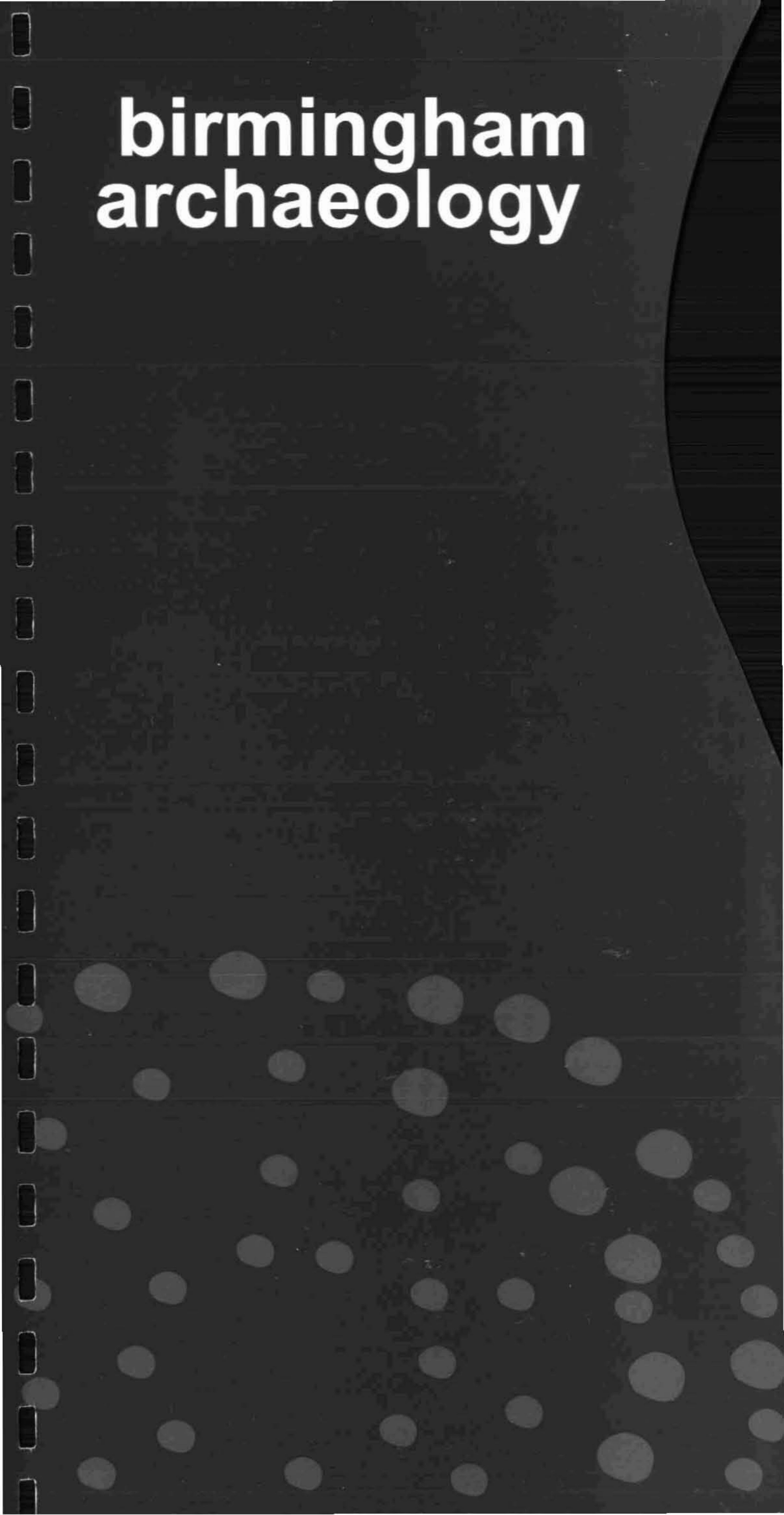


# **birmingham archaeology**





Consultancy

Desk Based Assessment

Environmental Impact Assessment

Standing Building Recording, including 'non-contact' Laser Recording

Evaluation

Excavation

Urban and Landscape Survey

High Resolution GPS Control and Detail Survey

GIS Based Analysis

Remote Sensing

Specialist Finds Analysis

Environmental Analysis

Vocational Training

Human Remains Analysis

Watching Brief

Illustration

Birmingham University  
Edgbaston  
Birmingham  
B15 2TT

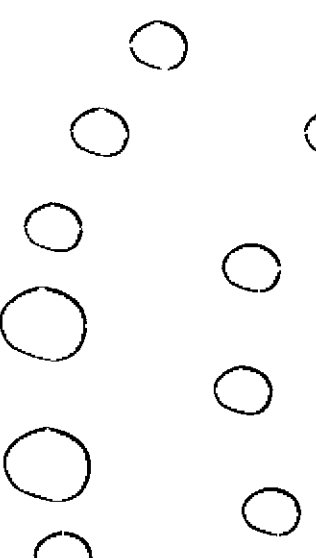
tel 0121 414 5513

fax 0121 414 5516

email [bham-arch@bham.ac.uk](mailto:bham-arch@bham.ac.uk)

[www.barch.bham.ac.uk](http://www.barch.bham.ac.uk)

Cover image: 'Henge' cropmark, 'Catholme Ceremonial Complex'



# birmingham archaeology



UNIVERSITY OF  
BIRMINGHAM

Red Hill Marina, Ratcliffe  
on Soar

Archaeological Evaluation  
2007

## DRAFT

Checked by	
Supervisor..... <i>lc. Lawrence</i> .....	date..... <i>21/8/07</i> .....
Project Manager.....	date.....



. SMR :

E9470.

L12110

L12111

L12112

L12113

L12114

L12115

L12116

(M500)

**Project No. 1588**



**Red Hill Marina, Ratcliffe on Soar  
An Archaeological Evaluation Fieldwork summary  
2007**

By

Kristina Krawiec

With contributions by

*David Brown, Hilary Cool, Sue Ebbins, Pam Grinter, Sam Hepburn, Rob Ixer,  
Erica Macey-Bracken and Jane Timbey*

For

Red Hill Marine Ltd

*For further information please contact:*

Alex Jones (Director)

Birmingham Archaeology

The University of Birmingham

Edgbaston

Birmingham B15 2TT

Tel: 0121 414 5513

Fax: 0121 414 5516

E-Mail: [bham-arch@bham.ac.uk](mailto:bham-arch@bham.ac.uk)

Web Address: <http://www.barch.bham.ac.uk/bufau>

## Red Hill, Ratcliffe on Soar AN ARCHAEOLOGICAL EVALUATION, 2007.

### CONTENTS

<b>1 INTRODUCTION .....</b>	<b>1</b>
BACKGROUND TO THE PROJECT .....	1
LOCATION AND GEOLOGY .....	1
<b>2 ARCHAEOLOGICAL BACKGROUND .....</b>	<b>1</b>
<b>3 AIMS AND OBJECTIVES .....</b>	<b>3</b>
<b>4 METHODOLOGY .....</b>	<b>3</b>
FIELDWORK .....	3
<b>5 RESULTS .....</b>	<b>4</b>
INTRODUCTION .....	4
TRENCH DESCRIPTIONS .....	4
<b>6 THE FINDS .....</b>	<b>16</b>
THE POTTERY BY JANE TIMBY .....	16
Roman .....	16
Saxon .....	17
MEDIEVAL AND POST-MEDIEVAL BY STEPHANIE RATKAI .....	18
SMALL FINDS BY SUE EBBINS AND ALAN PALFREYMAN .....	18
Coins .....	18
Copper alloy objects .....	22
Lead objects .....	23
Worked Bone .....	23
Glass .....	24
Iron objects .....	24
THE GLASS BY H.E.M. COOL .....	27
Catalogue .....	27
Addendum .....	27
THE STONE BY ROB IXER .....	27
Trench 18 - 1802 .....	27
Trench 68 - 6801 .....	27
Trench 68 - Spoil heap .....	27
THE TILE, FIRED CLAY AND FLINT BY ERICA MACEY-BRACKEN .....	28
Tile .....	28
Fired clay .....	28
Flint .....	28
THE ANIMAL BONE BY DAVE BROWN .....	28
HUMAN BONE BY SAM HEPBURN .....	29
CHARRED PLANT REMAINS BY PAM GRINTER .....	30
Laboratory method .....	30
Results .....	30
Conclusions .....	30
<b>7 DISCUSSION .....</b>	<b>30</b>
<b>8 ACKNOWLEDGEMENTS .....</b>	<b>32</b>
<b>9 REFERENCES .....</b>	<b>32</b>

## Figures

1. Location map
2. Trench locations
3. Field 1 close-up
4. Field 2 close up
5. Trench 11 sondage east facing section, Trench 11 east facing section and Trench 19 east facing section
6. [3102] east facing section, [3505] east facing section, [3604] east facing section, [3703] east facing section, [3902] west facing section and [4002] north facing section
7. [5503] west facing section, [5503/05] south facing section, [5611/13] south facing section and [5804] west facing section
8. Plans Trenches 23 and 24

## Plates

- 1 Trench 1 looking south
- 2 Trench 3 looking south
- 3 Trench 7 looking north east
- 4 [705] south facing section
- 5 Trench 8 looking north west
- 6 Trench 10 looking north
- 7 Trench 11 looking north
- 8 Trench 11 sondage looking west
- 9 Trench 15 looking north
- 10 Trench 19 east facing section
- 11 Trench 20 east facing section
- 12 Trench 21 looking north east, [2103]
- 13 Trench 23 looking north
- 14 [2306] south facing section
- 15 Trench 24 looking north
- 16 HB1 looking east
- 17 HB1 whole pot
- 18 HB2 skull
- 19 HB3 with pottery
- 20 Trench 25 looking east
- 21 Trench 26 looking north
- 22 Trench 27 looking north
- 23 Trench 29 looking east
- 24 [3003/05] south west facing section
- 25 [3102] west facing section
- 26 [3301] east facing section
- 27 Trench 34 looking north
- 28 [3403] east facing section
- 29 Trench 35 looking north
- 30 Trench 36 looking south
- 31 Trench 37 looking east
- 32 [3803] looking north
- 33 [3902] west facing section
- 34 [4002/12] south facing section
- 35 [5503] south facing section
- 36 Trench 65 looking east
- 37 [6504] east facing section
- 38 [6510] east facing section

39 Dog skeleton  
40 [6804/06] west facing section  
41 Trench 70 looking north

**Appendix**

i Database  
ii Table 1  
iii Table 2  
iv Analysis of the Slag

## SUMMARY

*An evaluation was carried out in advance of any development at the site of Red Hill marina, Ratcliffe on Soar, Nottinghamshire (NGR SK 4492 3299). The project was sponsored by Richard Morley of Red Hill Marine Ltd and undertaken by Birmingham Archaeology. A total of 68 trenches were excavated across the site in order to characterise and assess the depth and nature of the archaeological deposits.*

*The trenches aligned parallel, and close to the farm track revealed deep, urban style stratigraphy with a thick Roman layer overlying discreet features. The archaeology was characterised by rubbish pits and gully-like drainage features. There were also four inhumations with associated grave goods in two of the trenches. A number of metal artefacts were also recovered, mostly comprising Roman coinage. The pottery recovered was wide ranging in style and status but all was very well preserved. A small amount of possible prehistoric or Saxon material was also recovered which is illustrative of the longevity of the site.*

*Later episodes of medieval ridge and furrow cultivation were visible as positive as well as negative features. These features tail off towards the floodplain edge and are good indicators for the limit of dryland exploitation in antiquity. The floodplain deposits were found to consist mostly of oxidised alluvium overlying grey inorganic silts.*

**Red Hill, Ratcliffe on Soar**  
**AN ARCHAEOLOGICAL EVALUATION, 2007.**

## **1 INTRODUCTION**

### **Background to the project**

Birmingham Archaeology was commissioned by Red Hill Marine Ltd to undertake a programme of trial trenching in order to establish the depth and nature of archaeological deposits to the south of Red Hill (SAM Notts 141, SMR 500).

This report outlines the results of a field evaluation carried out during March 2007 and has been prepared in accordance with the Institute of Field Archaeologists Standards and Guidance for Archaeological Evaluations (IFA 2001).

The area immediately to the east of the site has been subjected to a small programme of trial trenching by Birmingham Archaeology during 2001. Two watching briefs were also carried out during geotechnical and drainage works in 2001 and 2006 respectively, also by Birmingham Archaeology.

The evaluation conformed to a Written Scheme of Investigation (Birmingham Archaeology 2007) which was approved by the Local Planning Authority prior to implementation in accordance with guidelines laid down in Planning Policy Guidance Note 16 (DoE 1990).

### **Location and geology**

The site is located 1km to the north of Ratcliffe on Soar (centred on NGR SK 4492 3299) and 200m to the east of the River Soar (Fig.1). It comprises four fields within Red Hill Farm. The site lies to the north of the A453. To the east is the River Soar, which has its confluence with the River Trent approximately 500m to the north. The western side of the site is bounded by a farm track which leads from the A543 to Red Hill Farm and Red Hill Marina. Further to the west is the Nottingham to London Railway line, with the Scheduled Ancient Monument of Red Hill approximately 20m to the north-east. (SAM Notts 141, SMR 500). The site is currently arable to the north and crop to the south.

The geology of the site comprises mainly river terrace gravel deposits within the alluvial flood plain. On the higher ground the geology changes to Keuper marl particularly on a raised knoll on the eastern side of the site, and to the north on Red Hill itself.

## **2 ARCHAEOLOGICAL BACKGROUND**

A desk-based assessment (Stephenson 1999) of the archaeological potential has already been carried out. This section forms only a summary of the archaeological background.

A Mesolithic microlith recovered from the surface at Red Hill, and worked Neolithic and Bronze Age flints recovered nearby indicate early prehistoric activity. Neolithic stone axes have also been recorded locally, one close to the Soar and two from the Trent. A Bronze Age ditch has



**Plate 1: Trench 1 looking south**



**Plate 2: Trench 3 looking south**

also been identified during the 2001 evaluation carried out by Birmingham Archaeology with a few scattered flint flakes being recovered from the topsoil (Cuttler 2001).

In the early 18<sup>th</sup> century human remains were unearthed during gypsum mining, and during the construction of the rail route along the eastern edge of the site further skeletal remains were revealed. The construction of a rail bridge over the Trent in 1895 produced the boss and spine from a rare Iron Age shield (Watkin et al 1996). From the 1950s onwards excavation work and systematic investigation by amateur archaeologists has generated further information about prehistoric and Romano-British activity at the site. A large amount of investigation has also been carried out by metal detectorists which has identified a spread of Romano-British material running parallel with the modern farm track. The Romano-British finds peter out to the west and a medieval material begins to appear.

Approximately 20m to the north of the site is the well documented Iron Age and Romano-British site of Red Hill, a Scheduled Ancient Monument (SAM Notts 141, SMR 500). Red Hill is situated on high ground to the southeast of the confluence of the River Soar and the River Trent. It seems likely that this confluence was considered sacred during the Iron Age and was chosen for the site of a shrine, which was later adopted by the Romans for a temple. Work in the past few years has begun to suggest that the shrine may have encouraged the growth of a small Roman town to the south and west of the scheduled area.

The importance of the site is further illustrated by the proximity of two Roman roads. The first of these runs directly from the Trent near Sawley in a northwest direction to the fort and later settlement at Strutt's Park and Little Chester (Derby). It seems likely that it crossed the Trent and continued to Red Hill, although the exact location has not been identified. The Road probably continued on from Red Hill to Vernemetum on the Fosse Way (Elsdon 1982). A second road (SMR 10) runs southwards along the west bank of the Soar to crossing at Kegworth and continues to Shepshed. The exact line of this road at Red Hill is not clear, but it seems likely that the road crossed to the east bank of the Soar somewhere north of the present A453, close to the site.

