SMR 3

Archaeological Service

Excavation Report

Suffolk County Council

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HOXNE CONTEXT PROJECT

HXN 019

K. Forrest.
Archaeological Section,
Suffolk County Council.
1995

SUFFOLK COUNTY COUNCIL

COUNTY PLANNING DEPARTMENT

MESSAGE PAD/FILE NOTE

(For use only within the Department)

FROM: John   Date: 3/4/95

TO: Jude   File No:

SUBJECT:

Hoxne – Kevin's completed report
(we only appear to be £200 down on the
project which isn't too bad considering
our expectations earlier in the year),

I've marked out copies for Colin & Fiona,
– & also sent copies to C. Johns & R. Bland,

I'll bring remainder of archive
to Bury later in the week (planets),

3 to E H

ACTION

NOTE: The normal memorandum system should be used for communications with other departments.

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SUMMARY

An excavation of 1000 square metres was undertaken on the site of the Roman hoard discovery in Hoxne, Suffolk. The primary purpose of excavation was to identify any contexts associated with the late Roman hoard burial, as damage caused by illegal metal detecting posed a significant threat to the archaeological features. The site of the 1992 excavation was redug to investigate more fully the features that were identified during the works involved in the initial hoard recovery. The area was found to have been redug and disturbed, since backfilling by the archaeology unit, however, some components of the original hole could be recognised, though in a much poorer condition. A single post-hole in the southwest corner of the hoard burial hole remained partly intact and though no dateable finds were recovered from the infilling deposit it is possibly contemporary in date with the hoard. No other Roman features were identified indicating that the hoard burial was not located in the immediate vicinity of a settlement. In total five phases of activity were identified on the site:

i. A series of eight pits and 55 post-holes of prehistoric date, 19 of which describe a possible structure.
ii. The Roman hoard burial.
iii. A Post-Medieval boundary ditch.
iv. A single modern rubbish pit.
v. Post 1992 illegal metal detecting activity.

A metal detector survey was carried out at all stages of the excavation and 336 disturbed hoard finds were recovered. The survey also recovered a few medieval and post-medieval artefacts.

INTRODUCTION

The excavation was undertaken during November and December 1994 by the Suffolk County Council, Archaeological Section Field Projects Team and was funded by English Heritage.

The primary purpose of this archaeological project was to identify, excavate and record any archaeological contexts that were associated with a late Roman hoard that was discovered in 1992 at Hoxne, Suffolk,(NGR TM 1746 7651) on a spur of land between the Dove and Goldbrook valleys at 36m O.D, see Fig.1.

When discovered in 1992 the majority of the hoard material remained in situ, with only the top finds being disturbed by ploughing. The finder removed about 25% of the hoard but left the majority to be properly excavated.

In total the finder and the 1992 excavation recovered 29 pieces of gold jewellery, 125 items of silver tableware, 563 gold coins and 14,088 silver coins and provided information on the packing of the objects within organic containers; wooden boxes and a bone inlaid casket.

The material has been dated to the end of the Roman period by the inclusion of two siliquae of Constantine III (407- 408 AD).

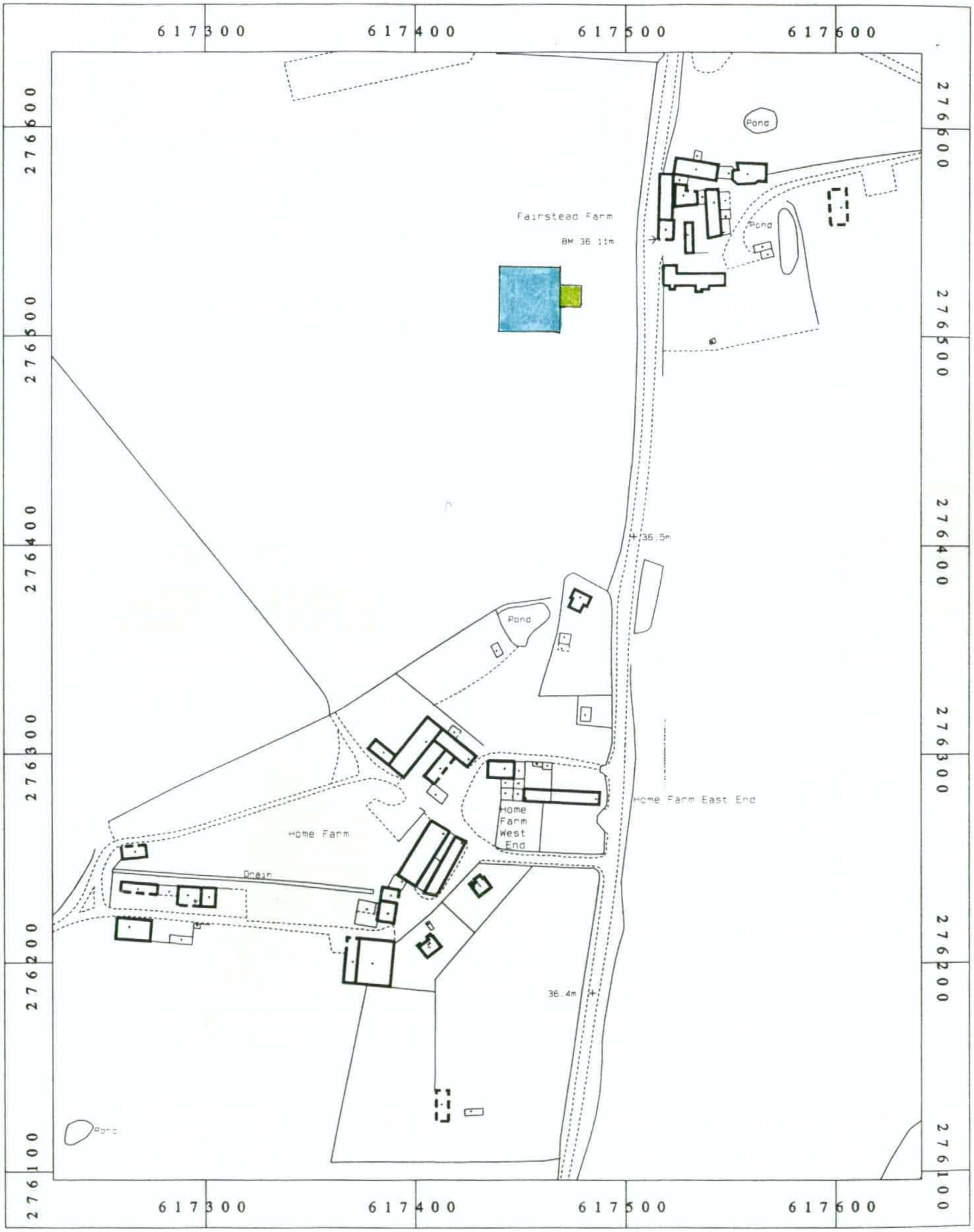
In 1992, immediately after the hoard discovery, an area of 30m radius, centred on the find spot, was intensively metal detected by the archaeology unit and 61 Roman coins were recovered. After ploughing in September 1993 84 Roman coins were found and after ploughing in September 1994 a further 68 Roman coins were found. All coins had been disturbed from the hoard and distributed by the agricultural process. Fragments of two copper alloy Roman brooches (pre-dating the hoard) were also recovered from the topsoil.

A fieldwalking survey identified a concentration of medieval pottery sherds on the road frontage to the east of the find spot, and to the southwest a scatter of prehistoric material (Iron age). No evidence of Roman settlement was identified.

A geophysical survey carried out by the Ancient Monuments Laboratory in February 1993 covered a 90 metre square, magnetometer survey and a 60 metre square, resistivity survey (see Appendix ii.). The magnetometer survey identified a rectilinear feature to the northeast of the hoard site which probably represents part of the medieval site located by the concentration of pottery found during fieldwalking. A linear feature, oriented NNW-SSE, to the west of the hoard was identified in both surveys.

From 1992-1994 the looting of the site and the continuing cultivation represented a threat to the remaining archaeological data.

HOXNE



Scale 1: 2500

Stripped and metal detected area.

Excavated area.

Fig.1. Site location plan.

METHODOLOGY

An area 30 metres square (900 sq.metres) was stripped by machine in 10cm spits with topsoil and subsoil being removed to the level of the natural geology (fluvioglacial drift, light sand/silt). A metal detecting survey was undertaken at all stages of the stripping. A further extension of 10 metres square (100 sq.metres) was stripped and metal detected, adjoining the east of the site, when the scatter pattern of dislocated hoard material was identified.

Outside normal working hours a high profile security presence was maintained to deter any further looting.

Metal detected finds were located in plan (see Fig. 2. for plotted hoard finds) and levelled against the Ordnance Datum. Some finds were recovered by searching spoil heaps and during backfilling of the site, as they had been positioned in the ploughsoil so that they could not be picked up by the metal detector (i.e. vertically). Non-hoard finds appear on the original archive plans.

All hand excavated deposits were sieved through 1cm mesh and all generated spoil was metal detected. A small number of non-metal finds were recovered from the ploughsoil and these appear on the general small finds plot.

Advice on sampling for environmental data was taken from the regional English Heritage environmentalist (P.Murphy). He recommended that no sampling programme should be undertaken on the excavated features.

Plans were made of the detected area, plotting all small finds at 1:50 on a superimposed 2m interval grid. Fig.2. shows the distribution of hoard finds within the metal detected area, the numbering of specific finds are not included in this report but are held in the archive.

A plan of excavated contexts and unexcavated prehistoric features was made at 1:20 (Fig.3). Section drawings were made of all excavated features at 1:20. (Publication scales in this report differ as annotated.)

A photographic record of the excavated contexts and general site shots is held in the archive under film codes: DEC, DED, DEE, DEF, DEG, DEH, DGN, DGO.

A full context record of cut features, deposits, finds and coin identifications is held in the archive.

All non-hoard finds are deposited in the County Store in Bury St Edmunds.

The archive has been deposited with the Archaeological Section, Shire Hall, Bury St Edmunds.

