possible with so few diagnostic sherds. The upper silts contain a mixture of sherds of Bronze Age and Iron Age date.

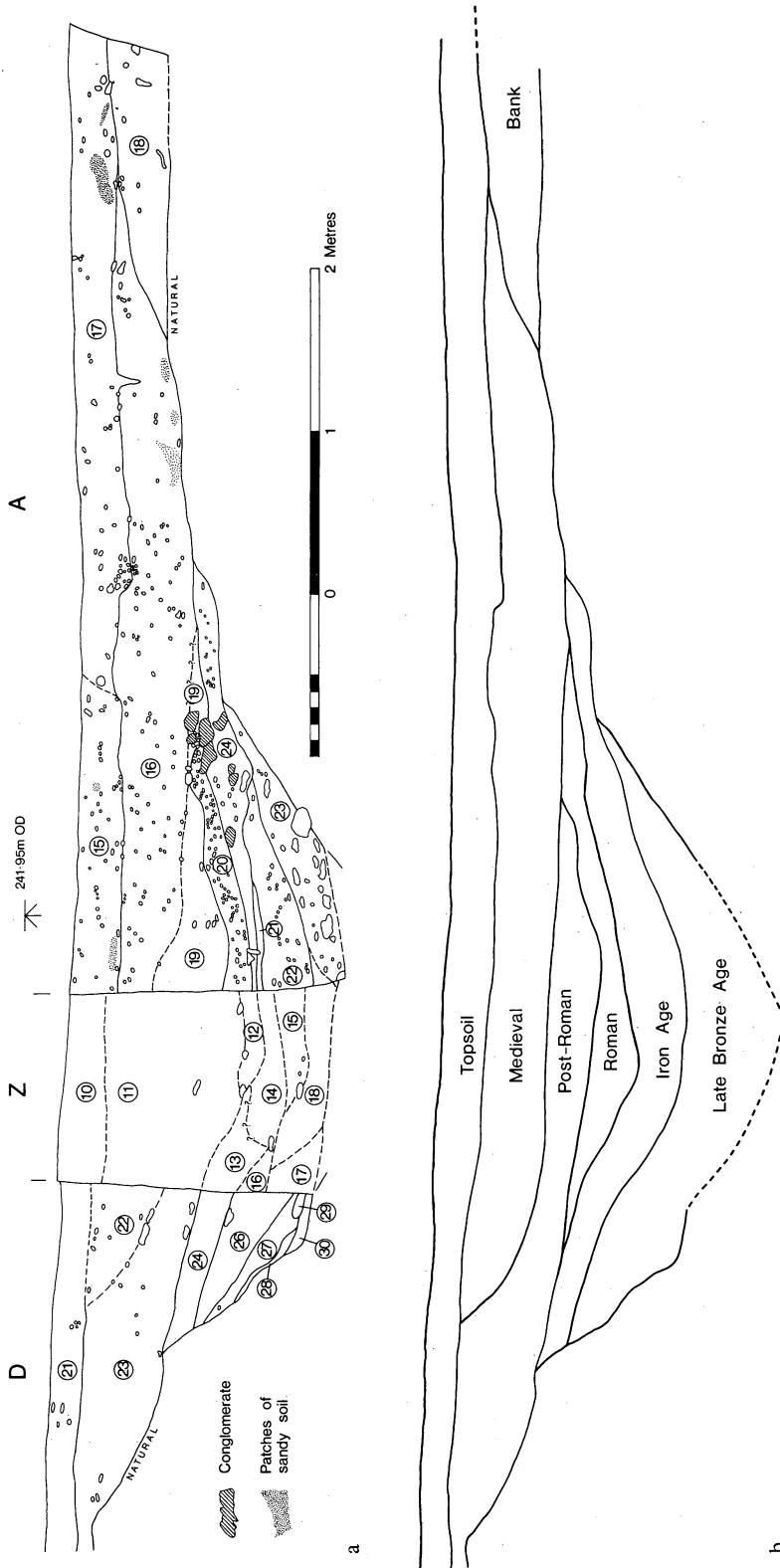


Fig 4. Nore Hill, Chelsham. a: south facing section, trenches D, Z and A (drawn by David Williams); b: suggested interpretation (drawn by Roy A Adkins)

*Illustrated sherds*

- 1 Orange. Filler: finely crushed flint and some grit. Fairly smooth (exterior was probably burnished). 4.69g. Small, thin-walled carinated bowl. Late Bronze Age. (D02. Fig 4, layers D23/4). Fig 5: 1.
- 2 Black. Filler: dense grits. Interior smooth; exterior burnished. 3.70g. Out-turned rim of finely finished bowl or jar. Late Bronze Age/Early Iron Age. (D03. Fig 4, layers D24/26). Fig 5: 2.
- 3 Dark grey/black, a little brown. Filler: grog, very

slight grit. Uneven texture. 26.55g. Base of a bowl or jar. Hand-made – wall of vessel joined to base by pinching. Late Iron Age. (Z01. Fig 4, layer Z12). Fig 5: 3.