While artefacts thought to relate to the Roman military have previously been found at Red Hill, no clear defensive features relating to a camp or fortress have yet been discovered. The steep topography of the northern and western sides of Red Hill would have afforded a natural defence, the occupation of which would have controlled traffic on both the Soar and the Trent.

Excavations by Houldsworth on the site at Red Hill in the 1950s uncovered a Roman building which had been identified from aerial photographs (Houldsworth 1963). Fluted stone columns of red Mansfield sandstone were thought to be associated with the building since this was thought at the time to be the only building on the site. Pottery from the 2<sup>nd</sup> to 4<sup>th</sup> centuries AD, a lead tablet and 1<sup>st</sup> century AD burial were associated with the building. Further field walking found traces of tessera, hypocaust tiles, stone flooring, limestone rubble and diamond shaped Roman floor tiles (Elsdon 1982). Red Hill was further excavated by E. Greenfield in the summer of 1963 in advance of building works connected with the power station (Greenfield 1964).

Recent work at Red Hill has concentrated on the cliff side area over looking the River Soar (Reeves 1992), which confirmed the concentration of Roman activity. Within the site observations were made during excavations for electrical cable laying, along the line of the Red Hill Farm access track. Here deposits of possible Romano-British date were observed (JSAC 1998). Evaluation carried out in 2001 by Birmingham Archaeology revealed extensive remains of 2<sup>nd</sup> to 4<sup>th</sup> century Romano-British occupation, including buildings, more akin to semi-urban deposits than rural settlement.



**Plate 3: Trench 7 looking north**



**Plate 4: [705] east facing section**

The probable remains of ridge and furrow relating to medieval or early post-medieval open field cultivation are visible on 1940s aerial photographs, aligned east-west (Stephenson 1999). An investigation into the proposed dualling of the A453 between Barton and the M1 also suggested the potential for a ring ditch between the area of the site and the A453 (Walker 1992). A large flood alleviation bank was excavated and erected during the 1980's along the entire river bank within the assessment area, no archaeological work was carried out prior to this.

### 3 AIMS AND OBJECTIVES

The principle aim of the evaluation was to determine the character, state of preservation and the potential significance of any buried remains.

More specific aims were to:

- demonstrate the presence or absence of well preserved and deeply stratified archaeological deposits or Roman date parallel with the farm track between Red Hill Farm and the A453
- determine how far these deposits extend into the development site
- assess the nature and extent of the post medieval archaeology
- qualify the nature of any other archaeological remains within the site
- identify areas where sand and gravel is close to the surface, which may indicate areas of early occupation, and provide data on the subsurface topography of the site
- Identify the presence of palaeochannels, and assess their potential for containing organic and palaeoenvironmental remains
- Provide suitable data and a report to enable an informed planning decision.

### 4 METHODOLOGY

#### Fieldwork

The proposed development area covers approximately 19ha. 40 trenches measuring 5mx2m were excavated parallel to the farm access with the intention of determining the extent of the Roman deposits identified by the evaluation works of 2001. A further 28 trenches measuring 25mx2m were excavated across the remainder of the site and were designed to provide a random sample, bringing the total amount to 1% of the area of investigation (Fig.2).

Trenches were located to provide a preliminary overview of the archaeological deposits and to assess and define zones of archaeological significance.

All topsoil and modern overburden was removed using a 360° tracked mechanical excavator with a toothless ditching bucket, under direct archaeological supervision, down to the top of the uppermost archaeological horizon or the subsoil. Subsequent cleaning and excavation was by hand. All (Spoil) heaps and trenches were scanned by an experienced metal detectorist.

All stratigraphic sequences were recorded, even where no archaeology was present. Features were planned at a scale of 1:50, and sections were drawn through all cut features and significant vertical stratigraphy at a scale of 1:20. A comprehensive written record was maintained using a continuous numbered context system on *pro-forma* context and feature



**Plate 5: Trench 8 looking north west**



**Plate 6: Trench 10 looking north**

cards. Written records and scale plans were supplemented by photographs using monochrome and digital and colour slide photography.

Twenty litre soil samples were taken from datable archaeological features for the recovery of charred plant remains. The environmental sampling policy followed the guidelines contained in the Birmingham Archaeology Guide to On-Site Environmental Sampling. Finds were cleaned, marked and remedial conservation work was undertaken as necessary. Treatment of all finds conformed to guidance contained within 'A strategy for the care and investigation of finds' published by English Heritage.

The full site archive includes all artefactual and/or ecofactual remains recovered from the site. The site archive will be prepared according to guidelines set down in Appendix 3 of the Management of Archaeology Projects (English Heritage, 1991), the Guidelines for the Preparation of Excavation Archives for Long-term Storage (UKIC, 1990) and Standards in the Museum Care of Archaeological collections (Museum and Art Galleries Commission, 1992). The finds and paper archive will be deposited with a museum registered with the Museums, Libraries and Archives Council subject to permission from the landowner.

## **5 RESULTS**

### **Introduction**

Archaeological features were found in 29 of the trenches. Mostly these could be dated to the Romano-British period, which were sealed by medieval ridge and furrow. A small amount of prehistoric material was also excavated. A thick occupation layer of Romano-British date sealed much of the archaeology to the immediate west of the farm track. A full database of all archaeological contexts is provided in appendix i as not all stratigraphic units will be discussed in full below. All of the 5m trenches were orientated north south.

The nature of the subsoil varied across the site with the depth of the deposits increasing toward the flood plain edge. The subsoil appears to be rich in oxidised silt clay derived from alluvial deposits during flooding events. The archaeology can be ascribed broad zones with the Romano-British zone confined to the eastern half of the site and mostly sealed beneath the occupation layer (Fig.2). All archaeology not sealed by this layer has been assigned a separate zone with the modern flood plain edge also defined. The natural across the majority of the site has been ascribed to the Syston and Eggington common sands and gravels leading to sharp changes in natural gravel deposits across the site.

### **Trench descriptions**

#### **Trench 1**

Dimensions: 5m x 2m x 0.90m

Trench 1 was aligned north south in the northernmost field of the site. The natural [104] was a pale orange silt sand and was truncated by a treebowl [103]. This was sealed by a subsoil [101] from which a small quantity of Roman pottery was recovered. The subsoil was then sealed by the topsoil [100] (Plate 1). No archaeological features were recorded.

#### **Trench 2**

Dimensions: 5m x 2m x 0.70m

Trench 2 was orientated north south to the south west of trench 1. The natural was a mid orange silt sand [202]. No archaeological features were observed in this trench.



**Plate 7: Trench 11 looking north**



**Plate 8: Trench 11 sondage looking west**

### Trench 3

Dimensions: 5m x 2m x 0.50m

Trench 3 was orientated north south to the south east of trench 1. The archaeology in this trench is defined by a series of layers, with Romano-British finds restricted to the lowest layer [303] a mid grey brown silt gravel 0.30m thick (Plate 2). This in turn was overlain by a layer of gravel [302] 0.10m thick which may represent a rough surface. This was then overlain by the subsoil [301] and topsoil [300].

### Trench 4

It was not possible to excavate trench 4 as it lay too close to the flood defences.

### Trench 5

Dimensions: 5m x 2m x 1.60m

Trench 5 was excavated to a depth of 0.90m and the river terrace gravels were not reached. The earliest recorded deposit was an oxidised orange brown alluvial deposit [501] 1.40m thick which represents the edge of the River Soar floodplain. This was sealed by the topsoil [500]. No archaeological features were recorded within trench 5.

### Trench 6

Dimensions: 5m x 2m x 0.90m

The natural [602] in trench 6 was reached at a depth of 0.90m and comprised very mixed silt rich gravels. This was overlain by a 0.65m thick deposit of silt clay subsoil [601] which in turn was sealed by the topsoil [600].

### Trench 7

Dimensions: 5m x 2m x 0.80m

The natural [706] in trench 7 was reached at a depth of 0.80m and comprised a mottled yellow brown silt sand (Plate 3, Fig. 5). This was truncated by a small circular pit [705] which was filled by a dark brown clay silt [704] with frequent charcoal and burnt clay (Plates 3 and 4). No pottery or datable evidence was recovered from this feature but it was sealed by a layer of dark brown sand silt [703] containing frequent charcoal, Roman pottery and animal bone.

This was in turn sealed by a mid grey silt [702] 0.40m in depth. This was overlain by the subsoil [701] and topsoil [700].

### Trench 8

Dimensions: 5m x 2m x 1.40m

Trench 8 was excavated through similar flood plain deposits as trench 5. A sondage was excavated by machine at the south end of the trench to a depth of 1.40m (Plate 5). A grey blue inorganic silt clay [802] 0.42m in depth was overlain by an oxidised orange brown alluvium [801] which was 0.70m in depth. This was then sealed by the topsoil [800].

### Trench 9

Dimensions: 5m x 2m 1.10m

Trench 9 was similar to trench 8 with a sondage dug at the south end to determine the depth of the alluvial deposits of the flood plain. An inorganic blue silt clay [902] was overlain by the oxidised alluvium [901] which was 0.70m thick. This was then sealed by the topsoil [900].



**Plate 9: Trench 15 looking north**



**Plate 10: Trench 19 east facing section**

### **Trench 10**

Dimensions: 5m x 2m x 0.55m

The natural in trench 10 (Fig. 5) was not reached but instead the archaeology seemed to overlie an orange brown mottled silt clay layer [1002] which may represent a redeposited natural context. This layer contained fragments of animal bone and samian (Plate 6).

A rough gravel surface [1001] which was fairly well compacted and contained Roman pottery and animal bone overlay [1002]. This surface was then sealed by a Roman occupation layer [1003] which was 0.20m thick and contained Roman pottery and animal bone. This was then sealed by the topsoil [1000].

### **Trench 11**

Dimensions: 5m x 2m x 0.70m

The Roman deposits in trench 11 were characterised by a series of layers containing pottery and animal bone. The natural of trench 11 was a light yellow sandy clay [1107] this was overlain by a layer of light brown silt sand [1105] which contained very degraded fragments of animal bone and single fragment of pottery (Fig.5, Plates 7&8). This was sealed by a dark brown black silt sand clay [1101], possibly the Romano-British occupation layer, which contained large quantities of pottery and bone as well as fragments of bone hair pins.

This layer also contained deposits of burnt daub [1102,03,06]. A coin and several copper alloy objects were retrieved from the spoil and almost certainly originate from [1101]. Environmental samples were taken from [1101,03,05] due to the high content of burnt material and finds.

### **Trench 12**

It was not possible to excavate trench 12 due to its proximity to the flood defences.

### **Trench 13**

Dimensions: 5m x 2m x 1.00m

Trench 13 (Fig. 6) was excavated through the same flood plain deposits identified in trenches 8 and 9. An inorganic silt clay [1302] was overlain by an alluvial clay [1301] which was 0.65m in depth. This was sealed by the topsoil [1300].

### **Trench 14**

Dimensions: 5m x 2m x 0.50m

The natural in trench 14 was a mixed red orange clay silt with clasts of gravel [1403] which was overlain by a hard layer of mixed mid brown orange sandy clay [1402] which was 0.10m thick. This in turn was overlain by the subsoil [1401] and topsoil [1400]. No features were recorded in this trench.

### **Trench 15**

Dimensions: 5m x 2m x 0.75m

The natural in trench 15 was not reached, as with trench 10, the earliest investigated layer was an orange brown mottled silt clay [1506] (Plate 9, Fig. 6). A linear feature [1505] cut layer [1506] but was not excavated. Layer [1506] was also overlain by a layer of light grey brown sandy silt [1504]. This layer was cut by a small pit [1503] which was filled by black



**Plate 11: Trench 20 east facing section**



**Plate 12: Trench 21 looking north east, [2103]**

brown sandy silt [1502] which contained animal bone and pottery. These features and layers were sealed by a subsoil [1501] and topsoil [1500].

#### **Trench 16**

Dimensions: 5m x 2m x 1.10m

Trench 16 was excavated through the floodplain and contained a 0.90m thick deposit of alluvium [1601]. This was sealed by the topsoil [1600].

#### **Trench 17**

Dimensions: 5m x 2m x 0.40m

The natural in trench 17 was a mottled orange brown silt rich gravel [1702] which was overlain by the subsoil [1701] and topsoil [1700]. There were no features recorded in this trench.

#### **Trench 18**

Dimensions: 5m x 2m x 0.55m

The natural in trench 18 was a mid brown orange sandy silt [1803] which was overlain by a possible occupation layer [1802]. This contained finds of Romano-British pottery and animal bone, however one sherd of Saxon pottery was also recovered. This was overlain by the subsoil [1801] and topsoil [1800]. No cut features were recorded in this trench.

#### **Trench 19**

Dimensions: 5m x 2m x 0.90m

A hand excavated sondage along the western side of trench 19 showed that the archaeological deposits were characterised by thin layers of redeposited natural that contained fragmented and poorly preserved animal bone and pottery (Plate 10, Fig. 6). The yellow sandy clay [1908] natural was overlain by a layer of redeposited natural [1907] containing animal bone. This layer was sealed by a sterile mid grey silt [1906] which in turn was overlain by redeposited natural [1905]. Layer [1905] was sealed by a dark brown sandy silt [1904] which contained pottery and animal bone. A thin layer of gravel [1903] overlying this deposit may represent a rough surface, as recorded in trench 10. This was cut by a shallow feature [1909] with vertical sides which was filled with brown silt [1902] containing pottery and animal bone. This was then overlain by a subsoil [1901] and topsoil [1900]. A fragment of copper alloy was retrieved from the spoil heap.

#### **Trench 20**

Dimensions: 5m x 2m x 0.65m

The natural in trench 20 comprised a mixed silt gravel [2005], which was overlain by a layer of orange brown silt sand [2002]. This layer was cut by a shallow sub-circular pit measuring 2m in diameter, [2006] which was filled by a dark brown sandy silt deposit [2003] 0.22m in depth, with charcoal flecks (Plate 11, Fig. 7). Roman pottery and tile were retrieved from this feature. This was then overlain by subsoil [2001] and topsoil [2000].

#### **Trench 21**

Dimensions: 5m x 2m x 0.50m

The natural in trench 21 comprised a mixed brown yellow silt clay [2105], was overlain by a secondary natural deposit which contained more sand [2104]. This was cut by a small east west orientated gully [2103] filled by black grey sandy silt [2102], which had high



**Plate 13: Trench 23 looking north**



**Plate 14: [2306] south facing section**

concentrations of charcoal throughout and a small amount of pottery and tile (Plate 12, Fig. 7). This feature was sealed by a subsoil [2101] and topsoil [2100].

#### Trench 22

Dimensions: 5m x 2m x 0.80m

Trench 22 was characterised by a series of very thin silt-rich gravel layers that produced no finds. No archaeological features were recorded in trench 22.

#### Trench 23

Dimensions: 5m x 2m x 0.70m

The natural in trench 23 was a yellow sandy clay [2312], which was cut by a small circular pit [2306], which appeared to be burnt around the edges [2305], indicative of in-situ burning (Plates 13 & 14, Fig. 7). The pit [2306] was filled by a dark grey sand silt deposit [2304] which contained frequent charcoal.

The trench also contained several other unexcavated features including a north south orientated gully [2308], and four possible pits or postholes [2307,09,10,11]. These features were sealed below an occupation layer [2303] containing Roman pottery and bone. This was overlain by a layer of orange sandy clay [2302] which contained burnt clay and charcoal, which was in turn sealed by subsoil [2301] and topsoil [2300].

#### Trench 24

Dimensions: 5m x 2m x 0.62m

Trench 24 contained the remains of three graves and redeposited natural similar to that observed in other trenches. The graves were exposed and recorded and field analysis was carried out on the human bones *insitu*, but none were removed (Fig. 7, Plate 15).