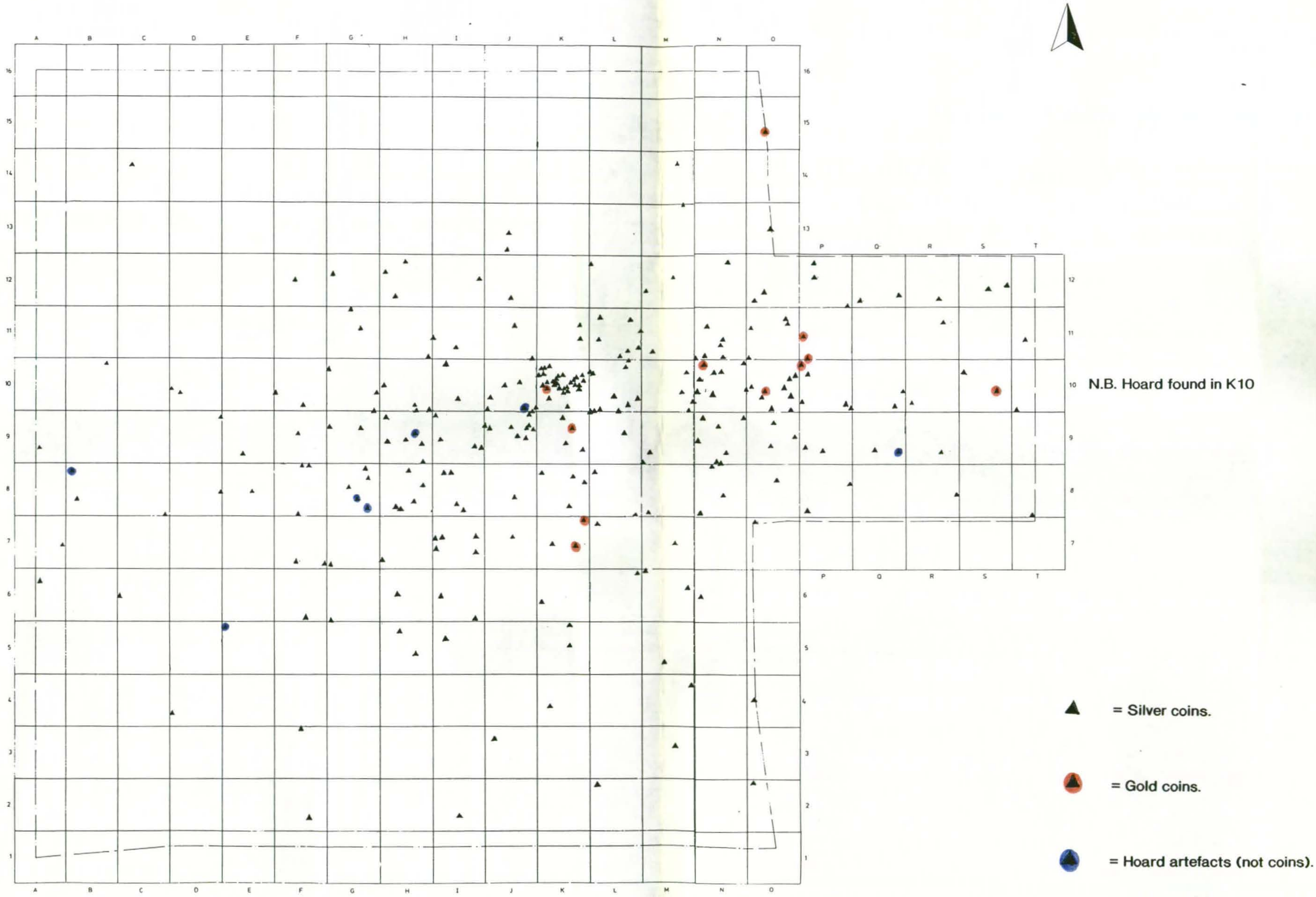


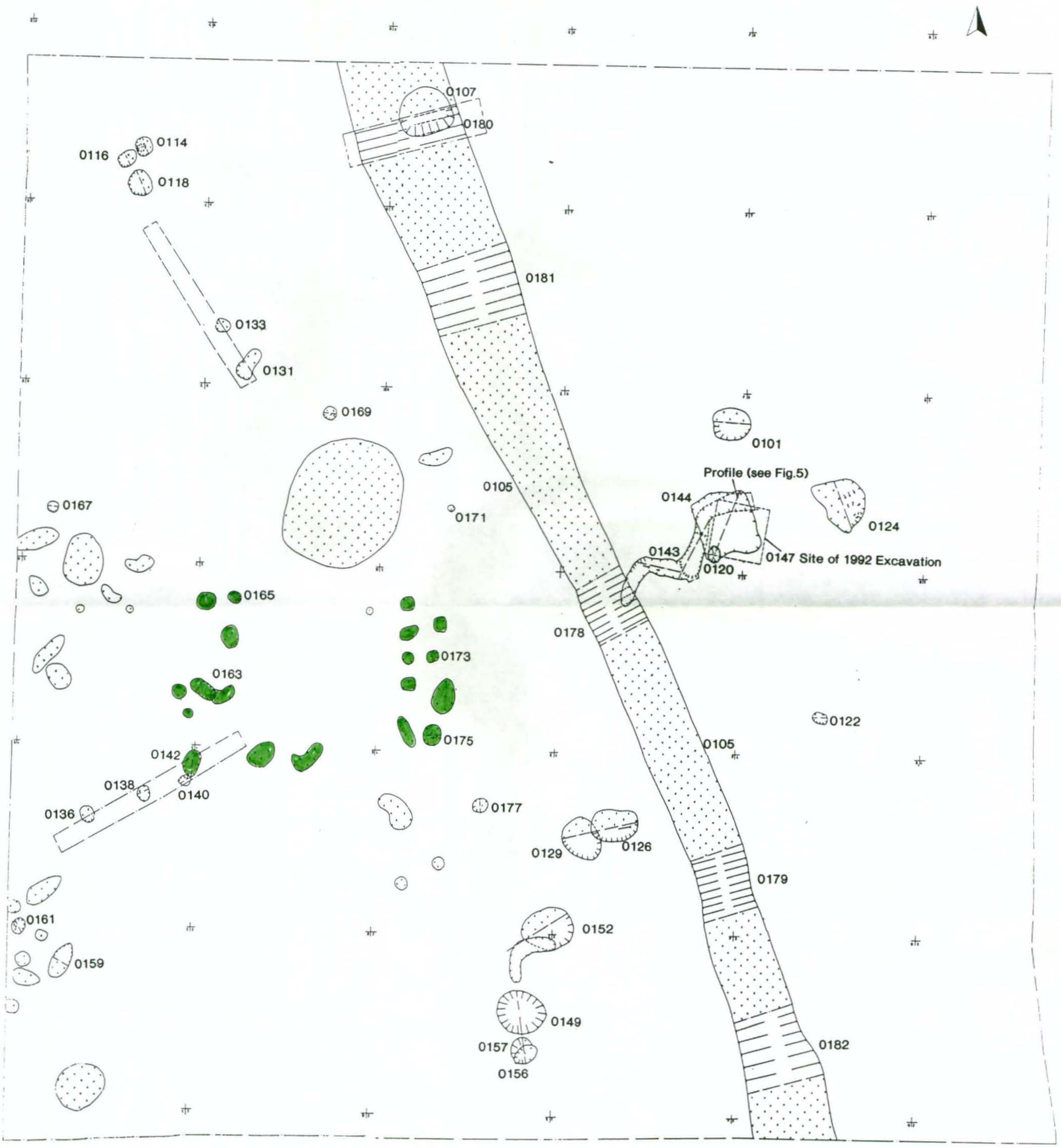
Fig.2. Plotted hoard finds from within the metal detected area. Grid square interval 2 metres.

RESULTS (see Fig.3. for site plan)

Five phases of activity were identified in the excavated area.

i.Prehistoric.
Prehistoric pits. (See Figs 3 & 4)
Seven small pits (0101,0126,0129,0149,0152,0156,0157) were half sectioned:

Context	Fill	Finds	Description & Conclusion.
0101	0100, 0103 & 0104	From 0100: Burnt Flint x 112, 1.75kg. Abundant charcoal 70% of fill.	Shallow circular pit. Prehistoric domestic rubbish burial, probably associated with cooking area.
0126	0125	Pottery 6 sherds Iron Age & Bronze Age. Burnt Flint x 74, 0.48kg. Fired Clay x 7.	Oval pit . Prehistoric domestic rubbish burial.
0129	0127 & 0128	From 0127: Pottery 14 Sherds, 1 Bronze Age (Beaker) & 13 Iron Age. Slag 0.01kg. Struck flint x 3. Burnt Flint x 46, 0.37kg. From 0128: Pottery 16 Sherds, Prehistoric. Struck Flint x 3. Burnt Flint x 38, 0.15kg.	Oval pit, cut by 0126. Two phases of Iron Age domestic rubbish burial.
0149	0146	Pottery sherds, 193 Early Bronze Age (Beaker) & 1 Iron Age sherd, intrusive. Burnt Flint x 2,842, 23.42kg. Struck Flint x 111.	Early Bronze Age, domestic rubbish burial.
0152	0151	Pottery 5 Sherds, 3 Early Bronze Age & 2 Iron Age. Burnt Flint x 301, 2.39kg. Struck Flint x 3.	Shallow circular pit, disturbed by burrowing animal. Iron Age domestic rubbish burial.
0156	0154	Burnt Clay x 2. Burnt Flint x12, 0.07kg.	Small oval pit, cuts fill of pit 0157. Prehistoric, function unclear.



= Post-holes associated with possible prehistoric structure.

0 5m 10m

Fig.3. Excavated plan of site.

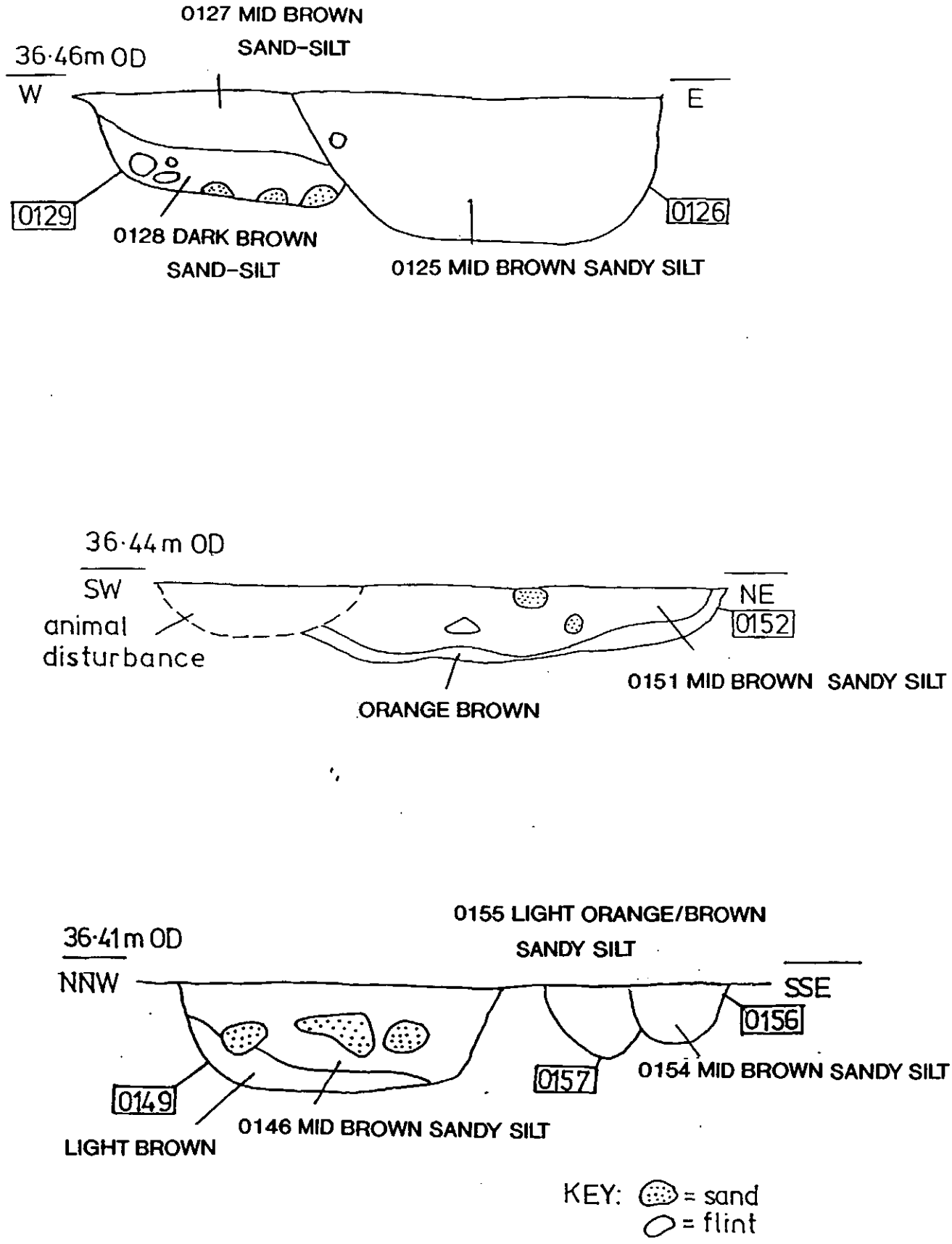


Fig.4. Prehistoric pits 0126, 0129, 0152, 0149, 0157 & 0156. Scale 1:20.

Context	Fill	Finds	Description & Conclusion
0157	0155	Burnt flint x 5, 0.06kg.	Small oval pit. Prehistoric, function unclear.

All the sampled pits exhibited a good state of preservation of contained finds.

One large pit was discovered in grid squares C5/D5, the fill of which was very leached and similar in tone and colour to the underlying natural, being a shade darker when wet. Not sampled.

Prehistoric post-holes.
55 post-holes were identified, 18 of which were sampled. Those which were not excavated or produced no finds have been dated into this phase by the similarity of infilling soil matrices to those that did produced prehistoric material (0162/0163, 0164/0165, 0168/0169, 0170/0171, 0172/0173, 0174/0175, 0176/0177). All of the post-hole fills are very leached and similar tonally and chromatically to the natural into which they were cut.

A rectilinear structure, possibly a building of approximately 6 metres across, was described by a double row of post-holes (x 19). 0165, 0163 and 0142 being part of the west side and 0173 and 0175 being part of the east side (grid squares C4/D4). Further work would be required to identify a specific function.