- 4 Brown/grey. Filler: shell (no longer present due to acidic soil), grit and grog. Smoothish surface. Rim of jar. Middle/Late Iron Age. (A07. Fig 4, layer A20). Fig 5: 4.

A detailed catalogue of the prehistoric pottery is held in the archive.

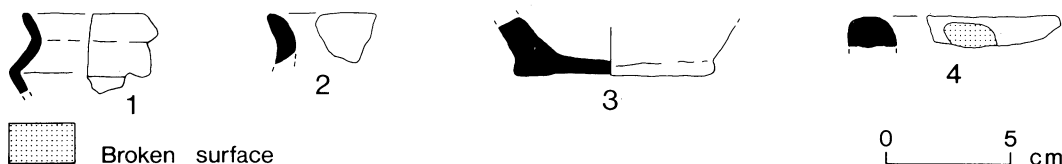


Fig 5. Nore Hill, Chelsham. Prehistoric pottery (drawn by Lesley Adkins). 1:3

## ROMANO-BRITISH POTTERY by Mary Saaler

There were 25 sherds of Romano-British pottery representing only four vessels weighing in total 304.19g. The pottery appears to have been supplied by the Alice Holt/Farnham Kilns (Lyne & Jefferies 1973). All the sherds were abraded and much of the burnish had been affected by the acidic nature of the soil. They were found close together and appear to be of late 2nd to mid 3rd century in date.

*Illustrated sherds*

- 1 Grey. Filler: sand. Traces of burnishing on the exterior. 136.49g. Two rim and two body sherds of a flanged bowl (Lyne & Jefferies type 5B). (A07. Fig 4, layer A20). Fig 6: 1.
- 2 Red/brown. Filler: sand. Traces of exterior burnishing. 15.59g. One rim and three body sherds of a pot. (A07. Fig 4, layer A20). Fig 6: 2.
- 3 Brown/light grey. Filler: sand. Two incised horizontal lines with traces of exterior burnish. 65.18g. Three

rim sherds and one body sherd of a pot (Lyne & Jefferies type 1.31). (A07. Fig. 4, layer A20). Fig 6: 3.

*Not illustrated*

- 4 Medium grey. Filler: sand. 86.93g. One base and 12 body sherds of a bowl. (A06 and A07. Fig 4, layers A19/20).

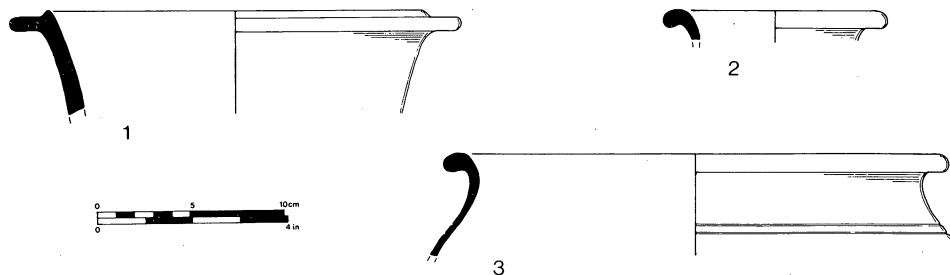


Fig 6. Nore Hill, Chelsham. Romano-British pottery (drawn by David Williams). 1:4

## THE MEDIEVAL POTTERY by Mary Saaler

- 1 Red. Filler: sand and grit. Base sherd of a vessel. (Unstratified. Fig 4, layer A15/17). Not illustrated.

This appears to be a product of the Earlswood Kilns which were in operation by at least the 13th century AD.



## THE POST-MEDIEVAL POTTERY

Two sherds of post-medieval pottery were also excavated from the topsoil in trench A (fig 4, layers A15/17). Identified by Mary Saaler; not illustrated.

## THE CLAY OBJECTS

1 Possible fragment of briquetage. 9.76g. (D03. Fig 4, layers D24/D26). Not illustrated.

2 Fragment of clay object, possibly refractory. 4.76g. (A05. Fig 4, layers A16/19). Not illustrated.

## THE GLASS BEAD by Roy A Adkins

Fragment (approximately half) of a Roman bead of translucent blue-green glass. Length 5mm. Surviving width 3.5mm. (A07. Fig 4, layer A20). Fig 7: 3.

This bead belongs to Guido's square-sectioned type, and is generally dated to the 3rd and 4th centuries AD (Guido 1978, 96, 212-15), lasting occasionally into the post-Roman period. (I am grateful to Mrs Margaret Guido for her comments on this bead).