A redeposited mottled brown orange silt clay [2408] was overlain by a mid brown orange sandy clay [2402]. This layer was cut by a grave [2406] orientated east-west which contained an almost complete female skeleton (HB1). The fill of the grave [2409] included a near complete pot and a shard of glass (Plates 16 & 17).

This grave was truncated by a second burial (HB2) within a north-south aligned cut [2405]. This appears to have removed the left side of HB1 including the skull, left arm and ribs (Plate 18). The section revealed the damaged skull HB2 and possibly the tops of the arm bones, this was not fully uncovered. This grave was infilled with a mid grey black silt clay deposit [2407], which produced Roman pottery.

A third, possibly disarticulated burial (HB3) overlay HB1 (Plate 19) but no clear grave cut could be determined. These remains comprised several long bones, and several large sherds of Roman pottery were recovered from the fill [2401]. Clearly most of this grave (HB3) lay beyond the eastern extent of the trench and consequently it was not possible to determine the extent of these remains. One further possible east-west aligned burial lay at the northern extent of the trench, this was not excavated [2410].

This burials were overlain by a Roman occupation layer [2401] which contained pottery and animal bone. The spoil heap was searched using a metal detector, which produced a piece of rolled lead, two copper alloy coins and a copper alloy hairpin, and it is likely these may be associated with this layer.



**Plate 15: Trench 24 looking north**

### **Trench 25**

Dimensions: 25m x 2m x 0.80m

Trench 25 was orientated east west and contained similar floodplain material as other trenches within the western half of the site. The earliest deposit was an inorganic blue grey silt clay [2502] which was overlain by oxidised alluvial clay [2501], 1.00m in depth. A large field drain or possible service truncated the alluvial flood plain deposits at the western end of the trench (Plate 20), however, no archaeological features were recorded in Trench 25.

### **Trench 26**

Dimensions: 25m x 2m x 0.60m

Trench 26 was orientated north south and revealed a series of east west orientated furrows (Plate 21). The ridge and furrow could be clearly distinguished prior to the trench being excavated so none were hand dug. The natural in Trench 26 was a mixed silt gravel [2602] which was truncated by the furrows. These were sealed by subsoil [2601] and topsoil [2600].

### **Trench 27**

Dimensions: 25m x 2m x 0.55m

Trench 27 was orientated north south and the oxidised alluvial clay of the floodplain [2701] was cut by a large east west orientated modern ditch [2702] which was infilled with a mixed deposit of topsoil and gravel [2703] (Plate 22). The southern edge of a possible palaeochannel [2704] was observed at the northern extent of the trench which was not excavated beyond the oxidised alluvial layer [2701]. This was then sealed by the topsoil [2700].

### **Trench 28**

Dimensions: 25m x 2m x 0.40m

The natural in Trench 28 was a mixed silt rich gravel [2802] which was overlain by a mid brown silt clay subsoil [2801]. The subsoil was cut by a northeast-southwest orientated field drain which was not excavated. This was then sealed by the topsoil [2800]. No archaeological features were observed in Trench 28.

### **Trench 29**

Dimensions: 25m x 2m x 0.40m

In Trench 29 (Plate 23, Fig. 4) the silt-rich natural gravel [2901] was cut by a shallow northwest-southeast orientated gully [2902], which was infilled with a mottled orange brown silt clay [2903]. No finds were recorded from this feature. The gully was cut by a large east west orientated furrow [2904] which was infilled with a sterile silt clay [2905]. Another large furrow [2906] was also excavated and yielded one piece of medieval pottery from the fill [2907]. These features were sealed by topsoil [2900].

### **Trench 30**

Dimensions: 25m x 2m x 0.57m

Trench 30 also contained the remains of furrows which yielded no finds. The natural was red-brown silt-rich gravel [3002] which was cut by a small sterile pit [3003] which was infilled by a mid brown grey silt [3004] (Plate 24). This was truncated by an east west orientated furrow [3005] which was infilled by a sterile mid brown grey silt clay [3006].

The natural was also cut by another furrow [3007] also infilled by a sterile silt clay [3008]. These features were sealed by the subsoil [3001] and topsoil [3000].



**Plate 16: HB1 looking east**



**Plate 17: HB1 whole pot**

### Trench 31

Dimensions: 25m x 2m x 0.67m

Trench 31 dipped sharply to the north, a change in topography that is visible on the surface of the field. The natural comprised a mottled orange brown silt clay [3101] which was cut by a shallow pit [3102], infilled with orange brown silt clay [3103] (Fig.6, Plate 25). Small fragments of Roman pottery were recovered from this feature and which was sealed by the topsoil [3100].

### Trench 32

Dimensions: 5m x 2m x 0.70m

Trench 32 contained no features but the natural was slightly different in character to the rest of the trenches being a yellow-grey clay [3203]. This was sealed by the subsoil [3201] and topsoil [3200].

### Trench 33

Dimensions: 5m x 2m x 0.40m

The earliest recorded layer in Trench 33 was a black brown silt sand clay [3301] Romano-British occupation layer (Plate 26). This contained frequent charcoal, animal bone and Roman pottery and a 20L sample was taken for environmental processing. This layer was overlain by the topsoil [3300].

### Trench 34

Dimensions: 5m x 2m x 0.66m

The natural in Trench 34 was overlain by a yellow silt clay [3404] which may represent disturbance of the upper surface of the natural by root action. This layer was cut by a small east-west orientated gully [3403] which was infilled by a mid brown silt clay [3402] (Plates 27 & 28). This contained Roman pot and animal bone and a fragment of glass. This feature was overlain by subsoil [3401] which in turn was overlain by the topsoil [3400].

### Trench 35

Dimensions: 5m x 2m x 0.40m

The natural in Trench 35 was a mottled orange brown silt clay [3502] which was overlain by a layer of grey brown silt clay [3505]. This may be the upper fill of a ditch which was cut by a north-south orientated grave [3504] (Fig.8, Plate 29). This grave contained the extended inhumation of an adult male, HB4, which was seen in section and not fully excavated. Specialist *insitu* analysis was undertaken on the visible portion of the skeleton. The grave was infilled with a mixed light brown sand silt [3503] from which produced iron nails were recovered and fragments of Roman pottery. This was overlain by the subsoil [3501] and topsoil [3500].

### Trench 36

Dimensions: 5m x 2m x 0.40m

The natural in Trench 26 was a yellow brown silt rich gravel [3601] which was overlain by a possible Roman occupation layer [3602] which contained Roman pottery (Fig.8, Plate 30). This layer was cut by a vertically sided, northwest-southeast orientated ditch [3604] which was infilled with an orange gravel [3603]. This differed greatly from the fills of other Romano-British features, and while the fill [3603] produced Roman pottery and animal bone, the vertical nature of the cut is more indicative of a modern machine-cut feature. The fact that this feature also cut [3602] may suggest a recent origin.



**Plate 18: HB2 skull**



**Plate 19: HB3 with pottery**

### **Trench 37**

Dimensions: 25m x 2m x 0.60m

Trench 37 was orientated east west and the natural was an orange red silt clay [3702] which became more gravelly to the east. This was cut by a small irregular pit [3703] which was infilled by a mid brown silt clay [3704] containing medieval pottery and animal bone (Fig.9, Plate 31). This was cut by a northeast-southwest orientated gully [3705], possibly a plough furrow, which was filled with mid brown silt clay [3706]. This was overlain by the subsoil [3701] and topsoil [3700].

### **Trench 38**

Dimensions: 5m x 2m x 0.35m

The earliest recorded layer in Trench 38 was a mottled orange brown silt [3804] which may be a disturbed natural. This was cut by a large pit [3803], which was filled by a dark brown sand silt [3802] which contained slag, pottery and animal bone (Fig. 9, Plate 32). This feature was sealed by a Roman occupation layer [3801] which in turn was overlain by the topsoil [3800].

### **Trench 39**

Dimensions: 5m x 2m x 0.43m

The natural in Trench 39 comprised gravel with patches of mottled silt [3904]. This was cut by a small east west orientated ditch [3902] which was filled by dark brown silt sand clay [3903] (Fig.9, Plate 33). This deposit contained fragments of slag, animal bone and pottery and was sealed by a layer containing Roman finds [3901], which in turn was sealed by the topsoil [3900].

### **Trench 40**

Dimensions: 5m x 2m x 0.40m

The natural in trench 40 was a yellow brown silt clay [4001] which was overlain by a mixed redeposited natural [4004]. This was cut by a possible pit [4012] which was filled by light brown silt sand [4011]. This was cut by a large circular pit [4002] which was infilled by 7 episodes of tipping (Fig.9, Plate 34). The water table prevented full excavation but the majority of the feature was defined. Several sherds of samian were recovered from the basal fill [4010] along with animal bone. Full details of these deposits is available in the database Appendix i. This feature was overlain by the topsoil [4000].

### **Trench 41**

Dimensions: 25m x 2m x 1.00m

Trench 41 was orientated approximately north south. The natural gravel [4102] was sealed by a thick deposit of alluvial clay [4101]. The gravel at the southern extent of the trench was 1.40m in depth, rising to 1.00m at the northern extent. This trench is characteristic of this field which contained many natural undulations as well as the remains of ridge and furrow cultivation. Many of the visible undulations can be attributed to natural processes possibly from palaeochannel action as well as flooding and flood alleviation.

### **Trench 42**

Dimensions: 25m x 2m x 1.00m

Trench 42 was orientated east west. The natural gravel [4202] was sealed by 0.76m of alluvial clay [4201]. No archaeological features were observed within Trench 42.



**Plate 20: Trench 25 looking east**



**Plate 21: Trench 26 looking north**

#### **Trench 43**

Dimensions: 25m x 2m x 0.90m

Trench 43 was orientated north south and no archaeological features were present. The alluvial clay [4301] was not as deep in this trench being 0.63m in depth.

#### **Trench 44**

Dimensions: 25m x 2m x 0.50m

Trench 44 was orientated north south, and the natural gravel [4402] was overlain by a layer of alluvium [4401] 0.30m in depth. and no archaeological features were present.

#### **Trench 45**

Dimensions: 25m x 2m x 1.00m

Trench 45 was orientated east west with a sondage was dug at the western end to establish the depth of the natural gravel [4502]. This was overlain by approximately 0.83m of alluvium [4501] and topsoil [4500].

#### **Trench 46**

Dimensions: 25m x 2m x 1.00m

The natural in Trench 46 was a grey brown silt rich gravel [4602], which had been cut by the remains of east-west orientated furrows [4603]. These were sterile and producing no finds, were sealed by a subsoil [4601] and topsoil [4600].

#### **Trench 47**

Dimensions: 25m x 2m x 0.46m

Trench 47 was orientated east west and the natural was a very silt-rich clay [4702]. This was truncated by several furrows which were not excavated. These were overlain by a subsoil [4701] and topsoil [4700].

#### **Trench 48**

Dimensions: 25m x 2m x 0.65m

Trench 48 was orientated east west and the natural was a silt rich gravel [4802] which was overlain by a subsoil [4801] and the topsoil [4800]. No features were present in this trench.

#### **Trench 49**

Dimensions: 25m x 2m x 0.64m

Trench 49 was orientated east west and the natural was a mottled silt [4902] that gradually turned to gravel to the east. This was cut by a southeast-northwest orientated furrow [4903] which was infilled with a sterile silt [4904]. This was overlain by a subsoil [4901] and topsoil [4900].

#### **Trench 50**

Dimensions: 25m x 2m x 0.60m

Trench 50 was orientated north south and the natural was yellow brown mottled silt [5002]. The features [5003/05] excavated in this trench are most likely geological, possibly clay clasts. No finds were recovered. These were overlain by a subsoil [5001] and topsoil [5000].



**Plate 22: Trench 27 looking north**



**Plate 23: Trench 29 looking east**

### **Trench 51**

Trench 51 was unable to be excavated as access was restricted due to the canal.

### **Trench 52**

Dimensions: 25m x 2m x 0.74m

Trench 52 was orientated east-west and the natural was mottled orange brown silt sand clay [5202]. This was overlain by a subsoil [5201] and topsoil [5200]. No features were present in this trench.

### **Trench 53**

Dimensions: 25m x 2m x 1.00m

Trench 53 was orientated north south and the natural was not reached as the alluvial clay [5301] was so deep. This was overlain by topsoil [5300].

### **Trench 54**

Dimensions: 25m x 2m x 0.46m

Trench 54 was orientated east west and the natural was a silt rich gravel [5402] which was cut by several furrows, the ridges of which were just visible above ground, although these were not excavated. These were overlain by a subsoil [5401] and topsoil [5400].

### **Trench 55**

Dimensions: 25m x 2m x 0.50m

Trench 55 was orientated north south and the natural was a mottled orange brown silt clay [5502]. This was cut by an ovoid pit [5503] which was infilled by a black brown silt clay which contained numerous heat-shattered stones and large pieces of charcoal (Fig.10, Plate 35). A 20L sample was retained despite no datable pottery being recovered. There was no evidence to suggest any burning occurred in-situ. This feature was clipped by an east-west orientated furrow [5507] which was infilled by a sterile silt deposit [5508].

### **Trench 56**

Dimensions: 25m x 2m x 0.34m

Trench 56 was orientated east west and the natural was a mottled orange brown silt clay [5602]. The natural was cut by a small sub-circular pit [5603] which was filled with mid brown silt clay containing frequent charcoal and burnt clay [5604] (Fig. 10). Several small sherds of possible prehistoric or Anglo-Saxon pottery and animal bone were recovered. This pit was cut by a shallow east-west gully [5605] which was filled with silt clay [5606].

To the west of the pit were two more east-west gullies [5611 and 5613] which were filled with sterile brown grey silt clay [5612 and 5614] and contained no finds (Fig.10). Shallow features towards the western extent of the trench and feature [5615] are likely to be the remains of plough-scars as they are very closely spaced and regular.

The natural was also cut at the eastern end of the trench by two small pits. The larger of the two [5607] was filled with silt-clay [5608] from which Roman pottery was recovered. The smaller pit [5609] had a similar fill [5610] but produced no finds. The two pits were not inter-cutting and cannot be assumed to be contemporary. All features were sealed by a subsoil [5601] from which sherds of medieval pottery were recovered, and the topsoil [5600].



**Plate 24: [3003/05] south west facing section**



**Plate 25: [3102] west facing section**

#### **Trench 57**

Dimensions: 5m x 2m x 0.66m

The orange brown gravel natural [5702] in Trench 57 was overlain by a subsoil [5701] which produced Roman pottery.

#### **Trench 58**

Dimensions: 5m x 2m x 0.56m

The natural in Trench 58 (Fig. 10) was a yellow brown mottled silt clay [5802]. This was cut by a large flat bottomed pit [5804] which was filled by orange grey silt [5803] from which a small amount of Roman pottery was recovered. A similar shaped feature [5805] was also visible to the north west of the pit but was not excavated. These features were sealed by a subsoil [5801] from which Roman pottery was recovered, and topsoil [5800].

#### **Trench 59**

Dimensions: 5m x 2m x 0.55m

The natural in Trench 59 was an orange brown silt rich gravel [5902] which was overlain by the subsoil [5901] and topsoil [5900]. No features were present in this trench.

#### **Trench 60**

Dimensions: 5m x 2m x 0.60m

The natural in Trench 60 (Fig. 10) was a mottled orange brown silt clay [6001]. This was cut by a north-south orientated gully [6003] which was filled with brown grey silt clay [6002]. This feature produced Roman pottery and animal bone, which was sealed by topsoil [6000].

#### **Trench 61**

This trench was unable to be excavated due to restricted access caused by the canal.

#### **Trench 62**

Dimensions: 25m x 2m x 0.50m

Trench 62 was orientated north-south. The natural silt-rich gravel [6202] was overlain by a subsoil [6201] and topsoil [6200]. No archaeological features were recorded in this trench.