All features west of the ditch, 0105, are therefore phased as prehistoric. The area to the east of the ditch though thoroughly examined included only one prehistoric feature (0101).

ii. Roman.
The 1992 excavation site (see 0147 Fig.3) was redug to expose the area that had previously been examined, some of the original Roman excavation components were still visible, though in a damaged condition. The areas to the west, north and directly on the site of the hoard find spot were disturbed by looting. A composite of the original Roman cut, the 1992 excavation and subsequent looting activity formed cut 0144 from which no reliable data as to the original hoard burial could be recovered.

In the Southwest corner of 0144 a single "post-hole" 0120 (0.40m wide, 0.30m deep), filled by 0119, could be considered as contemporary with the hoard burial, though no finds were recovered from this deposit (see profile and section, Fig. 5). It is possible that this "post-hole" could have contained a marker for the hoard burial site, suggesting an overgrown or woodland setting rather than an open field site at the time of burial.

The feature identified in the west side of the 1992 excavation, thought to have been a ditch, was proven to be an animal burrow (0143) and it is possible that the burrowing may have dislocated some of the hoard finds prior to the modern agricultural disturbance.

The metal detecting survey recovered one Roman copper alloy brooch, that pre-dates the hoard burial, 314 silver coins, 11 gold coins, 1bronze coin, fragments of 6 silver artefacts and 4 gilded silver artefacts that were directly associated with the disturbed hoard. The hoard material from this excavation has been deposited at the British Museum for analysis with the main body of material recovered in the previous excavation. The concentration of finds in the topsoil occurred within a relatively narrow band (an

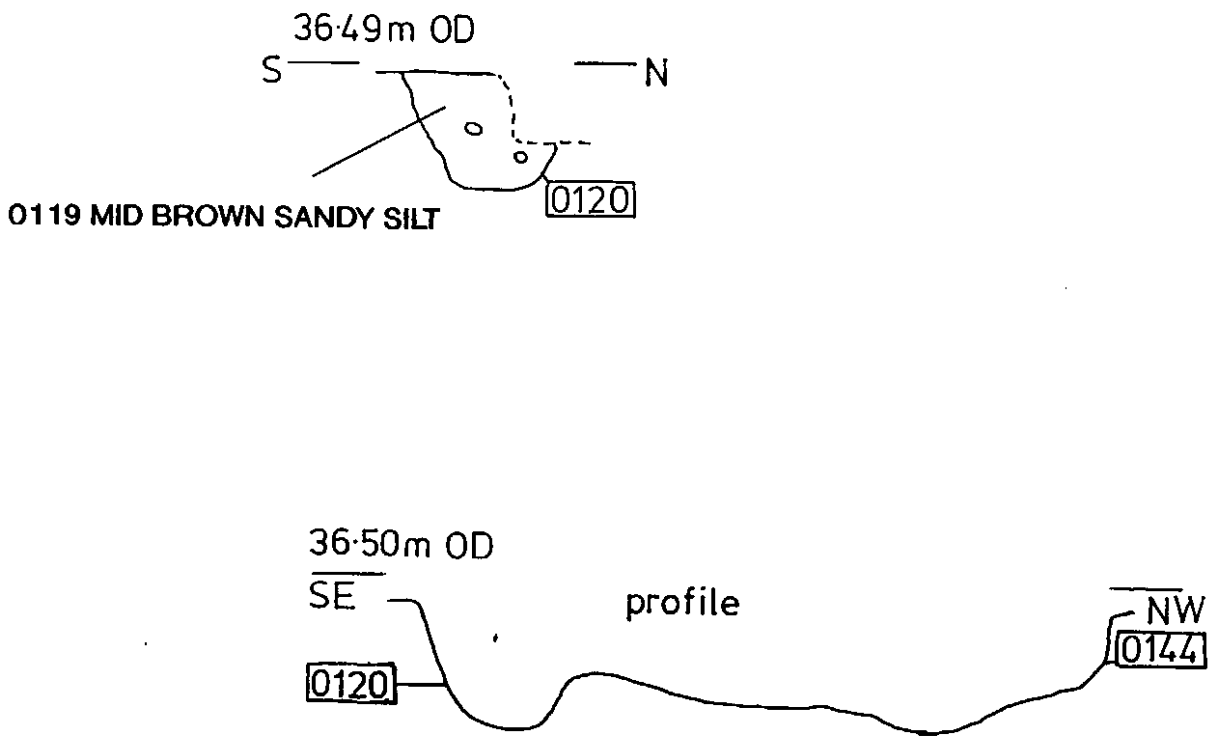


Fig.5. Profile of hoard hole (0144) and section of posthole 0120. Scale 1:20.

elongated oval), oriented east-west, with the main assemblage covering an approximate area of 480 square metres (see Fig.2) and an increased frequency nearer to the original find spot. In rare instances some finds have been moved up to 20m from the original source and possibly further, to outside the limits of the excavated area. A full listing of coin and artefact identifications is held in the archive.

No evidence of occupation during the Roman period was identified.

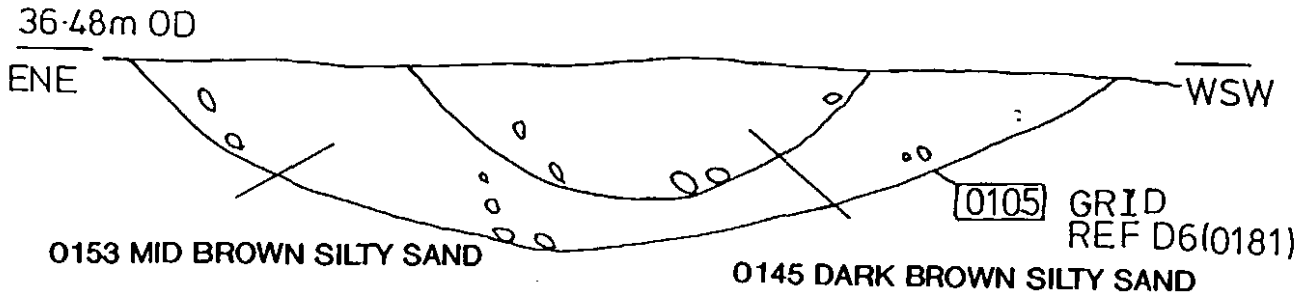
iii. Post-Medieval. (see plan Fig.3. & sections Fig.6.)
A ditch, 0105, running NNW to SSE, as identified in the geophysical survey (see Appendix ii. Fig*l* and 2.), was sampled in sections 0178-0182. The sections to the north (0180, 0181) and south (0182) of the excavated area were much wider than those situated more centrally on the site (0178,0179). The ditch could have been sited on a slight mound or hill and being dug to an even depth, relative to the contemporary ground surface, with the subsequent ploughing levelling the area and truncating the vertical profile of the central section more severely than those to the north and south. Post-medieval pottery sherds were recovered from the excavated sections along with residual material of prehistoric date. The post-medieval pottery sherds are representative of the date when the ditch fell out of use and are not necessarily indicative of the date of when the ditch was originally dug. It is probable that the ditch was medieval in origin.

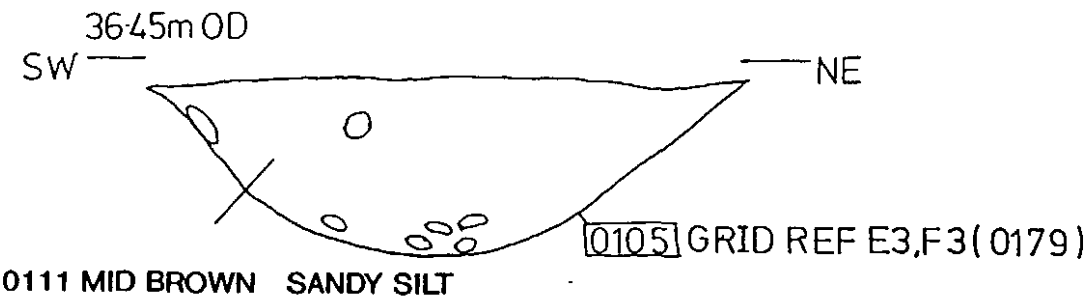
iv. Modern.
A circular pit, 0107, filled by 0106, contained modern rubbish, in particular a large steel fuel can and an aluminium saucepan which appear as one of the bright signals in the geophysical survey. This pit cuts the fill of ditch 0105 in segment 0180.

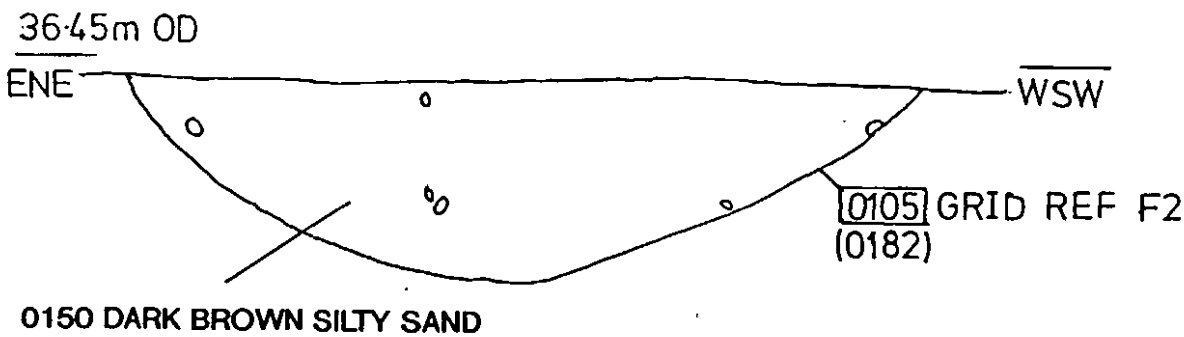
The modern ploughing, until 1990, was aligned north to south but no north-south scoring of the natural was observed. The ploughing from 1990 was realigned east to west and it was probably at this point or shortly after that the hoard was struck, a point born out by the east-west distribution of small finds in the topsoil and the relatively small movement of the main body of finds in a north-south orientation. The crop drilling being NW-SE, did not follow the plough alignment, this could have been responsible for a slight north-south spread of the finds in the very top horizon of the topsoil and could have affected only a very low percentage of the finds during the four years since the hoard was disturbed. Information about the ploughing was supplied by Mr Peter Watling the tenant farmer.

The metal detector survey recovered 4 medieval belt fittings, 2 post medieval objects including one coin of Elizabeth I. 27 objects of unknown date were recovered from the ploughsoil consisting of ; three copper alloy buckle fragments and two copper alloy buttons which are either medieval or post-medieval, 6 fragments of sheet metal, 10 metal fragments/waste and 6 unidentified objects.

v. Post 1992.
Since the hoard was discovered there has been a continuing process of illegal looting. The majority of which has been to the east of the hoard site and mostly as an attempt to recover finds from the topsoil, though two looting holes, 0122 and 0124, were identified cutting into the underlying natural geology. The hoard site and the area immediately to the north and west had been redug/raided and it is possible that contexts directly associated with the hoard have been dug out, disturbed and damaged.







= Stones.

Fig.6. Sections of ditch 0105; 0181,0179,0182. Scale 1:20.

29/03/95

HOXNE (HXN 019) ASSESSMENT REPORT - FINDS SUMMARY.

FACTUAL DATA

Bulk Finds

The following quantities of bulk finds were found at Hoxne (HXN 019):

	Pot	An Bone	Tile	Fired Clay	Slag	Worked Flint	Burnt Flint	Stone
Number	297	-	1	11	-	53	3583	20
Weight (Kg)	2.300	0.090	0.010	0.130	0.050	0.300	30.105	0.600

The finds were all washed except for the Prehistoric pot and the slag which were left to air-dry then cleaned with a soft brush. All the finds were then quantified by sherd count and by weight (Kg) except for animal bone which was just weighed. The pottery was then spot-dated.

Worked Flint

The following is a quantitative breakdown of worked flint by context;

Context	Flakes	Cores	Blades	?Leaf- shaped Arrowhead
0111	2			
0127	3			
0128	2			
0134	2		1	
0141	1			
0145	4		4	
0146	20	1	2	1
0150	1			
0151	3			
0153	2			
0162	1			
0174	1			
0176	1			
1272	1			
Totals	**44**	**1**	**7**	**1**

The leaf-shaped arrowhead is questioned because it is broken. The core has 2 platforms. All the worked flints were unpatinated. The small number of blades and the ?leaf-shaped arrowhead suggest a Neolithic assemblage.