## THE WHETSTONE by Mary Saaler

Highly ferruginous sandstone, probably from the Hythe Beds. A brown naturally shaped tabular fragment with rounded water-worn edges. A sheen on the surface indi-

cates that it had been used. 239.43g. 10×4×2cm. (Unstratified. Fig 4, layers A15/17). Not illustrated.

Although unstratified, the fragment is possibly of Later Bronze Age date, being similar to Tomalin's group I from the Brooklands site (Tomalin 1977, 79-80).

## THE FLINTS by Esmée Webb

A total of 178 flaked flint pieces was recovered, the greatest proportion (120) coming from trench B, the remainder from trenches A, D and Z. The raw material used is a rather poor quality nodular flint, varying in colour from black through all shades of grey, with many cherty inclusions, and in consequence several of the pieces exhibit involuntary breaks. The raw material could well have been obtained locally from the Blackheath beds or Clay-with-flints deposits. Most of the material recovered is knapping debris: core fragments, decortication flakes and unretouched secondary and tertiary flakes. Several pieces exhibit some traces of edge damage; however, this is considered to relate to post-depositional events on the site probably connected with the agricultural activity noted above, and not to their original utilisation. A few pieces appear to be in mint condition.

Being knapping debris, most of this material is not chronologically diagnostic. It is also technologically and typologically undistinguished. Any easily available pebbles or nodules of adequate size have apparently been used as cores, some of which proved totally flawed at the first blow. The resultant debitage products cannot be confidently attributed to any particular period.

Eighteen flakes, representing 10% of the material recovered, show well developed patination. The degree to which patination has developed on the different pieces is highly variable, but is considered to have little chronological significance. Some differentially patinated pieces were found in trench B. The ventral surface of one secondary flake is fresh grey flint but its dorsal face is heavily patinated a milky white, suggesting the flake was struck from a previously worked nodule. Similarly, a tertiary flake is deeply patinated white on its dorsal surface but the ventral face is only lightly patinated. Another tertiary flake has been removed from a parent piece which is lightly patinated a milky white; it also appears to have been flaked from a previously worked piece.

Thirteen flakes, representing 7% of the total material recovered, were hinge fractured at the distal end. The frequency of hinge fractures can be considered an indication of the level of skill of the knapper and the tractability of the material knapped: these nodules appear to have been worked with adequate skill given the poor quality of the raw material used.

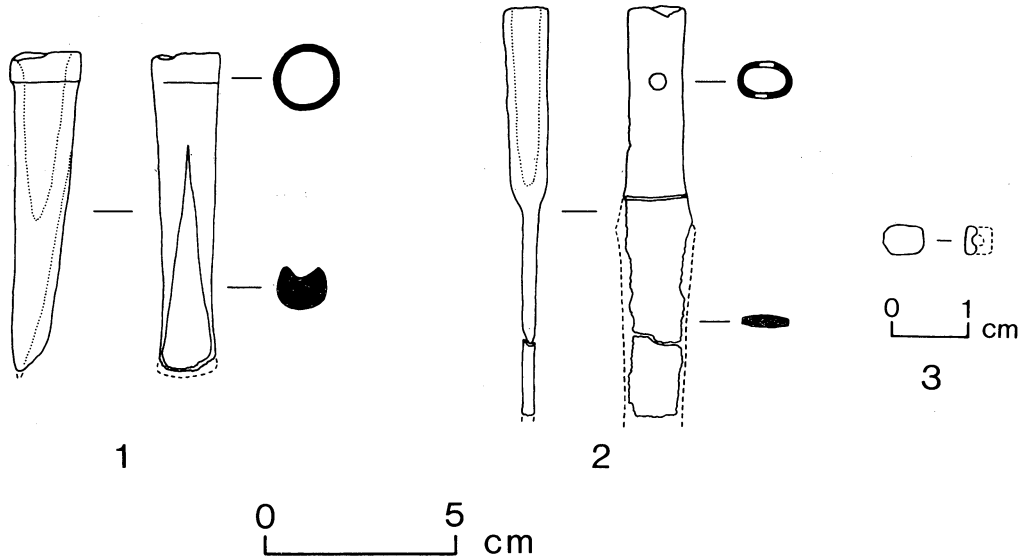


Fig 7. Nore Hill, Chelsham. Metal objects (1:2) and glass bead (1:1)

On technological and typological grounds the flint material from trench B seems homogeneous, and tentative dates can be assigned to some of the material. One core and a 'fabricator' are probably of Neolithic date, while the presence of a fragment of flaked axe, an axe sharpening flake and several microliths suggests that there was Mesolithic activity in the vicinity. None of these artefacts are considered to be in a primary context and have no connection with the later prehistoric enclosure, but the microliths compare well with other late Mesolithic assemblages in Surrey, and thus their presence is worth recording.