#### **Trench 63**

Dimensions: 25m x 2m x 0.70m

Trench 64 was orientated north-south and the natural silt-rich gravel [6302] dipped in the center of the trench to a depth of 1.00m. The natural was overlain by alluvium [6301] and topsoil [6300].

#### **Trench 64**

Dimensions: 25m x 2m x 0.45m

Trench 64 was orientated east-west with clean river terrace gravel [6401] at the base of the trench, which was directly overlain by the topsoil [6400]. No features were recorded.

#### **Trench 65**

Dimensions: 25m x 2m x 0.80m

Trench 65 (Plate 36, Fig. 11) was orientated east-west. The natural mottled orange brown silt clay [6502] was cut by an east-west orientated gully [6504] which terminated and was filled



**Plate 26: [3301] east facing section**



**Plate 27: Trench 34 looking north**

by a brown silt clay [6505] (Plate 37). This contained fragments of medieval pottery and animal bone. To the east of this the natural was cut by a pit [6506] which was filled with a brown silt clay [5607] which contained frequent charcoal and Roman pottery. This pit was cut by a shallow east west orientated linear feature [6508] which was filled with brown silt clay [6509]. This contained no finds and was possibly the remains of a furrow.

To the eastern end of the trench a small pit [6510] (Plate 38) filled with a dark brown silt clay [6511] which contained a small amount of animal bone, Roman pottery and a large stone. These features were overlain by subsoil [6501] and topsoil [6500].

#### **Trench 66**

Dimensions: 25m x 2m x 1.20m

Trench 66 was orientated north south and the mottled orange brown silt clay [6606] natural was cut by two parallel ditches [6603/04] filled during a single episode with a dark brown silt sand [6605]. A small amount of medieval pottery and a lead musket ball were recovered. These features were overlain by a subsoil [6602] which in turn was overlain by a thick deposit of made ground [6601]. This made ground was derived from the material used in the flood defences. This was sealed by topsoil [6600].

#### **Trench 67**

Dimensions: 5m x 2m x 0.44m

The natural in Trench 67 was an orange brown gravel [6702] which was cut by a shallow northwest-southeast orientated gully [6704]. This was filled by grey brown silt [6703] which contained a complete dog skeleton (Plate 39) and a small sherd of Roman pottery. This was overlain by a subsoil [6701] and topsoil [6700].

#### **Trench 68**

Dimensions: 5m x 2m x 0.30m

The natural in Trench 68 (Fig. 11) was a pale orange sandy gravel [6809]. This was cut by a shallow posthole [6808] which was filled with dark brown silt sand [6807] containing charcoal and burnt clay but no finds. The natural was also cut by a pit [6806] which was infilled by a brown grey sandy silt [6805] which contained animal bone and Roman pottery (Plate 40). This was cut by a north south orientated gully [6804] which was infilled by dark brown grey sandy silt primary fill [6803] which yielded animal bone. This was sealed by a dark grey black sandy silt [6802] from which no finds were retrieved.

These features were overlain by a possible occupation layer [6801] from which a rotary quern, samian, shards of glass and possible prehistoric pottery were recovered. This was sealed by topsoil [6800].

#### **Trench 69**

Dimensions: 5m x 2m x 1.02m

The natural in Trench 69 was a mottled orange brown silt sand gravel [6902] which was overlain by a deep layer of made ground [6901] which was derived from the flood alleviation scheme. No archaeology was observed, and given the depth of the flood alleviation works it seems unlikely that archaeological deposits would survive in this area.

#### **Trench 70**

Dimensions: 5m x 2m x 1.00m



**Plate 28: [3403] east facing section**



**Plate 29: Trench 35 looking north**

The natural in trench 70 was not reached as the flood alleviation scheme had not only scoured any archaeological horizon but also redeposited dredged river deposits [7001/02/00] which yielded pottery of various dates (Plate 41).

## 6 THE FINDS

### The pottery by Jane Timby

The evaluation resulted in the recovery of a modest assemblage of 762 sherds weighing 19.3 kg. In addition five small fragments of fired clay and 12 fragments of ceramic building material were present with the pottery.

The assemblage largely dates to the Roman period but also includes sherds of Saxon, medieval and post-medieval date. Pottery was recovered from 37 of the 70 trenches investigated, a total 82 individual contexts. The condition of the sherds is quite mixed with some very well preserved sherds, in three cases several sherds from single vessels (Trench 11, 24 and 68) but also some quite well fragmented pieces. The medieval sherds in particular comprise quite worn abraded sherds making identification difficult. The overall average sherd size is 25g, which suggests a good level of preservation.

Of the 83 contexts four contexts produced in excess of 30 sherds with a further 18 contexts with between 10-30 sherds. Over half the contexts, 58%, produced five sherds or less and this together with a relatively low incidence of diagnostic featured sherds makes precise dating difficult.

For the purposes of the assessment the assemblage was scanned to assess its likely chronology and quantified by sherd count and weight for each recorded context. The resulting data is summarised in Table 1 (Appendix ii). Most of the assemblage, in effect 93.6%, dates to the Romano-British period. This comprises a mixture of continental imports, regional imports and local wares.

### Roman

The continental imports include 58 sherds of samian (South, Central and East Gaulish) and 14 sherds of amphorae. The samian includes cups (Dr 27, 33, 38), dishes (Dr 31, Curle 11) and bowls (Dr 37). At least two vessels retain *in-situ* lead repair rivets whilst two other sherds have drilled holes for repairs. One sherd from (6801) was stamped but this is too worn to read and one basesherd (2303) has been trimmed down and reused which has involved burning around the edges. Of the 58 sherds at least 8 (14%) are decorated.

The amphorae are all Baetican (Southern Spain) in origin, most coming from the Dressel 20 olive oil type with one possible example of a Haltern 70 used for transporting *de frutum* (a sweet syrup).

Regional imports include 26 sherds of black burnished ware, 31 sherds from the Lower Nene Valley (colour-coats and mortaria), two sherds of Mancetter-Hartshill mortaria, one possible sherd of Verulamium whiteware and of Midlands pink grog-tempered ware and two sherds of Oxfordshire colour-coated ware.

The black burnished wares (BB1) includes products typical of the 2<sup>nd</sup>, 3<sup>rd</sup> and later 3<sup>rd</sup>-4<sup>th</sup> century with examples of flat rim dishes, grooved rim dishes, flanged bowls, plain-rimmed dishes and jars. A number of grey ware copies are also present. Although some of these



**Plate 30: Trench 36 looking south**



**Plate 31: Trench 37 looking east**



**Plate 32: [3803] looking north**



**Plate 33: [3902] west facing section**



**Plate 34: [4002/12] south facing section**



**Plate 35: [5503] south facing section**



**Plate 36: Trench 65 looking east**



**Plate 37: [6504] east facing section**



Plate 38: [6510] east facing section



Plate 39: Dog skeleton



**Plate 40: 6804/06] west facing section**



**Plate 41: Trench 70 looking north**

appear to be Dorset products, some may well be from Rossington Bridge, which produced BB1 vessels often macroscopically indistinguishable from the Dorset vessels.

The Lower Nene Valley wares include eight sherds of mortaria and twenty-three sherds of colour-coated ware (beakers and dishes). The Oxfordshire ware includes one mortaria (Young 1977, type C97) and one colour-coated ware. Some of the oxidised wares may also be products of this industry where the colour-coated surface has been lost.

Coarsewares dominate the assemblage most of which are likely to be locally sourced. These comprise a mixture of grey sandy wares, shelly wares (Dale ware or Dales-type ware and later Roman shelly ware), hard granular Derbyshire ware and some finer oxidised and reduced wares, probably from the Little Chester kilns including some rusticated jar (Tr 40 (Spoil)). Of particular note is an unsourced greyware sherd decorated with roller stamping (Tr 7 (Spoil)) and an oxidised sherd decorated with barbotine leaves and branches (4003).

The forms are dominated by jars followed by bowls/ dishes. A number of beakers are present including a 'local' bag-shaped one with a roughcast finish, folded beakers and part of a 'hunt-cup'. Two sherds from a colander came from (7002). The other main forms present are mortaria used for grinding foodstuff (herbs/spices) or medicines. These mainly come from the Nene Valley and Mancetter-Hartshill industries.

Most of the pottery appears to date to the 2<sup>nd</sup> and 3<sup>rd</sup> centuries with a small amount of material, which could potentially extend into the 4<sup>th</sup> century. There is no evidence of any pre-Roman material (but see 5.1 below) and only a sparse scatter of material potentially of later 1<sup>st</sup> century date and this is generally redeposited with later material, for example, the south Gaulish samian.

The finer wares potentially belonging to the Little Chester kilns are likely to date to the Trajanic-Hadrianic period and the early BB1 forms are unlikely to date before the mid 2<sup>nd</sup> century onwards. These include jars decorated with acute lattice and flat rim bowls.

Many of the local coarsewares, along with some of the Nene Valley wares and the Midlands pink grogged ware are probably 3<sup>rd</sup> century in date. The Oxfordshire ware and the Midlands shelly ware are more likely 4<sup>th</sup>-century imports.

The assemblage recovered from Ratcliffe-on-Soar bears close comparison with other material recorded from the locality (Anon 2004; Slowikowski 2001; 2003). The assemblage from the BUFAU 2001 investigations appears chronologically quite similar for the Roman material here but with a slightly more diverse range of material, particular imports. In all cases where material has been reported on the emphasis appears to be on material dating to the 2<sup>nd</sup> and 3<sup>rd</sup> centuries extending into the 4<sup>th</sup> century.

The quite diverse range of material and a moderately high level of samian, 8% by sherd count for this assemblage and 6.7% for the 2001 assemblage would indicate a fairly thriving roadside settlement. Most rural settlements by comparison tend to have 2% or less samian ware present unless linked with a temple or other specialist function.

### **Saxon**

Some nine sherds are present which are tentatively ascribed a Saxon date. One came from Trench 18 and eight from Trench 56. In two cases the sherds are associated with Roman sherds (1802) and (5604). The sherd from (1802) is handmade in a reduced sandy ware with additional organic tempering. One of the sherds from (5604) is broadly similar. The other six

sherds from (5604) are thick-walled and handmade with faceted polycrystalline quartz grains in the fabric and could without other association be considered potentially as prehistoric in date. A similar sherd came from (5608).

### **Medieval and post-medieval by Stephanie Ratkai**

Some 40 sherds have been identified as medieval or later. In most cases the sherds are quite small and difficult to identify, commensurate with material from a ploughsoil environment. It is possible that other small plain sherds are present in the more fragmentary pieces ascribed a Roman date. The fabrics are not dissimilar. The sherds probably derive from manuring scatters.

Tr 19 ((Spoil))

Nottingham ware slashed rod handle, 13<sup>th</sup>-14<sup>th</sup> century.

Tr 29 [2906]

Nottingham whiteware sherd. 13<sup>th</sup>-14<sup>th</sup> century.

Tr 47 [4702] (subsoil)

Nottingham-type fabric, probably small glazed roof tile fragment, medieval.

Tr 58 [5803]

Blue transfer printed sherd, possibly 'flow blue', 19<sup>th</sup> century.

Tr 65 [6506]

Nottingham splash-glazed ware, pre-Conquest-13<sup>th</sup> century.

Tr 68 ((Spoil))

Nottingham whiteware jug, 13<sup>th</sup>-14<sup>th</sup> century.

### **Small finds by Sue Ebbins and Alan Palfreyman**

#### **Coins**

The dates given are the tightest possible issue dates for the coins. If this cannot be narrowed down, then the wider dates for the reign of the emperor are quoted. Squared brackets are used around letters in the legends which are illegible but accepted.

SF No.	Description	Context	TR No.
33	NERO AE As OBV: --Caesar Aug G-- legible, Nero head facing left REV: Almost completely obliterated. Reign 54-68AD	3301	33

19	HADRIAN Copy of AR Denarius, made of lead alloy. OBV: Imp Caesar Traian Hadrianus Aug, legible except for last 6 letters REV: PM TRP COS III, Roma seated looking left, holding Victory and spear, shield behind. The regular coin was Rome, 122AD Illustrated in Sear (2002, 149 No. 3519)	3301	33
SF No.	Description	Context	TR No.
15	HADRIAN? AE Sestertius OBV: Only 'Aug Cos' legible, but almost certainly the later head of Hadrian, facing right REV: Illegible, seated female figure looking left, letters in exergue. This head 130sAD	3905 (Spoil)	39
38	HADRIANIC-ANTONINE Extremely corroded, no information can be obtained except that by the size and weight it is probably an As of this period	305 (Spoil)	3
27	1 <sup>st</sup> to EARLY 2 <sup>nd</sup> CENTURY AE. The coin is extremely worn and corroded, damaged edges obliterating legends on obverse and reverse. After scrutiny of the design on reverse, it is very similar to those in the reign of Augustus, with 2 elephants walking to left, pulling a biga/quadrige. Some early reverses were repeated later. However, with no parallel traced, a tighter date remains uncertain.	Field topsoil	3
40	1 <sup>st</sup> to 2 <sup>nd</sup> CENTURY AE coin. Very corroded, only a right-facing head can be discerned.	1108 (Spoil)	11
39	ANTONINUS PIUS AE Sestertius Reign 138-161AD OBV: Antoninus Aug Pius, the rest of title and consulship illegible REV: Annona Aug, lettering visible to the O left of head. She stands holding corn ears in right hand. Prow of ship just visible at feet. A similar coin of Rome, 142AD is illustrated in Sear ( 2002, 218, No.4147)	1108 (Spoil)	11
22	VICTORINUS/TETRICUS I. AE Radiate, part broken off OBV: Illegible but thick hair and beard as the above emperors REV: The 'AX' of Pax Aug can be seen and part of the figure standing with branch and sceptre. Reigns 268-273AD	6000 (Spoil)	60
32	VICTORINUS/TETRICUS I. AE Radiate, very corroded OBV: Head fairly clear but legend illegible REV: The walking figure is probably Spes or Victoria. Date as above	3605 (Spoil)	36

6	TETRICUS I. AE Radiate, only two thirds of coin, edge broken OBV: Imp Tetri[cus] Aug, adult with beard depicting the elder. REV: Standing figure cannot be identified, several possibilities.	2410 (Spoil)	24
37	TETRICUS II. AE Barbarous radiate, broken around the edge. OBV: Poor lettering, a couple of letters legible, but the young head with no beard is identifiable. REV: Princ[eps] Iuvent[utis], depicting the prince as leader of Youth. The regular coin date would be 270-273AD	203 (Spoil)	2
<b>SF No.</b>	<b>Description</b>	<b>Context</b>	<b>TR No.</b>
25	Barbarous radiate. Only half the coin remains, corroded and no legible detail. The outline of a radiate head and a poor attempt at a standing figure on the reverse put it in the 260-296AD period.	3301	33
38	Barbarous Radiate. Only the shape of a radiate head can be seen. It appears to have been cut down and much of the detail is missing. 260-296AD	305 (Spoil)	3
22	CARAUSIUS. AE Barbarous radiate, edge chipped OBV: [Imp Car]ausius PF Aug, a recognisable head. REV: poor standing figure, only 'A' in legend, probably Pax. An 'O' to her right is a detail of his reign. Reign 286-293	6000 (Spoil)	60
21	MAXIMINUS II. AE Follis. OBV: Imp Maximinus PF Aug REV: Genio Pop Rom, standing figure of a genius. 308-318AD	3302 Spoil)	33
21	CONSTANTINE I commemorative issue. AE 3/4 OBV: Constantinopolis, the new Rome Trier mint REV: No legend, Victory standing on prow of ship. 330-335AD	3302 (Spoil)	33
21	CONSTANTINE I commemorative issue. AE 3/4 OBV: Constantinopolis, as above REV: Victory on prow, as above, but Siscia mint. 330-335AD	3302 (Spoil)	33
19	CONSTANTINE I commemorative issue. AE 3/4 OBV: Urbs Roma, helmeted Roma REV: Wolf and twins, 2 stars above, commemorating Old Rome. Trier mint, 330-335AD	3301	33
38	THEODORA (2 <sup>nd</sup> wife of Constantius I) Copy? AE 4 OBV: The letters 'OD' are clear, but the coin is off-centre and the head is obscured by corrosion. REV: Pi[etas] Ro[mana], her figure, standing holding a baby, is just visible, except for her head. 337-341AD	305 (Spoil)	3
7	CONSTANTINE II. AE 3 OBV: Constantinus Iun NC Lyons mint REV: Beata Tranquillitas, altar inscribed VOTIS XX. 318-324AD	2410 (Spoil)	24