Burnt Flint

The following is a quantitative breakdown of burnt flint by context;

Context	Burnt Flint Weight (Kg)	Burnt Flint Numbers
0100	1.780	112
0102	0.220	16
0111	0.590	47
0112	0.070	10
0125	0.480	74
0127	0.370	46
0128	0.150	38
0134	0.210	41
0141	0.030	3
0145	0.140	19
0146	23.420	2842
0151	2.390	301
0153	0.030	4
0154	0.070	12
0155	0.060	5
0158	0.010	4
0162	<0.010	1
0164	<0.010	1
0168	<0.010	2
0170	0.010	2
0172	0.010	1
0174	0.010	1
0176	0.020	2

Pottery

The following is a quantitative breakdown of pottery by context;

Cont.	Preh.	Bronze Age Beaker	Bronze Age	Bronze /e.Iron Age	e.Iron Age	Iron Age	Roman	Med.	PMed.	No date
0111	3						3			
0125			1	4		1				
0127		1				13?				
0128	2				3?	3				8
0134		1?				4	5?			
0145							3?		33	
0146		193				1?				
0151		3				2				
0153						1?				
0160										1
1249							1?			
1268							1			
1269							1?			
1270						1?				
1271								2		
1275	1									
1377								1		
Totals	6	198	1	4	3	26	14	3	33	9

The majority of the pottery found on the site was Beaker pottery dating to the early Bronze Age. As this group was unusually large, in particular the pottery from Context 0146, it was thought important for there to be a more detailed record in the Archive other than the spot-dating records. The assemblage from Context 0146 contained 193 sherds including rims and bases, a preliminary study showed that there were 2 sherd links although further study may produce more. Several different types of decoration were represented including finger-tip and nail rustication, plain spatula comb, fine and coarse toothed comb and barbed wire decoration. Fine-toothed combed decoration dominates the group. There were also sherds with decorated and plain panels. On a few sherds more than one type of decoration was evident.

The Roman sherds were very abraded and some could possibly be Medieval in date. The Post-Medieval pottery came from one area in the Ditch and consisted of 2 broken tankards which are dated to the 18th Century by the quart or pint mark WR below a crown.

Small Finds

Each small find (excluding Roman coins) was individually recorded on an Artefact Record sheet and Roman coins were recorded on Roman Coin Identification sheets. All information held in the paper archive was copied onto database files using dBase IV. The small finds were packaged according to First Aid for Finds (Watkinson,1987) and separated into hoard and non-hoard material. Only one object (S.F.1369 Roman brooch) has been sent to Conservation at the Castle Museum, Norwich, to be x-rayed, cleaned and stabilised.

326 Roman coins were found in total; 11 gold, 314 silver, 1 bronze. Many of the silver coins were undersized due to clipping and some are literally "half" coins. The earliest coins belong to Julian AD354-63 and the latest are those of Honorius AD393-423 and Arcadius AD383-408. The bronze coin is a Radiate dating to AD260-96. Although this coin is earlier in date than the majority of the others, it cannot be immediately discounted as not belonging to the hoard as the excavated material from 1992 included 24 unidentified bronze coins (Bland & Johns,1993,13).

The rest of the small finds can be attributed to the following periods;

Roman hoard	Roman non-hoard	Medieval	Post-Medieval	Unknowns
10	1	4	2	27

The ten objects belonging to the hoard include 6 silver and 4 gilded silver objects. Most of these artefacts are fragmentary and have been damaged, probably as a result of ploughing. They include two fragments of a possible dolphin cosmetic brush similar to examples found in the 1992 excavation (Bland & Johns,1993,27,photograph) and 3 fragments of a comma-shaped blade toothpick (Bland & Johns,1993,27, photograph). There is also a gilded hinge with 6 "nails" still in position.

The non-hoard Roman small find was a bow brooch which pre-dates the hoard. The Medieval small finds were all belt-fittings and the Post-Medieval small finds include a silver coin of Elizabeth I. Of the 27 small finds of unknown date, there are 10 pieces of metal waste, 6 fragments of sheet metal, 2 buttons and 3 buckle fragments which could belong either to the Medieval or Post-Medieval periods and 6 unidentified objects.

STATEMENT OF POTENTIAL

The finds from the hoard found during this excavation will obviously be of further interest as part of the larger assemblage.

Within the aim of the excavation, which was to identify any contexts relating to the late Roman hoard found in 1992, the non-hoard finds do not have any potential for further study. However it should be stated that the group of Beaker pottery does merit further study as a significant assemblage from this period.

STORAGE AND CURATION

The bulk finds are stored in the General Store at the Archaeological Section, Shire Hall, Bury St Edmunds. The non-hoard small finds and paper archive are in the Environmentally-Sensitive Store at the same address.

The hoard small finds were deposited at the British Museum on Friday 3 March 1995 by Jude Plouviez.

BIBLIOGRAPHY

Bland, R., and Johns, C. 1993. The Hoxne Treasure: An illustrated introduction

Watkinson, D. E. 1987. First Aid for Finds

Fiona Seeley
Suffolk County Council
Archaeological Section
Finds Manager

29/3/95

CONCLUSION

The discovery of so many prehistoric features on the site was surprising in as much as the recovered material from fieldwalking did not indicate anything more than a background scatter of finds to the southwest of the site. It is therefore possible that the prehistory remains relatively undisturbed by ploughing. Some of the features were sampled but not fully excavated as contingencies were not set up for this unexpected assemblage. No further funding was made available. Evidence of occupation from the early Bronze Age to the late Iron Age was identified and certainly extends outside the limits of the excavated area. A significant number of prehistoric features remain in good, relatively undisturbed condition and therefore the potential for further data recovery remains good. More work would be required to identify a specific function for these contexts.

The disturbance of the hoard, which can be specifically dated to the change in the ploughing pattern in 1990, has offered the opportunity to observe how the finds have been distributed in a relatively short period of ploughing. This process of dispersal can be viewed in two phases; the period from when the hoard was struck but remained undiscovered, and, after the removal of the in situ hoard, the movement of dislocated finds in the topsoil. During the first phase a relatively high frequency of material would have been concentrated around the hoard site, then during the second phase, after removal of the source, the remaining artefacts (336 recovered from this intervention) were spread over a surprisingly large area (approximately 480 sq.metres covers the main assemblage). The field was essentially level and therefore gradient has not influenced the distribution of the hoard material. Whilst the main concentration of finds is oriented east-west it is surprising how far north and south a small number of the finds have been laterally moved by the throw of the plough shears.

The illegal redigging of the 1992 excavation had removed the chance of discovering further information relating to the hoard burial itself. The absence of Roman features within the excavated area, other than a small "post-hole" immediately to the southwest of the hoard find spot which possibly contained a marker for the hoard burial site, suggests an overgrown or woodland situation when the hoard was originally buried.

This archaeological project recovered the vast majority of the remnant finds, though it can be anticipated that a few stray finds which have been exceptionally removed from the identified scatter pattern, will turn up in the future.

A boundary ditch, identified in the geophysical survey and sampled in 5 sections in this excavation, probably represents the west side of an enclosure fronting the lane to the east, though the ditch contained post medieval pottery it is possible that it was medieval in origin with only the infilling material being later.

Very little modern disturbance was noted within the excavated area. The main threat to the remaining archaeological data will be posed by looting and by the cultivation of the site.

The spread of hoard finds over such a large area in a relatively short period of ploughing (4 episodes) will be worth consideration in future projects, particularly during rural evaluations where the siting of potential excavations is often based on the finds in the topsoil. If a site has been regularly ploughed the finds could be widely spread in a fairly short period of time which could make it difficult if not impossible to identify the area of highest potential. It has been demonstrated that careful identification of the scatter pattern of disturbed finds cross referenced with information regarding the agricultural process will be paramount in correctly locating future excavations within an agricultural setting.

HOXNE CONTEXT PROJECT: EXCAVATION PROJECT DESIGN

CONTENTS

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January 1994
Revised August 1994
September 1994

SUMMARY

It is proposed to excavate a 30 metre square trench around the findspot of the major late Roman hoard excavated at Hoxne in 1992. The excavation will provide a fuller context than the 1.5 metre area examined hurriedly in 1992, testing the hypothesis that the hoard was concealed next to a visible field boundary some distance away from any contemporary domestic site.

1. Background

1.1 The Hoard

1.1.1 In November 1992 a massive hoard of coins, jewellery and tableware was discovered by a metal detector user. Exceptionally about 65% of the material was left in situ for professional excavation by the County Council archaeological unit. It was declared Treasure Trove in September 1993.

1.1.2 The hoard can be dated to the very end of the Roman period in Britain because it includes a couple of siliquae of Constantine III (407-408).

1.1.3 The quality of the gold jewellery and the silver tableware can be compared to the Mildenhall and Thetford treasures in Britain and Kaiseraugst and Sevso on the Continent. The tableware consists of small pieces rather than the large plate found in Mildenhall - functionally Mildenhall and Hoxne are almost complimentary. The type of material and the inscriptions suggest that these were the domestic possessions of a wealthy Roman of senatorial class.

1.1.4 The quantity of material is quite exceptional: 29 pieces of gold jewellery, 125 items of silver tableware, 563 gold coins, 14,088 silver coins (Bland and Johns 1993).

1.1.5 The archaeological excavation provided information on the packing of objects within organic containers - principally a wooden box with at least one smaller casket. It also showed that the hoard pit was adjacent to a linear feature.

1.2 Topographical

1.2.1 The hoard findspot (NGR TM 1746 7651) is on the top of a spur of land at 35m OD between the valleys of the Dove and the Goldbrook, which join a kilometre to the north.

1.2.2 Most of this region of Suffolk is characterised by clayey soils over chalky glacial till (Lowestoft Till). The immediate vicinity of the findspot is a slightly lighter soil over glaciofluvial drift (the Hoxne brickearth pit with its important Palaeolithic sequence lies 150m to the north).

1.3 Contemporary Settlement Evidence

1.3.1 The Dove valley is an under-researched area in terms of any archaeological research (except for the Palaeolithic). The only previous SMR Roman period entry for Hoxne was a single gold coin of Honorius found in 1732. Some Roman material is recorded in Eye, including another exceptionally large early C5 hoard (600 gold coins in a lead box found in 1781 at Clint Farm) but nothing else in the Dove valley and its environs on the east side of the A140. The only possible villa type settlement recorded is a possible hypocaust excavated in 1857 in an uncertain location in Eye.

1.3.2 Taking a broader geographical view, the area lies to the east of the major Roman road which linked Caistor-by-Norwich to Colchester and London. Small towns and other roadside settlements along this road include Long Stratton, Scole, Stoke Ash, Coddenham. The Hoxne site is 3.4km (2 miles) from the small town at Scole and 8km (5 miles) from the smaller settlement at Stoke Ash. Both the latter are candidates for the name "Villa Faustini" in the Antonine itinerary.

1.4 Results of Fieldwork to Date

1.4.1 Immediately following excavation of the 1.5m square which contained the hoard pit, an area of about 30m radius was intensively metal detected. This area was detected again after ploughing in September 1993. Most of the material found was either directly related to the hoard (coins and box fitting fragments) or recent in date. However, two separated fragments of Roman copper alloy brooches suggest earlier activity (perhaps agricultural?). The initial search produced 61 coins, the subsequent ploughing in September 1993 84 coins.

1.4.2 The hoard field (that part of OS 4800 lying south of OS 3863) and the adjacent field to the south-west were systematically fieldwalked and detector traverses taken across the hoard field. A medieval pottery concentration was identified on the road frontage of the hoard field and scattered prehistoric (Iron Age) material found to the south-west. There was no indication of any Roman settlement debris.

1.4.3 Geophysical survey by Ancient Monuments Laboratory in February 1993 covered a 90 metre square (magnotometer) and a 60 metre square (resistivity) around the hoard findspot. The magnotometer survey shows a rectilinear feature north-east of the hoard; this feature is probably the boundary of the medieval site located in fieldwalking. Both surveys identify a possible linear feature aligned NNW-SSE, suggested to be an old field boundary. Although neither the precise location nor the alignment exactly tally with the excavation findings it may prove to be the linear feature found adjacent to the hoard. Alternatively that feature may be masked by cultivation marks (Linford 1993).