#### THE SLAG

A piece of slag weighing 251.88g was excavated from layer A13 (fig 4, layer A23). It was examined by Paul Craddock of the British Museum Research Laboratory and was found to be furnace slag from a smelting operation. Numerous pieces of charcoal and rock fragments are incorporated in it. The only metals detected were iron and manganese, and this suggests the debris is from iron smelting. If the interpretation of the earliest ditch fills being Late Bronze Age is correct, this piece of iron slag may be intrusive from the upper layers, but the possibility of it being the result of early iron working at the end of the Later Bronze Age cannot be ruled out.

#### METAL OBJECTS by Lesley Adkins

A number of copper alloy objects were found by metal detector users before, during and after the excavation. The findspots are plotted on fig 2. Further details are held in the National Bronze Implements Index, British Museum.

*Illustrated objects*

- 1 Socketed gouge with remains of a charred wooden haft in the socket. The tip of the haft survived to a length of 33mm and is retained by S Needham, Department of Prehistoric & Romano-British Antiquities, British Museum. 65.18g. Fig 7: 1.
- 2 Socketed knife with a small chip of wood from the socket base (retained by S Needham as above). 30.21g. Fig 7: 2.

*Not illustrated*

- 3 Socketed axe blade fragment. 14.10g.
- 4 Rod fragment with swollen terminal; 34.8mm long;

- 11.3mm max diam; 4.8mm min diam. 11.8g.
- 5 Highly leaded bronze rod, probably modern.
- 6 Part of a buckle, probably medieval or later.
- 7 Flat piece of bronze; 51mm long; 2mm thick; 33mm max width. Date uncertain.
- 8 Lead or lead alloy flat slab. 77.4g.
- 9–26 17 lumps of copper, probably waste resulting from the casting of bronze. Found in excavation and as metal detector finds (fig 2). The lumps range in weight from 2.23g to 64.90g.
- 27–30 Four edge fragments probably from copper alloy plano-convex ingots. (345.5g; 258.2g; 79.9g; 52.9g).

Apart from nos 5 and 6, all the objects are, or are likely to be, of Late Bronze Age date, within the date range 900–700 BC. The presence of ingot fragments and possible waste fragments suggests that metalworking was taking place on the site in the Late Bronze Age.

**THE ROMAN COIN** by Mary Saaler

Bronze sestertius of Antoninus Pius, AD 145–61.  
Obv ANTONINVS PIVS P.P. T.P.  
Rev PIETATI COS. IIII.

The reverse shows the figure of Pietas holding a globe in her right hand and a child on her left arm. A small girl is standing to the left and right (not illustrated).

This coin was found by a metal detector prior to the excavations (see fig 2).

**THE BONE FRAGMENT** by Ian Taylor

The bone fragment is 54mm in length, and is the proximal end of the right-hand femur of a rabbit (A02. Fig 4, layers A16/19).

**Interpretation**

From the evidence of the survey, and the results of the trial excavations, it appears that the earthwork at Nore Hill is a roughly circular enclosure with a single bank and ditch of about 150m maximum diameter. There are traces of a possible outer bank and ditch on the eastern side. The ditch was about 5m wide and at least 0.75m deep below the present topsoil. The evidence for the earliest occupation of the site relies primarily on the small sample of mostly abraded prehistoric pottery sherds from the ditch and the discovery of Later Bronze Age metalwork. The lowest fills of the ditch produced only Later Bronze Age pottery types whereas the upper fills consisted of a mixture of LBA/IA pottery sherds, with Roman and later finds in the topsoil. The flintwork from the site includes Mesolithic and Neolithic material, although the bulk of the material remains undated. The whetstone may be of Later Bronze Age date. The metalwork, both metal detector and excavated finds, is of the Later Bronze Age and, taken with the evidence from the other finds, suggests that the enclosure may be Later Bronze Age in date, with activity of an uncertain nature in the Mesolithic, Neolithic, Iron Age and Romano-British periods.

Accepting that this date for the initial occupation and construction of the earthwork is based on limited excavations, which may be superseded by further research, it is worth considering the place of Nore Hill within the Later Bronze Age settlement pattern of the area. The Croydon region has been reviewed in detail by Needham & Burgess (1980, 458–61) and supplemented by Adkins & Needham (1985, 45–8). The enclosure at Queen Mary's Hospital, Carshalton, may provide the nearest general parallel to Nore Hill in form and date, and thus Nore Hill can be considered as another circular defended enclosure of the Later Bronze Age (cf Adkins & Needham 1985, 45). Within the pattern of settlement and bronze artefact distribution in the

Croydon region (Adkins & Needham 1985, 47, fig 1), Nore Hill may be the pivotal place in a second, smaller, North Downs concentration, to the south-east of the main downland group possibly centred on the Queen Mary's Hospital site.

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