25	CONSTANTINE II. AE 3/4 OBV: Constantinus Iun Nob C REV: Gloria Exercitus, 2 soldiers with 2 standards. 330-335AD	3301	33
26	CONSTANTINE II. AE 3 OBV: Constantinus Iun Nob C REV: Caesarum Nostrarum, with VOT X within a wreath, commemorating 10 <sup>th</sup> Imperial anniversary. Trier mint, 318-324AD	6000 (Spoil)	60
<b>SF No.</b>	<b>Description</b>	<b>Context</b>	<b>TR No.</b>
37	CONSTANS. AE 3/4 OBV: [Constans] PF Aug 348AD REV: [Vi]ctoria Augustorum, Victoria walking to left with wreath	203 (Spoil)	2
23	CONSTANS. AE 3/4 OBV: DN Constans PF Aug, coin off-centre REV: [Victoria August]orum, the long-skirted, winged figure of Victoria visible, minus head and shoulders. 343-348AD	3302 (Spoil)	33
23	CONSTANTIUS II. AE 3/4 OBV: Constantius Nob C Trier mint REV: Gloria Exercitus, 2 soldiers with 2 standards. 330-335	3302 (Spoil)	33
38	CONSTANTIUS II. AE4 OBV: DN Constantius Nob C 337-341AD REV: Securitas Reip, Securitas standing with spear, leaning on pillar.	305 (Spoil)	3
18	CONSTANTIUS II. AR Siliqua possibly silver Arles mint OBV: Constantius PF Aug REV: VOTIS XXX MULTIS XXXX within a wreath. This is the later, reduced weight siliqua issued by Constantius. 357-361AD	4013 (Spoil)	40
8	CONSTANTINIAN minim copy. The obverse is illegible. REV: Gloria Exercitus, 2 soldiers with 1 standard. The regular coin date is 335-337AD	1909 (Spoil)	19
33	CONSTANTINIAN minim copy. The obverse legend is off the edge and the emperor uncertain. REV: Gloria Exercitus, 2 soldiers with 1 standard, date as above	3301	33
12	CONSTANTINIAN minim copy. Obverse obliterated by corrosion. REV: Gloria Exercitus, 2 soldiers with 1 standard, date as above	1108 (Spoil)	11
38	CONSTANTINIAN. Obverse illegible, emperor unidentified REV: Gloria Exercitus, 2 soldiers with 1 standard. 335-337AD	305 (Spoil)	3
38	CONSTANTINIAN? Corrosive products have obliterated this coin completely	305 (Spoil)	3
38	CONSTANTINIAN? As above, no information can be obtained	305 (Spoil)	3

37	VALENS OBV: DN Valens PF Aug REV: Gloria Romanorum. Emperor with standard, dragging crouching captive. Reign 364-378	203 (Spoil)	2
----	--	----------------	---

### Copper alloy objects

The finds are Romano-British unless stated otherwise

Finds No.	Description	Context	Tr No
9	Hairpin. The head is onion-shaped with a flat 'collar' beneath it. Below this is a groove and a protruding rounded band divided by slanting incised lines. The decoration is unusual and does not fit comfortably into Crummy's type grouping. Length 61mm. 2 <sup>nd</sup> to 4 <sup>th</sup> century AD?	2410 (Spoil)	24
11	Brooch fragment. It comprises a plain catchplate and ball foot. This type occurs on many of the Polden Hill and some of the Trumpet varieties. 1 <sup>st</sup> to 2 <sup>nd</sup> century AD. Length 13mm	5903 (Spoil)	59
14	3 small irregular, flat pieces of scrap. Largest 28mm long	1507 (Spoil)	15
17	Thin flat fragment with rounded end. No diagnostic detail. Length 8mm	3802	38
29	Small chunk of copper dross, 9x12mm.	3801	38
30	2 small flat pieces of scrap. Largest 7mm long	6801	68
13	Circular eyelet-hole protector, probably from a groundsheet or tent. Modern. Diameter 22mm.	1108 (Spoil)	11
None	Very small, thin fragment. Has vestiges of a design. Probably a broken piece of a 4 <sup>th</sup> century coin.	3801	38
None	Saucer-shaped object with 2 small indentations on the edge, spaced 10mm apart. Possibly a lid, or was intended to be suspended from leather horse trappings. Possibly Roman. Diameter 24mm	305 (Spoil)	3
None	Small plain disc. Date and function uncertain. 7mm diameter and 2mm thick	305 (Spoil)	3
None	Small rounded piece scrap. Diameter 8mm	305 (Spoil)	3
None	A thimble in the German 'Nuremberg' style of the 16 <sup>th</sup> century. It tapers gently towards the top, with a slightly conical apex. There is no rim, and around the base is a border with repeated small impressed squares, each containing a star motif. These details are typical of the type. Height 18mm, diameter at base 15mm.	305 (Spoil)	3
16	A small, stirrup-shaped object, with a protruding spherical knob at the bottom. A short stem extends from the horizontal bar, by which it was probably attached to something, possibly a pendant on a	6810 (Spoil)	68

	horse harness, or a strap fastening. Incomplete. Length 28mm. 14 <sup>th</sup> to 16 <sup>th</sup> century?		
--	---	--	--

**Lead objects**

<b>Finds No.</b>	<b>Description</b>	<b>Context</b>	<b>Tr.No.</b>
10	3 pieces of sheet lead showing sharp cut edges, where they have been prepared for scrap-recycling. Total weight 35 grams	1909 (Spoil)	19
31	A rolled piece of sheet lead forming a fishing or flail weight, or a net sinker. Length 24mm. Weight 25 grams	2410 (Spoil)	24
31	Small piece scrap. Weight 6 grams	2410 (Spoil)	24
35	Partly-rolled piece of sheet lead to form a weight, as in No. 31. Length 24mm, weight 25 grams	3302 (Spoil)	33
24	Musket ball. Diameter 11mm. 17 <sup>th</sup> to 18 <sup>th</sup> century	6605	66
None	Washer for securing nail? It is made from a coil of lead, flattened on the bottom. Diameter 17mm, depth 10mm, weight 20 grams	203 (Spoil)	2
None	7 small, irregular-shaped pieces of scrap. Total weight 27 grams	305 (Spoil)	3
None	1 piece scrap sheet lead. 24x22mm. Weight 5 grams	305 (Spoil)	3
None	3 pieces scrap sheet lead. Total weight 32 grams	305 (Spoil)	3
None	Rivet or mend, probably used on a pot or other vessel. A circular flat disc with a rod extending from the back, which is bent to one side, parallel to the disc. The rod appears to be broken at the end. Diameter of disc 15mm	707 (Spoil)	7
None	A short strip of worked lead, which has been flattened at both ends, one rounded, one angled. It has a smooth, shiny surface. Its function is speculative, perhaps used to decorate pottery? Length 32mm	4013 (Spoil)	40
None	3 small pieces of sheet lead scrap. Total weight 6 grams	1101	11
None	2 pieces of sheet lead showing sharp edges where they have been cut up for recycling scrap. One has a decorative edge and may originally have been used as a pot lid. Total weight 20 grams	1904	19
None	A piece of molten lead dross. Weight 13 grams	3302 (Spoil)	33

**Worked Bone**

<b>Finds</b>	<b>Description</b>	<b>Context</b>	<b>Tr.No.</b>
--------------	--------------------	----------------	---------------

No.			
3	Hairpin. The shaft has been carved below the conical head with 3 grooves, the top and bottom ones very narrow and the middle slightly wider. The head and carving are integral with the shaft, which is broken. Remaining length 33mm. Crummy's type 2, c.50-200AD	1101	11
1	Fragment of hairpin or needle. The smooth, shiny surface denotes use. No diagnostic features. It does not seem robust enough to be a stylus. Different types of bone pins and needles were used throughout the Roman period. Remaining length 29mm	1101	11
34	Natural bird? bone fragment. No sign of having been worked or used	3301	33

**Glass**

Finds No.	Description	Context	Tr.No.
5	Piece of blue-green glass from a pillar-moulded bowl, with part of a characteristic raised rib, which tapers towards the bottom. Common on 1 <sup>st</sup> century sites and sometimes found in burials. Length 41mm. 43 to 100AD	6801	68
28	A small fragment of pale green, very thin glass with many bubbles, and tiny occasional black flecks. Possibly from a pipette-shaped or other small unguent flask. These are often found in burials. Length 16mm	6801	68

**Iron objects**

NAILS (TYPE I)			
Finds No.	Description (L= length)	Context	Tr. No.
None	Complete except for the tip. Dome-shape head, 14mm diameter. Square-section shank, slightly bent in the middle. L 65mm	305 (Spoil)	3
"	Broken square-section shank of nail. L 70mm	1507 (Spoil)	15
"	Complete nail. Square head, 18x18mm. Bent in middle to approx. 75 degrees. Tip hammered over. L 53mm	1904 (Spoil)	19
"	Dome-shape head unusually large with concave underside, slightly bowed square-section shank. L 40mm	1903	19
"	Complete, undistorted, dome-shape head type. Square-section shank. L 156mm	3302 (Spoil)	33
Finds No.	Description	Context	Tr. No.
"	Dome-shape head, square-section shank, complete except for end of tip. L 50mm	3302 (Spoil)	33

"	Fragment of square-section shank. L 30mm	2410 (Spoil)	24
"	Complete except for the tip, it is bent in the middle to c.90 degrees. Square head, 15x15mm. Square-section shank. L 58mm	3605 (Spoil)	36
"	Dome-shape head, 15mm diameter and square-section shank, which is broken. L 26	3605 (Spoil)	36
"	Complete, dome-shape head, 13mm diameter, and square-section shank bent in the middle to almost 90 degrees. L 65mm	3001	33
"	Complete, dome-shape head, 15mm diameter, and square-section, slightly bowed shank. L 65mm	3001	33
"	This appears to be a small round-headed bent nail embedded in a lump of corroded slag and metal chippings, possible from a smithing workshop floor.	2410 (Spoil)	24
"	Squarish flat object, covered in accretions of ferrous chippings, Probably the head of a nail, 18x18mm. Workshop debris?	3301	33
"	Dome-shape head with part of head and square-section shank missing. L 45mm	6801	68
"	Complete, dome-shape head, c.23mm diameter. Square-shape shank. L 65mm	3503	35
"	2 joining fragments of dome-head type, 22mm diameter. Square-shape shank incomplete. L 65mm	3503	35
NAILS (TYPE 2)			
<b>Finds No.</b>	<b>Description</b>	<b>Context</b>	<b>Tr.No.</b>
"	Complete nail with triangular-shape head. Rectangular-section shank. L 28mm	305 (Spoil)	3
"	Complete except for the tip. Triangular-shape head. Rectangular-shape shank, with slight curve towards the tip. L 43mm	707 (Spoil)	7
"	Part of triangular-section shank. L 37mm	1900	19
"	Heavy accretions, but probably triangular-section shank section. L 35mm	1904 (Spoil)	19
"	Complete, with triangular-shape head and curved rectangular-section shank. L 62mm	2410 (Spoil)	24
"	Complete triangular-head type. Rectangular-section, slightly bowed shank L 56mm	3001	33
"	Complete triangle-head type. The rectangular-section shank is bent and clenched over. L 80mm	3001	33
"	Fragment of rectangular-section shank only. L 48mm	3001	33
"	Fragment of possible rectangular-section nail shaft or perhaps piece of a tang to a tool. L 37mm	3001	33
"	Complete nail with triangular-shape head. Rectangular-section shank. L 49mm	3802	38

"	Triangular head. Rectangular section shank with tip missing. L 28mm	4013 (Spoil)	40
"	Tip of rectangular-section shank, end bent over. L 30mm	Unstrat.	?
"	Head damaged, rectangular-section broken shank. L 40mm	6810 (Spoil)	68
<b>HOBNAILS</b>			
<b>Finds No.</b>	<b>Description</b>	<b>Context</b>	<b>Tr.No.</b>
"	Hobnail, roundish head, 10mm diameter. L 16mm	4013 (Spoil)	40
"	Hobnail fragment, part of shank missing. L 18mm	2410 (Spoil)	24
<b>OTHER IRON ITEMS</b>			
<b>Finds No.</b>	<b>Description</b>	<b>Context</b>	<b>Tr.No.</b>
"	3 small pieces of iron slag. Total weight 25 grams	305 (Spoil)	3
"	Flat, corroded ferrous item, broken and incomplete. L 30mm, width 9-6mm	305 (Spoil)	3
"	Corroded, flattish object, elliptical in section. Incomplete, part of tool?. L 38mm, width 23-15mm	1001	10
"	Triangular broken fragment from a tool? It appears to have 2 true edges, 45 and 35mm long, and broken edge, 60mm long. It tapers from one edge to the other. Possible axe head fragment?	1902	19
"	Flat, tapering object, smooth on one side. The tip is curved along one edge, and straight along the other. Incomplete, possible tool. L 47mm	2410 (Spoil)	24
"	Very corroded flattish object with a tapering tip. Possibly the tip of a pick, or perhaps a wedge/peg. Incomplete. L 46mm, widest 18mm	2410 (Spoil)	24
"	Incomplete, the end of a rectangular-section object, tapering to a tip. Possibly a forged tool, perhaps a chisel or a file. L 43mm, depth 11mm, width 14mm down to 9mm at tip.	3301	33
"	T-Cramp? One side of head and shaft broken off. Estimated head width 35mm. L 34mm	3605 (Spoil)	36
"	Incomplete and broken, heavily corroded. The rectangular-section shaft tapers to a rounded point at one end, and widens to a thicker, flat tang? At the other end. Overall length 85mm	6801	68

Many of the iron items are heavily coated with accretions of metal dross as well as normal corrosion. This may suggest that they were lying on a smithing workshop floor for some time.

### **The Glass by H.E.M. Cool**

The only form that can be identified amongst the fragments from this site is a pillar moulded bowl of first century date (Price and Cottam 1998, 11-6). People who lived on rural sites in the first to mid second centuries appeared to find large bowls like these useful (Cool and Baxter 1999, 84-5), and so the recovery of a fragment at this site is not surprising. The other fragments retain no diagnostic features and can only be dated by their colour which are typical of the first to third centuries.

### **Catalogue**

- 1 Pillar moulded bowl; lower body fragment. Blue/green. Retaining part of one rib. Dimensions 42 x 30mm. TR68 6801 sf5
- 2 Body fragment. Blue/green. TR 24 2409 sf28.
- 3 Body fragment. Blue/green. TR 68 spoil.
- 4 Body fragment. Pale green. (3402).

### **Addendum**

TR 7 (703) – the fragment is modern.

### **The stone By Rob Ixer**

#### **Trench 18 - 1802**

A thinly-bedded, fine-grained, pale cream, unfossiliferous, calcareous sandstone with dark, clay-rich layers along joint planes/stylolites. The rock is worked and may be a small tracery fragment. A Mesozoic sediment probably local/regional in origin

#### **Trench 68 - 6801**

Two adjoining quern fragments manufactured from a coarse-grained (<1000µm grain size so a coarse sand), indurated, mica-bearing, pale-coloured sandstone. The sandstone has an open fabric with euhedral terminations on quartz crystals growing into the many void spaces. A very typical quernstone lithology from the Carboniferous Millstone Grit or possibly, because of the lack of natural iron-staining, the Coal Measures. Probably local/regional in origin.