1.4.4 Air photographs: cover held by SCC has been examined and nothing significant can be distinguished. They do show that cultivation in the past (1991) has been on roughly the alignment of the linear feature identified in the geophysical survey.

1.4.5 In summary there is no evidence for Roman period settlement in the immediate vicinity but there are one or more undated linear features and stray finds suggestive of agricultural activity (? manuring). A medieval site and possibly related enclosure lie 30 metres to the east of the hoard findspot.

2. Destructive Factors

2.1 Looting

2.1.1 The immediate area surrounding the hoard findspot has been dug over at night to the base of ploughsoil and in places deeper. An area 15m by 20m is affected (at February 1993). Illicit detecting evidence is found more widely on the whole field and has also been reported on the field to the east.

2.1.2 Treasure hunting is now inevitable in this area. Destruction of any archaeological features in the area around the hoard is well under way.

3. Research Objective

3.1 To identify features and other evidence in the immediate vicinity of the hoard which may indicate what was the contemporary land use and why the spot was selected.

3.2 While pursuing this primary objective the removal of ploughsoil will allow the further recovery of the relatively small scattered element of the hoard. Experience suggests that it takes at least two years ploughing and detecting to recover the ploughsoil content from 'normal' hoards (a normal hoard being about the same size as the annual Hoxne ploughsoil component so far - see paragraph 1.4.1).

3.3 The excavation will complete the programme of work on the immediate context of the Hoxne hoard, making it one of the best documented Roman hoards to date and unique among late Roman 'treasure' finds.

4. Method Specification

4.1 Excavation of an area 30 metres square around the findspot (fig 3) to include the linear feature identified in the geophysical survey and to extend beyond the worst looting area (roughly 15 by 20 metres recorded in January 1993). This area is judged to be the minimum feasible to ensure that sufficient lengths of undisturbed linear features are available to establish direction and to provide an excavatable sample.

4.2 Ploughsoil to be stripped by machine (backacter with toothless bucket Hymac type) in spits of circa 150mm depth with constant detecting of soil in situ and after removal (see objective 3.2). Soil will be stored within a 10m wide strip reserved around the 30m square excavation. Use of a Hymac within this area will not require any additional machinery to remove soil. Ploughsoil will be stored separately from subsoil. Metal finds within the ploughsoil and subsoil will be plotted individually in the case of copper alloy and precious metals and by 10m square in the case of iron.

4.3 All features cutting subsoil will be excavated. In the light of the continuing threat of total destruction to the site (see section 2) a high proportion, preferably 100%, will be excavated of any feature of apparently Roman or unknown date. A minimum sample of 30% will be taken out of all linear features in order to establish and record fill profiles and to recover datable finds and a minimum of 50% of all pits, post holes etc., for the same reason.

4.4 All deposits to be detected in situ and all excavated deposits to be dry sieved through a 10mm mesh to maximise finds retrieval including animal bone.

4.5 Environmental sampling procedures will follow the guidelines provided by the regional environmentalist (Murphy & Wiltshire, August 1994). Sampling will be discussed with the regional environmentalist in the light of the evidence exposed on site. The current evidence of shallow features cutting sands and gravels is not promising but any deeper or better sealed deposits would be considered for macrofossil and pollen sampling to elucidate past land use in the vicinity. Single bulk samples will be taken from each Roman feature for assessment for plant macrofossils, small bones and shell.

4.6 The excavation will follow the Suffolk County Council statement of Safety Policy. The relevant insurance cover is provided by Suffolk County Council. Specific areas of risk include plant on site during soil stripping and the use of hand tools during excavation. During machining a minimum number of people will be on site (supervisor and detector user) with suitable protective clothing (hard hats). The excavation will employ suitably qualified staff (experienced excavators) wearing protective clothing (steel toe-cap boots). It is not anticipated that any holes will exceed 1 metre in depth. Spoil will be stored at least 2 metres back from the excavation edge. There will be a vehicle and a mobile telephone on site at all times during excavation.

4.7 Recording methods and finds collection and processing as per Suffolk County Council standard guidelines.

4.8 All metal artefacts (excluding coins) will be sent to conservation at Norwich Castle Museum for X-ray and emergency treatment/stabilisation if necessary. Coins will only be sent if cleaning is required for legibility (after identification by JP).

4.9 An archive of all records and finds including security copies to be prepared consistent with MAP 2 and deposited with the County SMR within 12 months of completion of excavation and a copy will be deposited with the RCHM(E) NAR.

4.10 All finds are the property of Suffolk County Council as landowner and will be retained by them except those which may form part of the Treasure Trove hoard, which will be handed to the British Museum and reported to the Coroner.

4.11 An assessment report will be prepared in line with MAP2 on the excavation results and finds excluding those which can be directly related to the hoard (late Roman gold and silver coins, silver box fittings/studs, silver tableware fragments, bone or ivory box inlay fragments). Such finds will be passed to the British Museum for inclusion in the consideration of the hoard itself. The quantity of other artefacts retrieved is expected to be low (under 1kg of Roman pottery, less than 50 other Roman artefacts) and will be assessed by in-house specialist (J Plouviez). Environmental material, if any, will be assessed by P Murphy.

4.12 A summary report in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the Proc Suffolk Inst Archaeol will be prepared. Significant results will form part of the County Council's contribution to the British Museum publication of the hoard.

5. Resources

5.1 Costing for excavation of 30m square area

	£
Machine hire - Hymac to strip @ £16.50 per hour plus £100 transport	628
- JCB to backfill @ £12 per hour plus £50 transport	242
Machine supervision (1 x SCP 23, 2 x SCP 14) - 1 week	875
Excavation team (1 x SCP 23, 1 x SCP 17, 4 x SCP 14) - 2 weeks @ £338 per day	3,380
Transport to site @ £35 per day	525
Site office @ £32 per week + £160 transport	256
Site toilet @ £23 per week + £40 transport	109
Equipment (site phone, consumables)	200
On site security (night time watch) @ £60 per night for 19 days	1,140
Finds processing (SCP 14) - 5 days	265
Finds identification and assessment report (J Plouviez, SCC) - 5 days @ £84 per day	420

Conservation (G Turner-Walker, NCM) - 2 days @ £72 per day	144
Preparation of excavation archive and archive report (SCP 23, 10 days and SCP 17, 7 days) plus preparation of assessment report (SCP 23, 5 days and SCP 17, 3 days)	1,605
Management & administration (low rate)	980
Crop compensation	300
Total:	11,069

Scale point daily rates @ 1st September 1994:

SCP 14	£53
SCP 17	£57
SCP 23	£69

6. Timetable

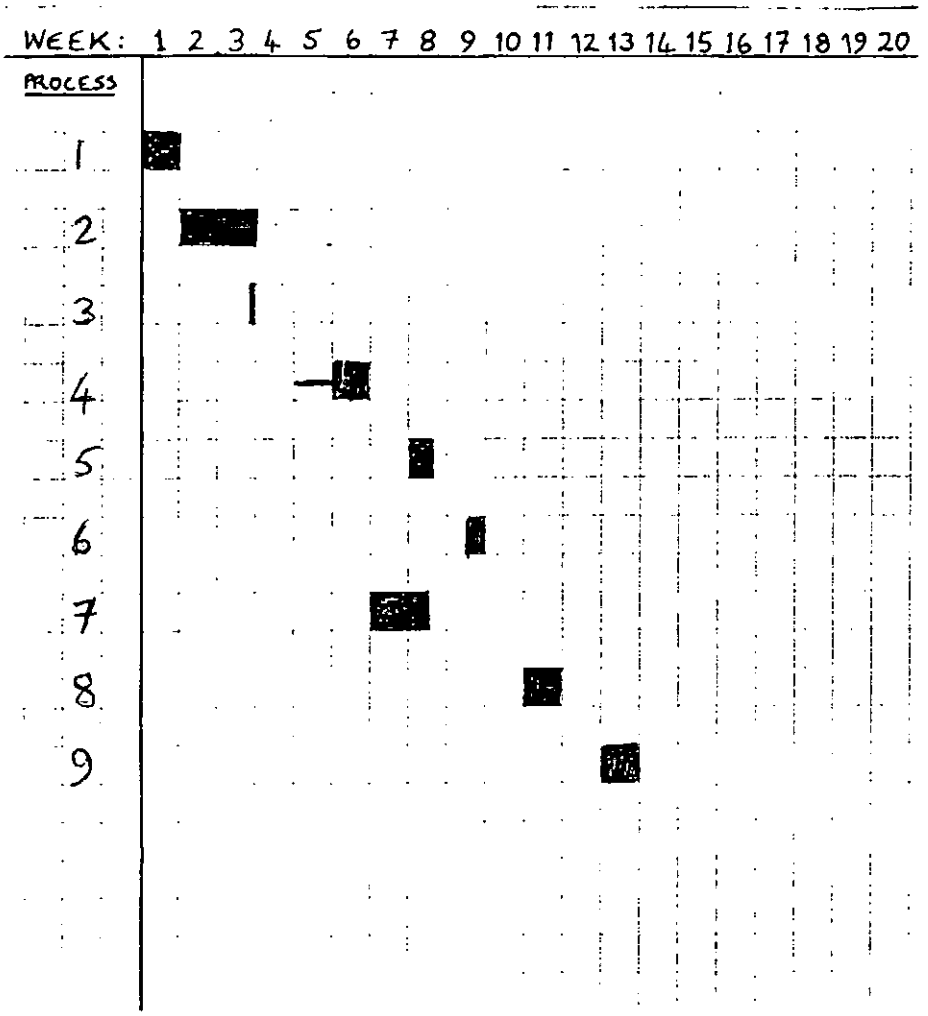
6.1 Staffing

The excavation team will consist of a site supervisor, a senior assistant and four site assistants. Specialist staff include Peter Murphy (Environmental), Gordon Turner-Walker (conservation) and Jude Plouviez (Roman artefacts). The project will be managed by J Newman of SCC Field Projects Team with curatorial monitoring and specialist (Roman) advice by J Plouviez of SCC Conservation Team.

6.2 Tasks

1. Machining. Supervision, metal detecting (3 staff).
2. Excavation (6 staff).
3. Environmental advice (P Murphy).
4. Finds processing (1 staff).
5. Finds identification (J Plouviez).
6. Conservation (G Turner-Walker).
7. Site archive (2 staff).
8. Archive and summary reports (1 staff).
9. Assessment reports (3 staff)

6.3 Timing



7. Bibliography

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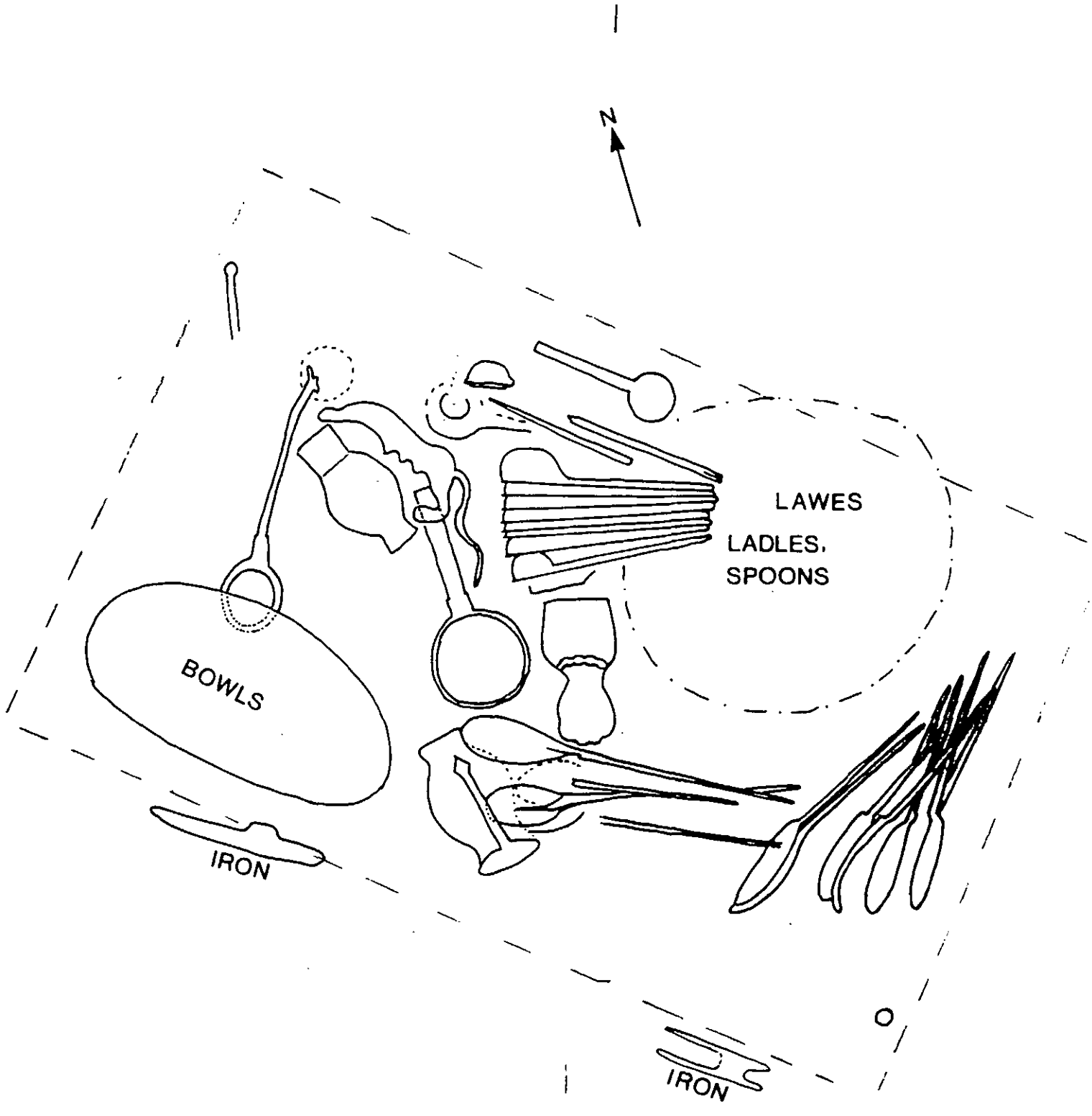
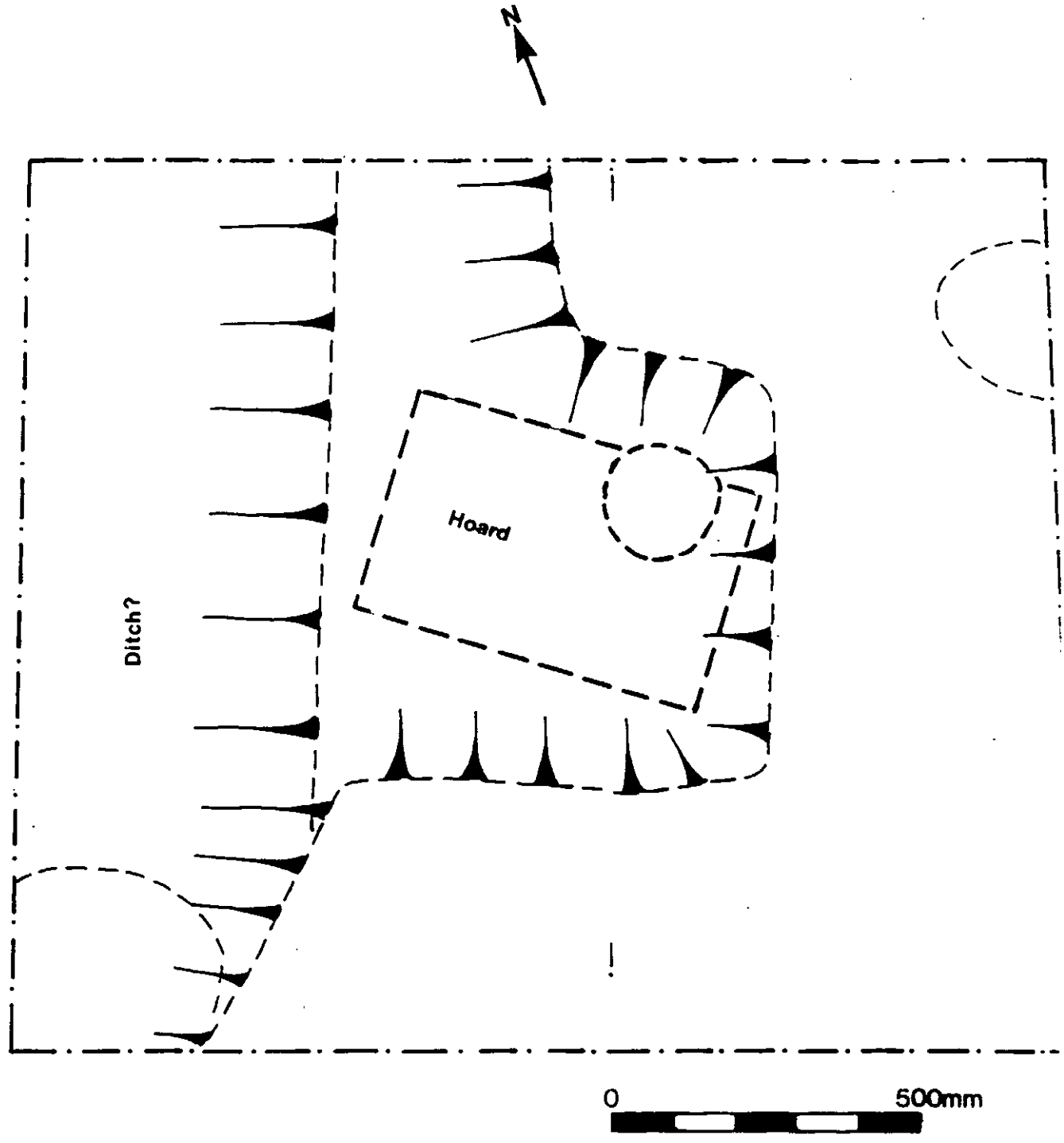
Linford P, Home Farm, Hoxne, Suffolk, Report on geophysical survey, 1993, AM Lab, unpub.

MAP 2, Management of Archaeological Projects, English Heritage, 1991

Hoxne hoard: plan showing the location of objects in the lower part with a suggested outline for the container.

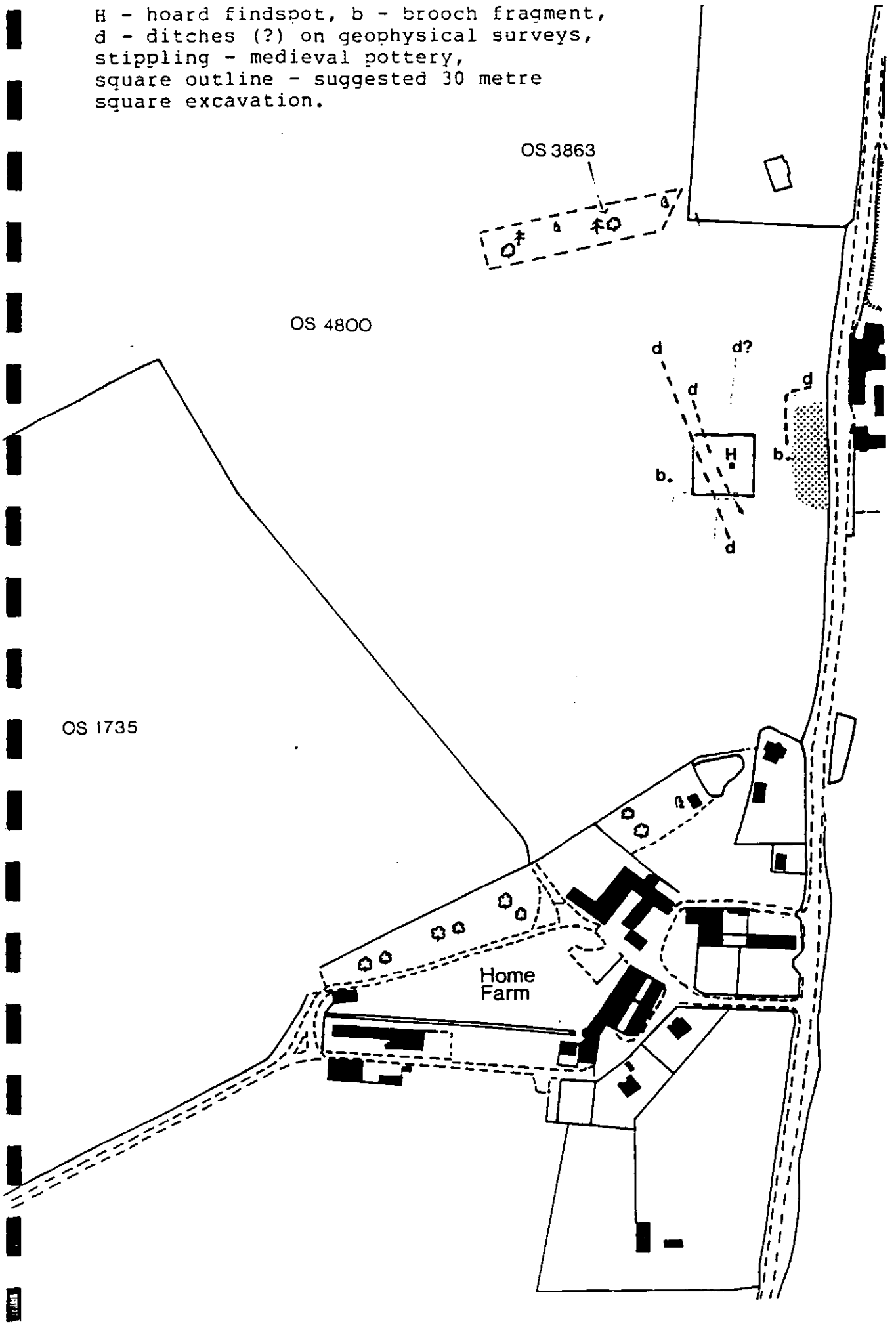


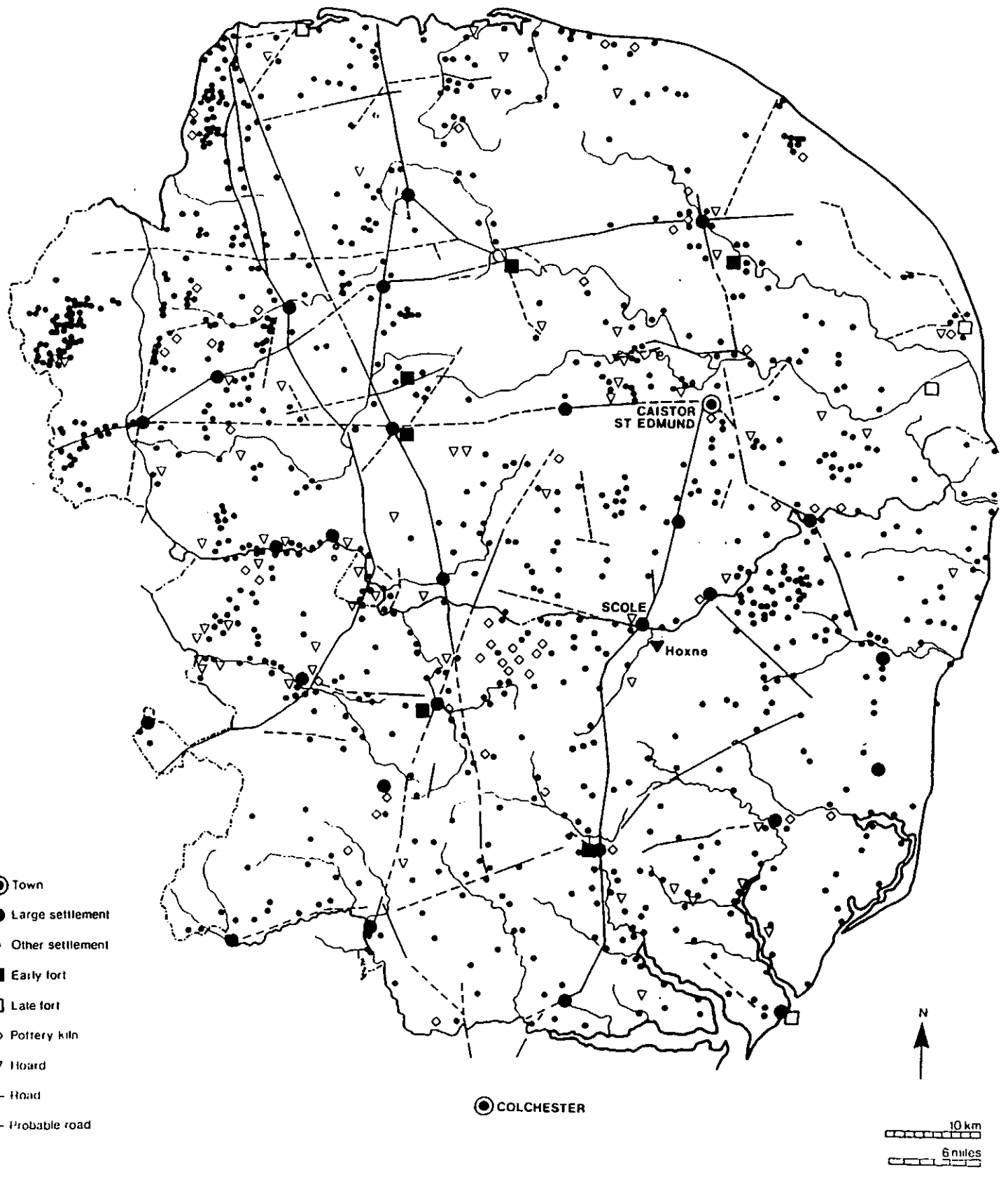
Hoxne hoard: plan of the excavated trench 1992.