#### **Trench 68 - Spoil heap**

Fine-grained, ?fossiliferous, slate-blue, micaceous, indurated meta-mudstone/siltstone (grain size > 187µm) with a pronounced planar fabric that has been employed to manufacture a roofing slate. A ?Palaeozoic meta-sediment. This is a ?regional import as Charnwood Forest, Leicestershire or Nuneaton is the closest area of similar rocks.

The calcareous sandstone and pale coarse-grained sandstone artefacts could have been made from rocks that crop out within 10-20 kms of the site as the main Mesozoic outcrops lie just to the east and Coal Measures lie to the north and south of the site. The slate is not local and may be a regional or even a non-regional import. It is, however, not a 19<sup>th</sup>/20<sup>th</sup> century Welsh roofing slate but is earlier.

### **The tile, fired clay and flint by Erica Macey-Bracken**

Other finds recovered from the site included ceramic tile, fired clay, flint and charcoal. The assemblage was quantified by count and weight and examined macroscopically for the purposes of assessment. The assemblage was fragmentary, but individual pieces were largely unabraded.

#### **Tile**

A total of 38 fragments of ceramic tile were recovered from the site. Several examples of Roman tile forms were noted, namely three fragments of tegula (1018, 1101, 2303) and a definite (2303) and a possible (703) fragment of imbrex.

#### **Fired clay**

Initial quantification of the Redhill assemblage identified three undiagnostic fragments of fired clay (3100 x 2, 4003 x 1). The initial assessment of the tile assemblage revealed a further three fragments of fired clay that were originally identified as tile (1802 x 2, 2003 x 1). One of these pieces (1802) appears to have been formed around a tubular shape, and may be a piece of daub.

#### **Flint**

Three small pieces of flint were recovered from the site. At least one of these pieces, recovered from the spoil of Trench 34, was worked, and appears to be a scraper perform. The other two pieces (1101, Trench 24 spoil) are unworked flakes, one primary (1101) and one tertiary (Trench 24, Spoil).

### **The animal bone by Dave Brown**

The animal bone assemblage from Red Hill contains remains from multiple periods of the site's usage: Prehistory; Romano-British; and medieval period. Remains from the Romano-British deposits dominate the assemblage and the number of those from the other periods was very small and mostly unidentifiable and therefore cannot reveal much information. The assemblage was hand-collected thus creating a bias toward larger fragments that are immediately visible in the ground. Preservation was variable between the periods noted above with Romano-British material being in a better condition on the whole than the others. However, the degree of fragmentation from all deposits was poor.

This is a small assemblage consisting of 927 fragments (5797g) (one standard-sized museum archive box), of which 502 fragments were identifiable. The main species represented were cattle and dog (due to the dog skeleton burial [6703]). Other species that were less frequently represented were: pigs; sheep/goat; domestic fowl; horse; and small mammals (single mandible possibly from a field vole [*Microtus agrestis*] but inconclusive).

Bone element representation frequencies show there was a preponderance of elements that are typically discarded following primary butchery (lower limb bones, skull elements including mandibles, teeth and horncore fragments). One cow mandible shows evidence of removal of the tongue. There was a lower frequency of upper limb bones and pelvic elements but those that were present showed evidence of dismemberment and/or scrape or cut marks from defleshing and jointing. A suspected neonatal sheep/goat metacarpal was recorded, which demonstrates stock management as neonatal animals are slaughtered either: for their own meat; for secondary products from the mother, such as milk; or they were not economically

viable to keep. Also, the presence of an unidentified fragment showing evidence of pathology (a healing injury) further indicates localised animal stock control. All of these factors indicate a level of occupation in the vicinity via animal husbandry, consumption and waste disposal. Furthermore a sheep/goat metacarpal with a hole drilled through the central area of the diaphysis suggests the manufacture and utilisation of bone tools in the vicinity.

The most interesting aspect of this assemblage is the intentionally buried dog from context (6703). This dog was aged between one-and-a-quarter to one-and-a-half years old at the time of its death based on epiphyseal fusion data. The skeleton shows no signs of trauma, disease, pathology or taphonomy. However, the skeleton is missing its pelvis, atlas vertebra and skull except the mandibles. It is likely that this is how it was buried as the context from which it was recovered was sealed and undisturbed. It would be interesting to postulate that this juvenile site as it is unlikely that these elements of the skeleton would be removed if it was simply a companion animal or the runt of a litter with no economic value. While other ritual elements are known from the site, it is not possible to confirm this assertion without further research.

#### **Human bone by Sam Hepburn**

The remains of 4 human skeletons were found during the course of the evaluation. Each set of remains were examined and recorded in-situ and were not removed but reburied.

Human Burial 1 was the most exposed set of remains. The skeleton was that of a mature adult female, lain supine with legs extended and orientated east west. The right arm was positioned at the side of the torso with the phalanges of the left hand lying over the pelvis. The rest of the hand and arm, along with the left side of the torso, skull and cervical vertebrae were absent being removed in antiquity. Cut marks on the left ilium of the pelvis bear this out. The spine showed signs of osteophytosis on vertebrae T5, T6 and L2 in particular. Osteophytosis is a growth of the bone on the vertebral body caused by chemical and degenerative changes in the intervertebral discs due to advancing age and stress upon the spine (Roberts and Manchester 1995). The presence of which, as well as complete fusion of the long bones epiphyses puts the age of the individual over 30.

Human Burial 2 was that of an adult male of which only the skull was exposed. The skull was aligned north south facing west. The facial bones of the skull were badly damaged in particular the maxilla, nasal and zygomatic bones. The mandible was present and the molars showing signs of wear. The lateral incisors had been pushed behind the central incisors due to lack of space on the jaw for all of the teeth to sit in their usual position.

Human Burial 3 was a collection of 5 miscellaneous long bones that were only partially visible in the west facing trench edge. Three were identifiable as the distal ends of an adult humerus (left) and femur (left) and the proximal end of a tibia (left). The other 2 bones were too damaged to make an identification.

Human Burial 4 was that of an adult with only the long bones of the right side visible in section. The remaining part of the skeleton was not excavated. Not enough of the pelvis was visible to ascertain sex.

### **Charred plant remains by Pam Grinter**

Archaeobotanical samples were taken from a range of features and were assessed to determine:

- if plant remains were present and of interpretable value.
- if the plant remains provide information about the Romano-British economy.
- if the plant remains provide information about the surrounding environment.

In total, 17 samples were selected for assessment – in most cases, selection was directly related to the significance of the archaeological context sampled.

### **Laboratory method**

Sample volumes ranged from 12 to 20 L in volume and were processed using water flotation. The flots and heavy residues were sieved to 500µm. Flots were scanned by the author under a low-power microscope at a magnification of x15. Identification was aided by use of various seed identification manuals (Anderberg, 1994; Berggren 1969 & 1981 and Cappers *et al* 2006). Nomenclature follows Stace (1997) for indigenous taxa and Zohary and Hopf (2000) for economic plants.

### **Results**

Table 2 (appendix iii) presents the results for the flots, charred plant remains were present in four flots (Samples 5, 9, and 15 and 16)) in relatively low numbers. Samples 5 and 16 produced the highest quantity of cereal grains where around 50 wheat grains were identified from each sample. The charred plant remains comprised of grains of barley, wheat and oat (*Hordeum vulgare*, *Triticum* cf. *spelta* and *Avena* sp.). 15 flots (1,2,4,5,6,7,8,9,10,12,13,14,15,16, and 17) contained quantities of charcoal. Preservation of the cereal remains was good.

### **Conclusions**

The Romano-British features which produced the plant remains were interpreted by the archaeologists to be the fills of pits and dump deposits. The assemblage contained barley, wheat and oat grains. The cereal grains clearly represent crop harvesting or processing activities which may have taken place nearby and have been incorporated within the contents of the features accidentally or by the intentional dumping of burnt waste. It is likely that the crops were grown however there is no evidence from the samples taken so far, for large-scale cereal processing on site.

## **7 DISCUSSION**

This evaluation was designed to identify the extent and nature of the archaeological resource of this site. Previous evaluation work had identified deep urban style stratigraphy to the east of the farmtrack (Cuttler 2001). This evaluation has extended the limit of Romano-British occupation of the site further west. The areas of archaeological potential have been defined in figure 2 by coloured zones. The Roman occupation layer, in pink, can clearly be seen along the eastern edge of the site with a second area of multi-period archaeological features not sealed

by the occupation layer delineated by the green. This curves around a possible palaeochannel and the floodplain edge.

The previous evaluation identified floors and building remains while this stage has identified industrial practices, field systems and most importantly a possible cemetery. The thick layer of charcoal rich silt clay that overlies most of the Roman features can best be described as a type of dark earth that seems to mark the last phase of the Roman exploitation of the site sealing ditches and gullies in the trenches along the farm track. It is of a homogenous character with frequent pottery, bone and metal artefacts. The layer is thickest directly along the farm track and thins out to the west, this is possibly due to the ridge of high ground in the adjacent field and the fact that the land to west of the farm track is at a lower level.

The frequency of imported pottery along with fine tablewares from a variety of sources indicates a thriving community with extensive trade links. The pottery seems to indicate a 2<sup>nd</sup> to 3<sup>rd</sup> century date for the site. The majority of the coinage was recovered from the machine spoil but it can be assumed they originally came from the Roman layer. This layer is akin to dark earth which is found on many urban sites towards the end of the Roman period. This confines the dating of that layer to the mid 3<sup>rd</sup> to late 4<sup>th</sup> century AD, mainly during the reign of Constantine I and his sons Constans, Constantius and Constantinian. There are coins of late 1<sup>st</sup> to early 2<sup>nd</sup> century date and again these are from the machine spoil.

It appears that the Roman occupation was at its peak during the 3<sup>rd</sup> and 4<sup>th</sup> centuries with evidence of industry being carried out on site indicated by the metal accretions on the iron objects. This suggests that these had possibly lain on a smithing floor. The presence of lead objects may be related to the production of curse tablets and votive items that would have been sold to those visiting the shrine on the hill. Although no remains of a road were identified several gravel surfaces were identified in trenches 3, 10 and 19. Further work may help to identify access routes to the temple and settlement.

The pottery also included sherds of possible prehistoric or Anglo-Saxon date and the presence of the early Roman coinage suggests a long chronology for the site.

The main feature type was shallow gullies that may form stock enclosures or drainage for cultivation. The animal bone assemblage showed signs of both butchery and stock management indicating that this was occurring onsite rather than being imported. The use of animal bone as a raw material has also been noted. A few discreet pits have emerged, the largest of which appearing in trench 40 which contained several episodes of deposition and well preserved pottery. Several of the features were noted to have burnt deposits, the gully [2103] and the small pit [2306] along with the charcoal present in the Roman occupation layer. It is possible this represents the destruction of the site whether deliberate or not is unclear. The charred plant remains did not yield much information beyond evidence for cultivation with processing occurring offsite.

It must not be forgotten that this settlement thrived due to its proximity to the Roman shrine at Red Hill. The excavations during the 50's and 60's revealed curse tablets along with human remains. It is likely that the settlement was a centre of commerce and trade (Houldsworth 1963). The human burials were aligned east-west and are fairly characteristic of burial practices during the 3<sup>rd</sup> and 4<sup>th</sup> centuries. The north south aligned burial in trench 35 may represent an earlier pagan burial although Philpott suggests that most burials of this type, pagan and Christian, were buried in identical fashion (Philpott 1991:240). Under Roman law burials must be placed outside the town so we can assume that these are part of a larger cemetery outside the main settlement possibly alongside a road. The presence of human

burials, the evidence for metal-working, stock management and a possible ritual deposition of a dog demonstrates the full spectrum of life at Red Hill during the Romano-British period.

The nature of the floodplain deposits was briefly tackled as the trenching programme was not designed to map substantial palaeochannel deposits. The large scale research project recently undertaken upon the Trent-Soar confluence has already suggested a relatively late date for the floodplain deposits but no firm dating has been carried out (Brown et al 2007). With such an active river as the Soar the probability that the site will produce not only palaeochannels but also structures associated with exploiting wetland resources is high. This is proven in many stretches along the course of the River Trent, in particular Shardlow (Krawiec 2006). The confluence of the Trent and Soar lies to the north east of the Red Hill SAM and the importance and significance of the dryland remains cannot be divorced from the wetland, in both practical and spiritual terms. The positioning of an ancient shrine at the high point in the landscape and its proximity to the confluence of two major rivers indicates the site's importance in terms of its spiritual significance throughout antiquity as well as its significance as an exploitable natural resource.

## 8 ACKNOWLEDGEMENTS

The project was commissioned by Richard Moreley of Red Hill Marine Ltd. Thanks are due to Robert Williams, Alan Palfreyman and Sue Ebbins for their assistance throughout the project. Thanks also go to Ursilla Spence, who monitored the project on behalf of Nottinghamshire County Council. Work on site was undertaken by Elizabeth Bishop, Paul Breeze, Paul Collins, Samantha Hepburn and Anthony Wright. Specialists to whom thanks are due are Dave Brown, Hilary Cool, Sue Ebbins, Pam Grinter, Sam Hepburn, Rob Ixer and Jane Timby. Kristina Krawiec produced the written report which was illustrated by Nigel Dodds and edited by Richard Cuttler who also managed the project for Birmingham Archaeology.

## 9 REFERENCES

- Anderberg, A. L. 1994 *Atlas of seeds, Part 4 Resedaceae-Umbelliferae*. Sweden: Risbergs Tryckeri AB.
- Berggren, G. 1981. *Atlas of seeds and small fruits of Northwest-European plant species with morphological descriptions*. Stockholm: Swedish Museum of Natural History.
- Berggren, G. 1969. *Atlas of seeds, Part 2, Cyperaceae*. Stockholm, Swedish Natural Science Research Council.
- Brown, A.G., Carey, C., Challis, K., Howard, A., Kinsey, M., Tetlow, E., & Cooper, L. 2007 *Predictive Modelling of Multi-Period Geolarchaeological Resources at a River Confluence: Phase II report*
- Cappers, R., Bekker, R., and Jans, J. 2006. *Digitale zadenatlas Van Nederland*. Groningen: Barhuis Publishing & Groningen University Library.
- Cool, H.E.M. and Baxter, M.J. 1999. 'Peeling the onion: an approach to comparing vessel glass assemblages', *Journal of Roman Archaeology* 12, 72-100.
- Crummey, N. 1983. *Colchester Archaeological Report 2: The Roman Small Finds from Excavations in Colchester 1971-9*. Colchester Archaeological Trust, LTD, Colchester.

- Cuttler, R 2001. *Land east of Red Hill Farm, Ratcliffe on Soar, Nottinghamshire: an archaeological evaluation 2001*. BA Report 829
- Department of the Environment (DoE) 1990 *Planning Policy Guidance Note 16: Archaeology and Planning*
- Elsdon, S. M. 1982 Iron Age and Roman Sites at Red Hill, Ratcliffe-on-Soar, Nottinghamshire: Excavations of E. Greenfield, 1963 and Previous Finds. *Transactions of the Thoroton Society of Nottinghamshire* no. 86.
- Greenfield, E. 1964 Ratcliffe-on-Soar. *East Midlands Archaeology Bulletin* no. 7.
- Houldsworth, H. O. 1963 The Roman Site at Red Hill, Ratcliffe-on-Soar, Nottinghamshire. *Transactions of the Thoroton Society of Nottinghamshire* no 67.
- Institute of Field Archaeologists (IFA) 2001 *Standards and Guidance for Archaeological Evaluations*
- JSAC, 1998 *Report on an Archaeological Watching Brief during excavations of cable connection trenches at Red Hill, Ratcliffe on Soar, Nottinghamshire*. John Samuels Archaeological Consultants, Newwalk.
- Krawiec, K 2006. *An Archaeological Watching Brief at Shardlow Quarry, Derbyshire: Phases 2-5 2006*. Birmingham Archaeology report no 1332
- Margary, I. D. 1973 *Roman Roads in Britain*. John Barker Publishers.
- Philpott, R. 2001/1991. *Burial Practices in Roman Britain: A survey of grave treatment and furnishing A.D 43-410*. British Archaeological Reports, British Series 219
- Price, J. and Cottam, S. 1998. *Romano-British Glass Vessels: A Handbook*, CBA Practical Handbook in Archaeology 14 (York).
- Reeves, P. 1992 *Report on the Evaluation at the Roman Site of Red Hill at Ratcliffe on Soar, Nottinghamshire*. English Heritage Central Archaeology Service.
- Roberts, C and Manchester, K 1995. *The Archaeology of Disease 2<sup>nd</sup> edition* Sutton Publishing
- Sear, David R. 2002. *'Roman Coins'* Vol II. London
- Stace, C. (1997). (second edition) *New Flora of the British Isles*. Cambridge: Cambridge University Press.
- Stephenson, B. 1999 *East Midlands Parkway, Ratcliffe-on-Soar, Nottinghamshire. Desk-Based Assessment*. C.P.M. Environmental Planning and Design.
- Von den Driesch, A. 1976. A Guide to the Measurement of Animal Bones from Archaeological sites. *Peabody Museum Bulletin* 1, Harvard University.
- Walker, J. 1992 *Archaeology of the A453. Implications of the Proposed Dualling of the A453 Between Barton and the M1*. Trent and Peak Archaeological Trust.

Watkin, J. et al 1996 A Decorated Shield Boss from the River Trent near Ratcliffe-on-Soar. *Antiquities Journal*, Vol. 76.

Zohary, D. and Hopf, M. (2000). *Domestication of Plants in the Old World: The Origin and Spread of Cultivated Plants in West Asia, Europe, and the Nile Valley*. (3rd edition). Oxford: Oxford University Press.

## Appendix i

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
100		01	Layer	0.20m	101		Topsoil	N		
101		01	Layer	0.70m	102	100	Subsoil	Y		
102	103	01	Fill	0.12m	103	101	Fill of tree bowl	N		
103		01	Scoop	0.12m	104	102	Tree bowl			
104		01	Natural			103	Pale orange silt sand	N		
200		02	Layer	0.30m	201		Topsoil	N		
201		02	Layer	0.28m	202	200	Subsoil	N		
202		02	Natural			201	Mid orange silt sand	N		
300		03	Layer	0.20m	301		Top soil	N		
301		03	Layer	0.30m	302, 304	300	Subsoil	N		
302		03	Layer	0.10m	303	301	Gravel spread, possible surface	N		
303		03	Layer	0.30m		302, 304	Mid grey-brown silt-gravel, demolition?	Y		
304		03	Natural		303	301	Natural	N		
500		05	Layer	0.20m	501		Topsoil	N		
501		05	Layer			500	Oxidised orange-brown alluvium	N		
600		06	Layer	0.25m	601		Topsoil	N		
601		06	Layer	0.65m	602	600	Subsoil	N		
602		06	Natural			601	Mixed silt-rich gravel	N		
700		07	Layer	0.25m	701		Topsoil	N		
701		07	Layer	0.25m	702	700	Subsoil	N		
702		07	Layer	0.40m	703	701	Mid grey silt	N		
703		07	Layer		704	702	Dark brown sand-silt, demolition?	Y		
704	705	07	Fill	0.14m	705	703	Dark brown clay silt	N		
705		07	Pit	0.14m	706	704	Small Pit			
706		07	Natural			705	Yellow/brown silt sand	N		
800		08	Layer	0.28m	801		Topsoil	N		
801		08	Layer	0.70m		800	Oxidised orange-brown alluvium	N		
802	008	08	Layer	0.42m	802	801	Grey inorganic clay			
900		09	Layer	0.30m	901		Topsoil	N		
901		09	Layer	0.70m	902	900	Oxidised alluvium	N		
902	009	09	Layer	0.10m		901	Layer of inorganic silt-clay			
1000		10	Layer	0.28m	1001		Topsoil	N		
1001		10	Surface		1002	1000	Compact gravel surface	Y		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
1002		10	Layer			1001	Silt-clay, possible redeposited natural	Y		
1003	0	10	Layer	0.20m	1002	1000	Possible occupation layer	Y		
1100		11	Layer	0.20-0.40m	1101		Topsoil	N		
1101		11	Layer	0.12-0.30m	1102, 1103, 1104	1100	Occupation layer	Y	1	39,40,12,
1102		11	Layer	0.14-0.17m			Occupation layer	N		
1103		11					Burnt daub	N	3	
1104		11	Layer		1101	1100	Subsoil	N		
1105		11	Layer	0.08-0.24m	1107	1106	Silt-sand, possible occupation Layer	Y	2	
1106		11		0.12m	1105	1104	Burnt daub	N		
1107		11	Natural			1105	Yellow sandy-clay	N		
1300		13	Layer	0.20m	1301		Topsoil	N		
1301		13	Layer	0.65m	1302	1300	Alluvium	N		
1302		13	Layer	0.20m		1301	Inorganic silt-clay	N		
1400		14	Layer	0.20m	1401		Topsoil	N		
1401		14	Layer	0.20m	1402	1400	Subsoil	N		
1402		14	Layer	0.10m	1403	1401	Alluvium	N		
1403		14	Natural			1402	Orange clay-silt with gravel clasts	N		
1500		15	Layer	0.30m	1501		Topsoil	N		
1501		15	Layer	0.30m	1502, 1505	1500	Subsoil	N		
1502	1503	15	Fill	0.20m	1503	1501	Brown sandy-silt	Y		
1503		15	Pit	0.20m	1504	1502	Shallow pit/tree bowl			
1504		15	Layer	0.30m	1506	1503	Grey sand-silt, possible occupation layer	Y		14
1505		15	Fill		1506	1501	Fill of Linear Feature? Unexcavated	N		
1506		15				1504, 1505	Orange-brown clay, possible natural	N		
1600		16	Layer	0.20m	1601		Topsoil	N		
1601		16	Layer	0.90m		1600	Alluvium	N		
1700		17	Layer	0.25m	1701		Top Soil	N		
1701		17	Layer	0.17m	1702	1700	Subsoil	N		
1702		17	Natural			1701	Orange brown silt-rich gravel	N		
1800		18	Layer	0.25-0.30m	1801		Topsoil	N		
1801		18	Layer	0.20m	1802	1800	Subsoil	N		
1802		18	Layer	0.15m	1803	1801	Occupation layer	N		
1803		18	Natural			1802	Orange sandy-silt	Y		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
1900		19	Layer	0.30m	1901		Topsoil	N		
1901		19	Layer	0.20m	1902	1900	Subsoil	N		
1902	1909	19	Fill		1903	1901	Fill of possible feature	Y		810
1903		19	Surface	0.10m	1904	1902	Mottled Surface?	Y		
1904		19	Layer	0.08m	1905	1904	Dark brown silt, possible occupation layer	Y		
1905		19	Layer	0.04-0.08m	1906	1904	Re-deposited natural	N		
1906		19	Layer	0.08m	1907	1905	Sterile grey silt	N		
1907		19	Layer	0.20m	1908	1906	Occupation Layer	Y		
1908		19	Natural			1907	Yellow sandy-clay	N		
1909	0	19			1903	1902	Possible feature with vertical sides			
2000		20	Layer	0.20m	2001		Topsoil	N		
2001		20	Layer	0.30m	2003	2000	Subsoil	N		
2002		20	Surface	0.04m	2005	2006	Orange-brown silt-sand	N		
2003	2006	20	Fill	0.22m	2006	2001	Fill of pit	Y	5	
2004		20	Natural	0.20m			possible natural	N		
2005		20	Natural			2002	Mixed silt gravel	N		
2006		20	Pit		2002	2003	Shallow Pit			
2100		21	Layer	0.20m	2101		Topsoil	N		
2101		21	Layer	0.30m	2102	2100	Subsoil	N		
2102	2103	21	Fill	0.12m	2103	2101	black-grey sandy-silt with charcoal	Y	6	
2103		21	Gully	0.12m	2104	2102	Shallow gully			
2104		21	Natural	0.12m	2105	2103	Brown yellow silt clay-sand	N		
2105		21	Natural			2104	Brown yellow silt clay	N		
2200		22	Layer	0.20m	2201		Topsoil	N		
2201		22	Layer	0.30m	2202	2200	Subsoil	N		
2202		22	Layer	0.30m	2203	2201	Silt-rich gravel	N		
2203		22	Layer	0.05m	2204	2202	Silt-rich gravel	N		
2204		22	Layer	0.05m	2205	2203	Possible surface	N		
2205		22	Layer			2204	Levelling/make-up layer	N		
2300		23	Layer	0.20-0.30m	2301		Topsoil	N		
2301		23	Layer	0.22-0.30m	2302	2300	Subsoil	N		
2302		23	Layer	0.08-0.12m	2303	2301	Sandy clay	N		
2303		23	Layer	0.20m	2304,2307,2308,2309,231	2302	Occupation Layer	Y		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
2304	2306	23	Fill	0.14m	2305	2303	Charcoal-rich, grey sand-silt	N	4	
2305	2306	23	Fill	0.01m	2306	2304	Burnt lining	N		
2306		23	Pit	0.15m	2312	2305	Small Pit/Posthole			
2307		23	Fill			2303	Fill of Posthole/Pit Unexcavated	N		
2308		23	Fill			2303	Fill of Unexcavated Feature	N		
2309		23	Fill			2303	Fill of Posthole Unexcavated	N		
2310		23	Fill			2303	Fill of Unexcavated Feature	N		
2311		23	Fill			2303	Fill of Unexcavated Feature	N		
2312		23	Natural			2306	Yellow sandy-clay	N		
2400		24	Layer	0.30m	2401		Topsoil	N		
2401		24	Fill	0.30m	HB3 2407	2400	Fill of grave cut	Y		69,31
2402		24	Layer		2408	2401	Orange sandy-clay	N		
2405		24	Grave	0.39m	2409	2407	HB2			
2406		24	Grave		2408	2409	HB1			
2407	2405	24	Fill	0.38m	HB2 2405	2401	Grave Fill	Y	12	
2408		24	Layer			2402	Brown-orange silt-clay	Y		
2409	2406	24	Fill	0.29	HB1 2406	2405	Grave Fill	Y		28
2410		24	Layer		2402	2401	Brown silt-clay, possible grave fill	N		
2500		25	Layer	0.20m	2501		Top Soil	N		
2501		25	Layer	0.30-1.00m	2502	2500	Oxidised alluvial clay	N		
2502		25	Layer	0.20m		2501	Inorganic blue grey silt clay, alluvium	N		
2600		26	Layer	0.25m	2601		Topsoil	N		
2601		26	Layer	0.20-0.35m	2602	2600	Subsoil	N		
2602		26	Layer			2601	Mixed silt gravel	N		
2700		27	Layer	0.25m	2703		Topsoil	N		
2701		27	Layer			2702	Oxidised alluvium	N		
2702		27	Ditch		2701	2703	Large east-west orientated modern ditch			
2703	2702	27	Fill		2702	2700	Fill of ditch	N		
2704		27	Palaeocha		2701	2700	Fill of large north-south aligned palaeochanne	N		
2800		28	Layer	0.20m	2801		Topsoil	N		
2801		28	Layer	0.20m	2802	2800	Mid-brown silt-clay subsoil	N		
2802		28	Natural			2801	Mixed silt-rich gravel	N		
2900		29	Layer	0.40m	2905, 2907		Topsoil	N		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
2901		29	Natural			2902, 2906	Silt-rich gravel	N		
2902		29	Gully	0.21m	2901	2903	NW-SE Gully			
2903	2902	29	Fill	0.21m	2902	2904	Orange-brown silt-clay	N		
2904		29	Plough Fu	0.13m	2903	2905	Plough furrow			
2905	2904	29	Fill	0.13m	2904	2900	Sterile silt-clay, fill of plough furrow	N		
2906		29	Plough Fu	0.20m	2901	2907	Plough furrow			
2907	2906	29	Fill	0.20m	2906	2900	Fill of plough furrow	Y		
3000		30	Layer	0.47m	3001		Topsoil	N		
3001		30	Layer	0.10m	3006,3008	3000	Subsoil	N		
3002		30	Natural			3003, 3007	Red-brown silt-rich gravel	N		
3003		30	Pit	0.15m	3002	3004	Possible pit/geological feature			
3004	3003	30	Fill	0.15m	3003	3005	Mid-brown grey-silt, possibly geological	N		
3005		30	Plough Fu	0.08m	3004	3006	Plough furrow			
3006	3005	30	Fill	0.10m	3005	3001	Sterile mid-brown-grey silt-clay	N		
3007		30	Plough Fu	0.10m	3002	3008	Furrow			
3008	3007	30	Fill	0.10m	3007	3001	Fill of furrow	N		
3100		31	Layer	0.40-0.67m	3103		Topsoil	Y		
3101		31	Natural			3102	Orange brown silt clay	N		
3102		31	Pit	0.24m	3101	3103	Small Subcircular Pit			
3103	3102	31	Fill	0.24m	3102	3100	Orange-brown silt-clay, fill of pit	Y		
3200		32	Layer	0.25m	3201		TopSoil	N		
3201		32	Layer	0.40m	3202	3200	Subsoil	N		
3202		32	Natural			3201	Variation in the natural	N		
3203		32	Natural			3201	Yellow-grey clay, natural	N		
3300		33	Layer	0.40m	3301		Topsoil	N		
3301		33	Layer	0.58-0.61m		3300	Possible occupation layer	Y	8	19,20,25,3
3400		34	Layer	0.30m	3401		Topsoil	Y		
3401		34	Layer	0.36m	3402	3400	Subsoil	Y		
3402	3403	34	Fill	0.32m	3403	3401	Mid-brown silt-clay, fill of gully	Y	7	
3403		34	Gully	0.32m	3404	3401	E-W narrow gully			
3404		34	Layer			3403	Yellow silt-clay	Y		
3500		35	Layer	0.30m	3501		Topsoil	N		
3501		35	Layer	0.10m	3503	3500	Subsoil	N		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
3502		35	Natural			3505	Orange brown silt clay	N		
3503	3504	35	Fill	0.40m	(HB4) 3504	3501	Grave Fill	Y	11	
3504		35	Grave	0.40m	3505	3503	Grave cut			
3505		35	Fill			3504	Grey-brown silt-clay, possible fill (not excav)	N		
3600		36	Layer	0.40m	3603		Topsoil	N		32
3601		36	Natural			3602	Yellow-brown silt-rich gravel	N		
3602		36	Layer	0.36m	3601	3604	Occupation Layer	Y		
3603	3604	36	Fill	0.90m	3604	3600	Orange sand grave, fill of ditch	Y		
3604		36	Ditch	0.90m	3602	3603	NW-SE ditch			
3700		37	Layer	0.40m	3701		Topsoil	N		
3701		37	Layer	0.20m	3706, 3708	3700	Subsoil	N		
3702		37	Natural			3703, 3707	Orange-red silt-clay	N		
3703		37	Pit	0.17m	3702	3704	Irregular shaped pit			
3704	3703	37	Fill	0.17m	3703	3705	Mid brown silt clay, fill of pit	Y		
3705		37	Plough Fu	0.02m	3704	3706	Furrow			
3706	3705	37	Fill	0.02m	3705	3701	Brown silt-clay, fill of furrow	N		
3707		37	Plough Fu	0.04m	3702	3708	Furrow			
3708	3707	37	Fill	0.04m	3707	3701	Fill of Furrow	N		
3800		38	Layer	0.40m	3801		Topsoil	N		
3801		38	Layer	0.24m	3802	3800	Demolition/occupation layer	Y		
3802	3803	38	Fill	0.50m	3803	3801	Dark-brown sand-silt within feature 3803	Y	9	
3803		38	Pit		3804	3802	Large refuse pit			
3804		38	Layer			3803	Mottled orange-brown silt	N		
3900		39	Layer	0.40m	3901		Topsoil	N		
3901		39	Layer	0.24m	3903	3900	Possible occupation layer	Y		15
3902		39	Ditch	0.28m	3904	3903	E-W Ditch			
3903	3902	39	Fill	0.28m	3902	3901	Brown silt-sand-clay, fill of Ditch	Y		
3904		39	Natural			3902	Gravel with patches of mottled silt	N		
4000		40	Layer	0.40m	4003		Topsoil	N		18
4001		40	Natural			4004	Yellow-brown silt-clay	N		
4002		40	Pit	0.90m	4011	4010	Large pit			
4003	4002	40	Fill	0.22m	4005	4000	Final Fill of 4002	Y		
4004		40	Layer		4001	4012	Redeposited natural	N		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
4005	4002	40	Fill	0.12m	4006	4003	Gravel fill	N		
4006	4002	40	Fill	0.15m	4007	4005	Brown clay-silt	N		
4007	4002	40	Fill	0.20m	4008	4006	Gravel fill	N		
4008	4002	40	Fill	0.10m	4009	4007	Charcoal-rich silt	N		
4009	4002	40	Fill	0.05m	4010	4008	Gravel fill	N		
4010	4002	40	Fill	0.18m	4002	4009	Primary fill of 4002	Y	14	
4011	4012	40	Fill	0.22m	4012	4002	Brown silt-sand, fill of pit	N		
4012		40	Pit	0.22m	4004	4011	Small pit			
4100		41	Layer	0.20m	4101		Topsoil	N		
4101		41	Layer	0.80-1.20m	4102	4100	Alluvium	N		
4102		41	Natural			4101	Gravel	N		
4200		42	Layer	0.24m	4201		Topsoil	N		
4201		42	Layer	0.76m	4202	4200	Alluvium	N		
4202		42	Natural			4201	Gravel	N		
4300		43	Layer	0.25m	4301		Topsoil	N		
4301		43	Layer	0.53-0.63m	4302	4300	Alluvium	N		
4302		43	Natural			4301	Natural	N		
4400		44	Layer	0.20m	4401		Topsoil	N		
4401		44	Layer	0.30m	4402	4400	Subsoil	N		
4402		44	Natural			4401	Gravel	N		
4500		45	Layer	0.17m	4501		Topsoil	N		
4501		45	Layer	0.83m	4502	4500	Subsoil	N		
4502		45	Natural			4501	Gravel	N		
4600		46	Layer	0.20m	4601		Top Soil	N		
4601		46	Layer	0.36-0.60m	4604	4600	Subsoil	N		
4602		46	Natural			4603	Grey-brown silt-rich gravel	N		
4603		46	Plough Fu	0.04m	4602	4604	Furrow	N		
4604	4603	46	Fill	0.04m	4603	4601	Fill of Furrow	N		
4700		47	Layer	0.28m	4701		Topsoil	N		
4701		47	Layer	0.18m	4702	4700	Subsoil	N		
4702		47	Natural			4701	Silt-rich clay	N		
4800		48	Layer	0.20m	4801		Topsoil	N		
4801		48	Layer	0.45m	4802	4800	Subsoil	N		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
4802		48	Natural			4801	Natural	N		
4900		49	Layer	0.20-0.30m	4901		Topsoil	N		
4901		49	Layer	0.10-0.34m	4904	4900	Subsoil	N		
4902		49	Natural			4903	Natural	N		
4903		49	Plough Fu	0.02m	4902	4904	Furrow			
4904	4903	49	Fill	0.02m	4903	4901	Sterile silt, fill of furrow	N		
5000		50	Layer	0.20m	5001		Topsoil	N		
5001		50	Layer	0.40m	5004, 5006	5000	Subsoil	N		
5002		50	Natural			5003, 5005	Yellow-brown silt	N		
5003		50	Post-hole	0.15m	5002	5004	Geological feature			
5004	5003	50	Fill	0.15m	5003	5001	Fill of 5003	N		
5005		50	Gully?	0.04m	5002	5006	Tree Root Activity			
5006		50	Fill	0.04m	5005	5001	Fill of 5005	N		
5200	052	Layer	0.24m	5201			Topsoil	N		
5201	052	Layer	0.50	5202		5200	Subsoil	N		
5202	052	Natural				5200	Orange-brown silt-sand-clay	N		
5300	053	Layer	0.20m	5301			Topsoil	N		
5301	053	Layer	0.80m			5300	Alluviuvial clay	N		
5400	054	Layer	0.20m	5401			Topsoil	N		
5401	054	Layer	0.26m	5402		5400	Subsoil	N		
5402	054	Natural				5401	Silt-rich gravel	N		
5500	055	Layer	0.30m	5501			Topsoil	N		
5501	055	Layer	0.20m	5508		5500	Subsoil	N		
5502	055	Natural				5503,05	Orange-brown silt-clay	N		
5503	055	Pit	0.13m	5502		5504	Small pit	N		
5504	5503	55	Fill	0.13m	5503	5507	Heat cracked stone & charcoal fill of pit	N	13	
5505	055	Furrow	0.08m	5502		5506	Furrow	N		
5506	5505	55	Fill	0.08m	5505	5502	Fill of furrow	N		
5507	055	Furrow	0.05m	5504		5508	Furrow	N		
5508	5507	55	Fill	0.05m	5507	5502	Fill of furrow	N		
5600		56	Layer	0.20m	5601		Topsoil	N		
5601	056	Layer	0.30m	5616,08,10,06,12,04		5600	Subsoil	Y		
5602		56	Natural			5603,05,07,09,11,	Orange-brown silt-clay	N		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
5603	056	56	Pit	0.22m	5602	5604	Pit containing a pot	Y		
5604	5603	56	Fill	0.22m	5603	5615	Mid brown silt clay, fill of pit	Y	10	
5605	056	56	linear	0.03m	5602	5606	Possible gully	N		
5606	5605	56	Fill	0.03m	5605	5601	Fill of shallow gully	N		
5607	056	56	Pit	0.12m	5602	5608	Shallow pit	Y		
5608	5607	56	Fill	0.12m	5607	5601	Silt-clay, fill of shallow pit	Y		
5609	056	56	Pit	0.10m	5602	5610	Small pit	N		
5610	5609	56	Fill	0.10m	5609	5601	Fill of small pit	N		
5611	056	56	Linear	0.06m	5602	5612	Shallow gully	N		
5612	5611	56	Fill	0.06m	5611	5601	Fill of linear feature	N		
5613	56	56	Ditch	0.18m	5602	5614	Small ditch	N		
5614	5613	56	Fill	0.18m	5613	5601	Fill of ditch	N		
5615	056	56	Linear	0.04m	5604	5616	Linear feature, possible ploughscar	N		
5700	057	57	Layer	0.46m	5701		Topsoil	N		
5701	057	57	Layer	0.20m	5602	5600	Subsoil	N		
5702	057	57	Natural			5601	Orange brown gravel	N		
5800	058	58	Layer	0.26m	5801		Topsoil	N		
5801	058	58	Layer	0.30m	5802	5800	Subsoil	Y		
5802	058	58	Natural			5804	Yellow-brown silt-clay	N		
5803	5804	58	Fill	0.30m	5804	5801	Orange-grey silt, fill of large pit	Y		
5804	058	58	Pit	0.30m	5802	5803	Large flat bottomed pit	Y		
5805	058	58	Layer			5801	Layer unexcavated	N		
5900	059	59	Layer	0.20m	5901		Topsoil	N		
5901	059	59	Layer	0.35m	5902	5900	Subsoil	Y		11
5902	059	59	Natural			5901	Orange-brown silt-rich gravel	N		
6000	060	60	Layer	0.60m	6002		Topsoil	N		22
6001	060	60	Natural			6003	Orange-brown silt-clay	N		
6002	6003	60	Fill	0.20m	6003	6000	Fill of gully	Y		
6003	060	60	Gully	0.20m	6001	6003	n-s gully	Y		
6200	062	62	Layer	0.25m	6201		Topsoil	N		
6201	062	62	Layer	0.25m	6202	6200	Subsoil	N		
6202	062	62	Natural			6201	Gravel	N		
6300	063	63	Layer	0.25m	6301		Topsoil	N		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
6301	063		Layer	0.45m	6302	6300	Alluvium	N		
6400	064		Layer	0.45m	6401		Topsoil	N		
6401	064		Natural			6400	Natural	N		
6500	065		Layer	0.20m	6501		Topsoil	N		
6501	065		Layer	0.60m	6502	6500	Made ground	N		
6502	065		Layer	0.20m	6505,09,11,14	6501	Subsoil	N		
6503	065		Natural			6504,06,12,13	Natural	N		
6504	065		Butt-end	0.14m	6503	6505	Butt-end of gully	Y		
6505	6504	65	Fill	0.14m	6502	6504	Brown silt-clay, fill of gully	Y		
6506	065		Pit	0.18m	6503	6507	Small pit	Y		
6507	6506	65	Fill	0.18m	6508	6506	Fill of small pit	Y	16	
6508	065		Gully	0.04m	6507	6509	Shallow linear cuts pit	N		
6509	6508	65	Fill	0.04m	6508	6502	Fill of linear	N		
6510	065		Pit	0.20m	6512	6511	Small pit with large stone in the top	Y		
6511	56510	65	Fill	0.20m	6510	6502	Dark brown silt clay, fill of small pit	Y		
6512	065		Layer	0.25m	6503	6510	Possible layer of silt	N		
6513	065		Scoop	0.04m	6503	6514	Geological feature	N		
6514	6513	65	Fill	0.04m	6513	6502	Fill of geological feature	N		
6600	066		Layer	0.20m	6501		Topsoil	N		
6601	066		Layer	1.00m	6602	6601	Made ground	N		
6602	066		Layer	0.70m	6605	6601	Subsoil	N		
6603	066		Ditch	0.20m	6605	6605	E-w ditch	Y		
6604	6603	66	Fill	0.20	6603	6602	Dark brown silt, fill of ditch	Y	17	24
6605	066		Ditch	0.28			E-w ditch has single fill but two cuts			
6700	067		Layer	0.27m	6701		Topsoil	N		
6701	067		Layer	0.17m	6703	6700	Subsoil	N		
6702	067		Natural			6704	Orange-brown gravel	N		
6703	6704	67	Fill	0.26m	6704	6701	Fill of gully with dog skeleton	Y		
6704	067		Gully	0.26m	6702	6703	e-w gully	Y		
6800	068		Layer	0.30m	6801		Topsoil	N		
6801	068		Layer	0.15m	6802,07	6800	Roman layer	Y	15	4,5,16,17,2
6802	6804	68	Fill	0.26m	6803	6801	Upper fill of gully	N		
6803	6804	68	Fill	0.12m	6804	6802	Lower fill of gully	Y		