Copy of the Ordnance Survey 1:2500 scale map showing the location of the Hoxne hoard excavation 1992.

H - hoard findspot, b - brooch fragment,
d - ditches (?) on geophysical surveys,
stippling - medieval pottery,
square outline - suggested 30 metre
square excavation.




CAISTOR
ST EDMUND
SCOLE
Hoxne
Town
Large settlement
Other settlement
Early fort
Late fort
Pottery kiln
Hoard
Road
Probable road
COLCHESTER
N
10 km
6 miles

Ancient Monuments Laboratory Report 107/93

HOME FARM, HOXNE, SUFFOLK, REPORT ON GEOPHYSICAL SURVEY, 1993

Paul Linford

Summary

A geophysical survey was carried out around the location where a great hoard of Roman treasure was discovered with a metal detector. Few anomalies likely to have been caused by archaeological features were detected and the strongest responses of the instruments were to the underlying drift geology. This reinforces the view that the burial location was remote from any contemporary Roman settlement.

HOME FARM, Hoxne, Suffolk.

Report on geophysical survey, 1993

Introduction

This report describes the results of the geophysical survey carried out near Hoxne in Suffolk, over the location where a great hoard of Roman treasure was discovered. The find was made by Mr Eric Lawes on the 16th November 1992, while searching with a metal detector for a friend's lost hammer, in an arable field owned by Suffolk County Council. Owing to the commendable promptness with which Mr Lawes reported the find, the Suffolk Archaeological Unit were able to mount an excavation to recover the remaining objects associated with it. This excavation revealed that the treasure was originally contained in a wooden box and that the burial appeared to be cut into the side of a North-South ditch. No other evidence of archaeological context was apparent.

The geophysical survey was thus conducted to assist the Archaeological Unit in their interpretation of the hoard, by prospecting for the remains of any contemporary Roman structures in the immediate vicinity. A description and analysis of the treasure comprising the hoard has been made by Catherine Johns and Roger Bland (1993). The find spot remains under threat from the activities of trespassing metal detectorists and a 15m square area around it was illegally excavated on the evening of the 24th December 1992.

The site (TM 175 765) lies in an area where Norwich Crag overlies the Upper Cretaceous Chalk to a depth of 40 metres. The drift geology of the region is predominantly Lowestoft Till. However, the find location lies between the River Dove and its tributary, Gold Brook, in a localised area of Head Gravel, a poorly sorted clayey gravel, deposited by this system.

Method

Owing to limits on the time available for the survey, it was decided to survey a 90m square, centred on the find spot, using a fluxgate gradiometer. Additionally, a 60m square, centred over the same area was covered using the less rapid, earth resistivity prospecting technique. The gradiometer survey area was divided into a grid of nine 30m squares as depicted in the magnetometer survey location plan. The area was then surveyed with a Geoscan FM36 magnetometer along successive N-S traverses separated by 1.0m intervals. Readings were logged every 0.25m and the data was transferred to a portable microcomputer in the field. It should be noted that a 5m strip along the Eastern edges of squares 3, 6 and 9 was not surveyed, because of the proximity of an iron fence that greatly distorted the instrument readings.

Plot 1a depicts the results of this survey in greyscale format, with no computational enhancement applied. Plot 1b shows the same results, enhanced by the method of downward continuation (Telford *et al.* 1990, p32), to predict a topsoil susceptibility distribution, at a depth of 0.25m

below the magnetometer sensor, that could account for the measurements recorded. Additionally, the Wallis contrast enhancement algorithm (Wallis 1976) has been applied to plot 1b to enhance the response of features less than 5m across.

The area covered by the resistivity survey is shown in the resistivity survey location plan. The area was again surveyed using parallel N-S traverses spaced at 1m intervals. However, readings were taken at 1m intervals along each traverse with this technique. Measurements were taken using a Geoscan RM15 resistance meter using the twin electrode configuration with a half meter mobile probe separation.

Plot 2a depicts the untreated results of this survey in greyscale format; plot 2b depicts the same results after computer enhancement. In the latter, the high reading caused by contact resistance has been replaced by a local mean value, and the data treated with a directional cosine filter, to remove the corrugation caused by recent ploughing.

Results

The Magnetometer Survey

Examination of the untreated gradiometer data in figure 1a, reveals few anomalies likely to have been caused by archaeological structures. The most obvious possibility is a linear feature that turns through a right angle in the south eastern corner of square 3. However, there is nothing to link this feature to the area where the hoard was found and it may well be the result of agricultural activity post-dating the treasure burial. The disturbance caused by trespassing metal detectorists around the find spot is evident in square 5. The only other anomalies readily apparent on plot 1a are localised groups of high intensity readings caused by small buried iron objects. It is likely that these are caused by recent agricultural debris, lying just below the ground surface.

Referring to the magnetic susceptibility map in plot 1b, some additional features may be discerned; these are indicated on the copy of plot 1b shown in Figure 1. An indistinct linear anomaly is visible running approximately North-South. It begins at the North edge of square 1, runs into square 5 through their common corner, then goes through the centre of square 8. It does not run in exactly the same direction as the disturbance caused by recent ploughing, but the contrast in magnetic susceptibility between it and the surrounding soil is low. An archaeological interpretation consistent with this evidence would be that it marks a previous field boundary, at some remove from the nearest contemporary settlement or

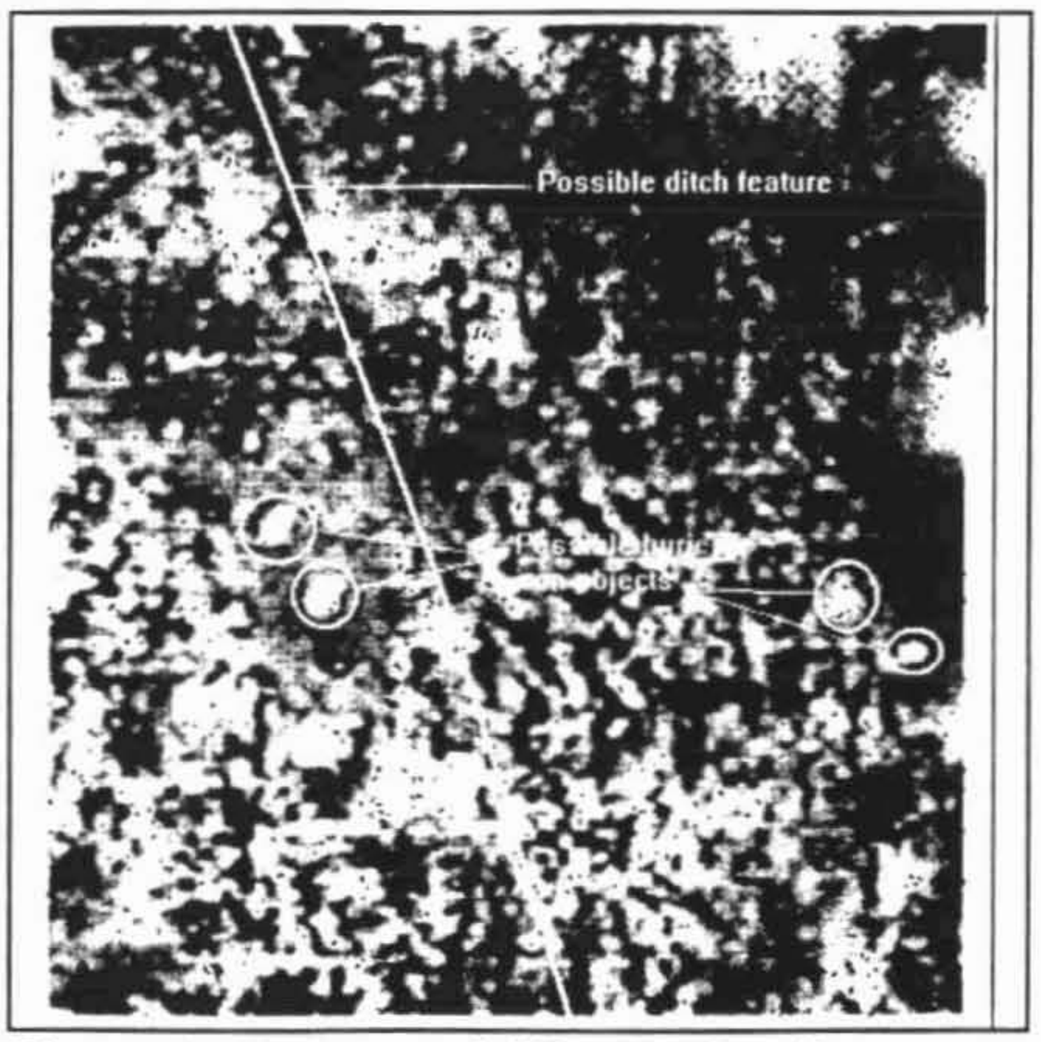


Figure 1; Features visible on plot 1b.

activity. It is possible that this is the ditch feature, discovered during the archaeological excavation, that the hoard burial was cut into.

Also visible on plot 1b are four localised, circular areas of high response, highlighted in Figure 1. These are likely to be caused by iron objects, probably more deeply buried than the majority of the surface iron debris apparent in plot 1a. It is thus possible that these anomalies represent archaeological artifacts but it is equally likely that they are caused by agricultural debris that has been ploughed into the soil, so any such interpretation is tentative at best. Unfortunately little other information may be gleaned from plot 1b, owing to the strong contrasts in magnetic susceptibility caused by the underlying drift geology.

The Resistivity Survey

Scrutiny of plot 2b, where the linear trends caused by recent ploughing have been removed from the resistivity data, shows that the predominant response of the survey is to the drift geology. It is notable that the area of high resistivity in square R02 corresponds with the area of low susceptibility in plot 1b (plot 1b has been filtered to suppress regional variation so this area does not show up clearly). Thus, given that the drift geology is known to be poorly sorted clayey gravel, it is likely that this area represents a concentration of gravel and that the areas of lower resistivity, and higher magnetic susceptibility, represent concentrations of clay.

However, a low resistance linear anomaly is visible running through the centre of square R01; this is highlighted on the copy of plot 2b shown in figure 2. Its position and alignment correspond with that of the linear anomaly detected in the magnetometer survey. Furthermore, as a low resistivity anomaly, it may well represent a previous ditch feature, lending weight to the interpretation suggested above, that it represents the remains of a previous field boundary. The only other feature discernable in this plot is the disturbance around the find spot that was noted on the magnetometer survey.

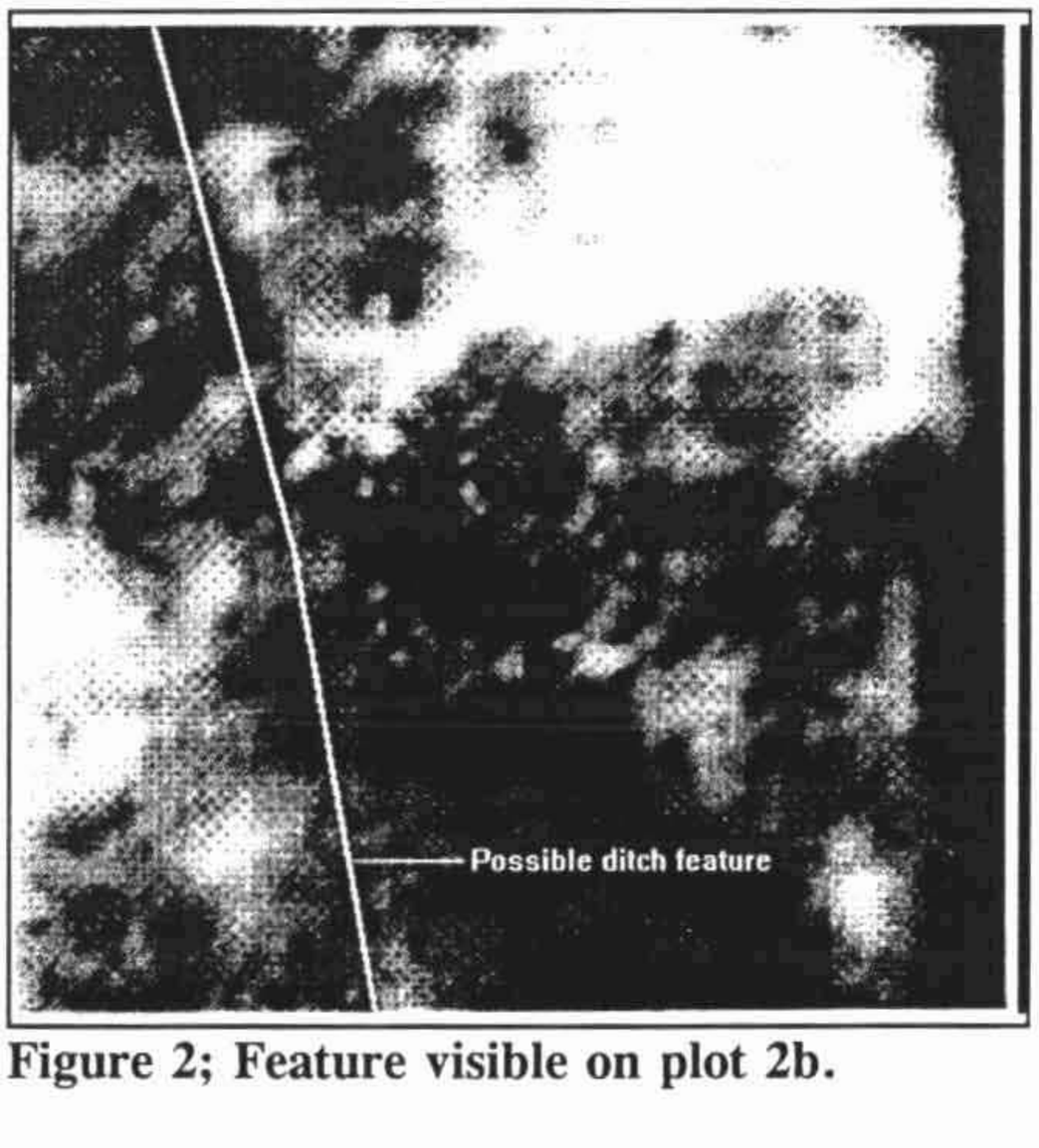


Figure 2; Feature visible on plot 2b.

Conclusion

In both the resistivity and magnetometer surveys, the predominant response was to drift geology rather than to archaeological features. Nevertheless, a clear linear feature, turning through a right angle, was detected with the magnetometer and a faint linear ditch anomaly, running North-South, was detected by both instruments. This suggests that anomalies resulting from archaeological remains would have been detected if present and it could thus be concluded that little anthropogenic activity occurred in the vicinity during, or after, the Roman period when the treasure was secreted. It is possible that the faint linear feature represents a previous field boundary and that the treasure was deliberately buried at the edge of this field. However, owing

to the scant amount of potential archaeological features detected, few firm conclusions may be made.

Surveyed by: P Linford
A Payne

Date of survey: 10-12/2/93

Reported by: P Linford

Date of report: 26/11/93

Archaeometry Branch,
Ancient Monuments Laboratory,
English Heritage.

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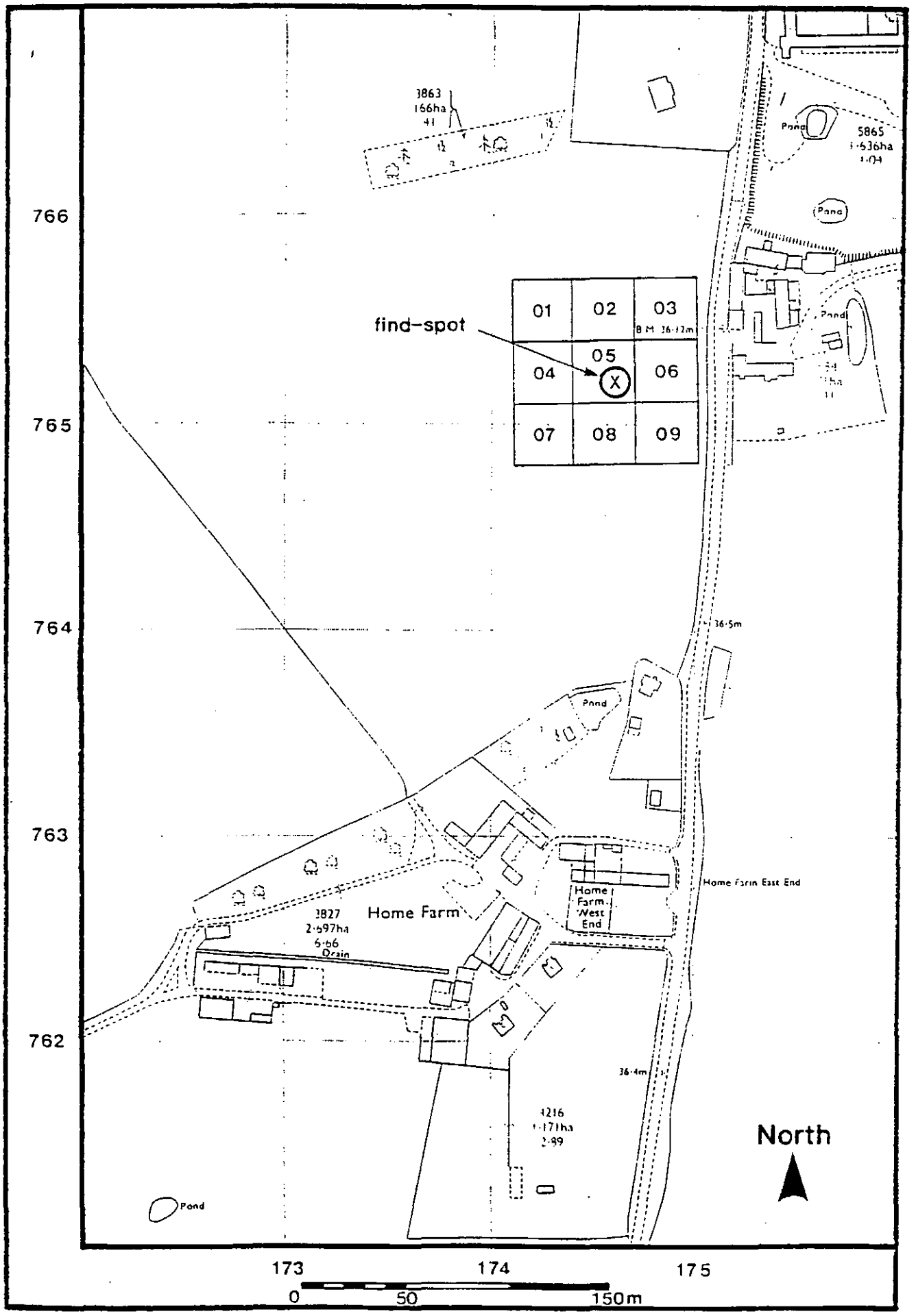
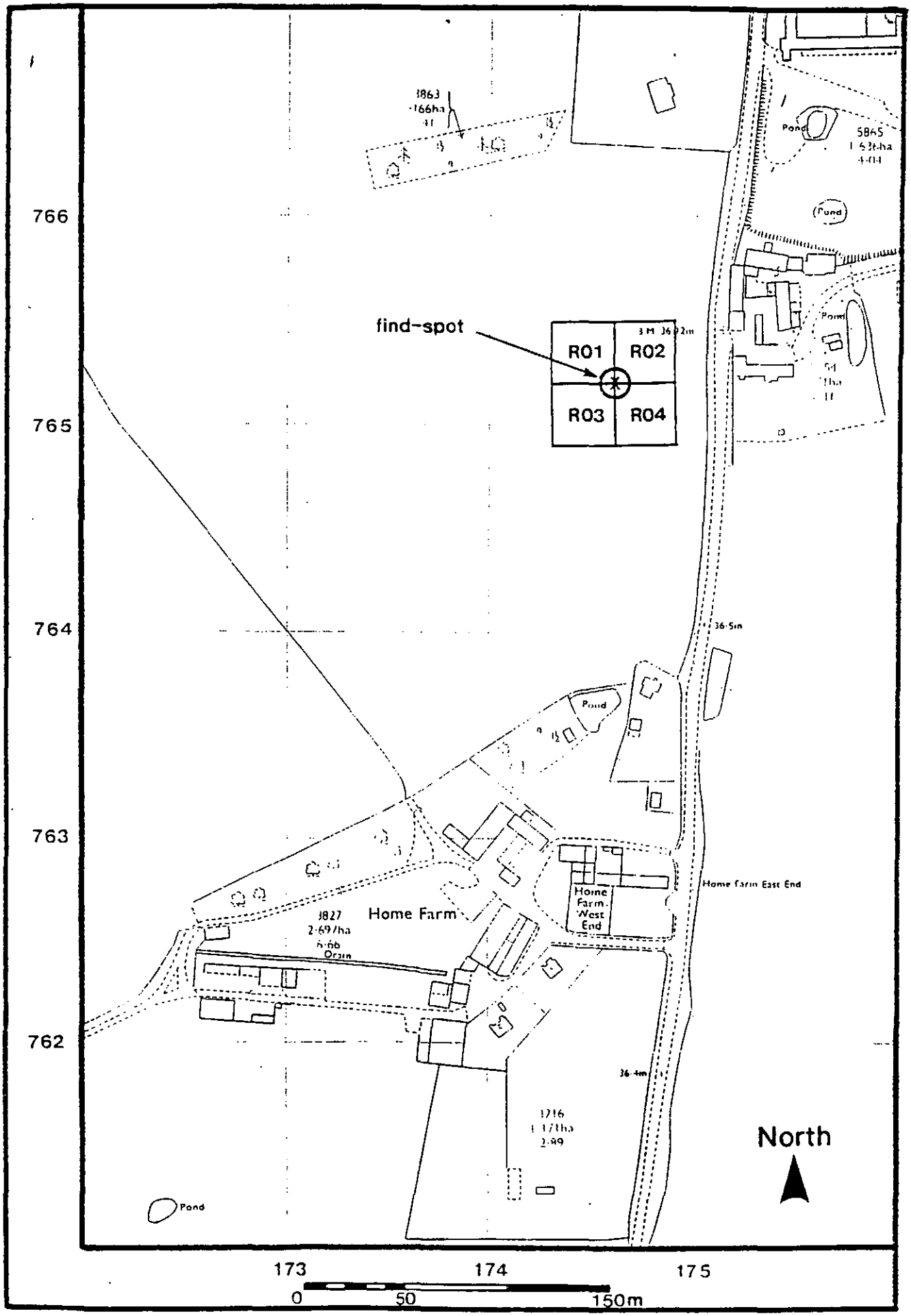
HOXNE, SUFFOLK



Location of Magnetometer Survey

HOXNE, SUFFOLK



Location of Resistivity Survey