Context	Fill of	Tr	Type	Depth	Later than	Earlier than	Description	Finds	Sample	small finds
6804		68	Gully	0.34m	6805	6803	n-s gully	Y		
6805	6806	68	Fill	0.38m	6806	6804	Brown-grey sandy-silt, fill of pit	Y		
6806	068	Pit	0.38m	6809	6805	Pit cutting gully	Y			
6807	6808	68	Fill	0.12m	6808	6801	Dark brown silt-sand, fill of small posthole	N		
6808	068	Post-hole	0.12m	6809	6807	Small posthole	N			
6809	068	Natural			6806,08	Orange sandy gravel	N			
6900	069	Layer	0.20m	6901		Topsoil	N			
6901	069	Layer	1.00m	6902	6900	Made ground	N			
6902	069	Natural			6901	Orange-brown silt-sand gravel	N			
7000	070	Layer	1.00m	7001		Made ground	N			
7001	070	Layer			7002	Redeposited natural	N			
7002	070	Layer		7001		Layer of dredged material	Y			

## Appendix ii

Table 1: Summary of pottery from Ratcliffe-on-Soar, Notts

Tr	Context	Sam	Amp	BB1	LNV	OXF	MAH	CW	Post-Ro	Med/Pm	Tot No	Tot Wt	Date	cbm/fc
1	102	0	0	2	0	0	0	1	0	0	3	241	C3	
2	201	0	0	0	0	0	0	1	0	0	1	16	Roman	
3	303	2	0	0	2	0	0	6	0	0	10	206	1C2+	
7	703	1	0	0	0	0	0	13	0	0	14	238	C2	
7	spoil	0	0	0	2	0	0	7	0	0	9	108	C3+	
10	1001	6	0	0	0	0	0	3	0	0	9	65	C2	1
10	1002	1	0	0	0	0	0	0	0	0	1	2	C2	
10	1018	1	0	0	1	1	0	0	0	0	3	45	1C3-C4	
11	1101	2	7	0	0	0	0	79	0	0	89	6096	C2	
11	1105	0	0	0	0	0	0	1	0	0	1	1	Roman	
11	spoil	2	1	3	0	0	0	11	0	0	17	853	1C2+	
15	1502	0	0	0	0	0	0	1	0	0	1	6	Roman	
15	1504	0	0	0	0	0	0	7	0	0	7	93	C4	
18	1802	0	0	0	0	0	0	7	1	0	8	181	Ro/Sx	
19	1902	1	0	0	1	0	0	2	0	0	4	70	mid C2	
19	1904	3	0	0	0	0	0	7	0	0	10	132	C2	
19	spoil	4	0	0	1	0	0	14	0	0	19	305	mid-1 C2	1
20	2003	8	0	0	3	0	0	3	0	0	14	155	1C2-C3	
21	2102	0	0	1	1	0	0	3	0	0	5	142	1C3-C4	
22	2200	0	1	0	0	0	0	0	0	1	2	40	Med	
23	2303	1	0	0	1	0	0	7	0	1	9	142	1C2-C3/Med	
23	us	0	0	0	0	0	0	3	0	0	3	82	C3-C4	
24	2401	1	0	1	1	0	0	33	0	0	36	767	1C2+	
24	2403	3	0	0	0	0	0	0	0	0	3	12	1C2	
24	2407	0	0	2	0	0	0	14	0	0	16	190	1C2-C3	
24	2409	1	0	0	0	0	0	18	0	0	19	1092	? C2	
24	2409	0	0	0	1	0	0	6	0	0	7	41	1C2+	
24	spoil	0	2	0	3	0	0	20	0	0	25	475	C2-C3	
26	2601	0	0	0	0	0	1	0	0	0	1	30	C3+	1fc
31	3100	0	0	0	1	0	0	1	0	0	2	27	mid C2+	
32	3200	0	0	0	0	0	0	0	0	1	1	10	?pmed	
32	3202	0	0	0	2	0	0	4	0	0	6	164	mid C2+	
33	3301	0	0	0	0	0	0	20	0	0	20	214	C3+	
33	3302	1	0	0	2	0	1	14	0	0	18	476	mid-late C2	
33	spoil	0	0	0	1	0	0	2	0	0	4	147	C2-C3	
34	3401	0	0	0	1	0	0	2	0	0	3	24	mid C2+	

Table 1: Summary of pottery from Ratcliffe-on-Soar, Notts

34	3401	0	0	0	1	0	0	2	0	0	3	24	mid-late C2	
34	3402	2	0	1	0	0	0	0	0	0	3	31	IC3-C4	4
34	3402	0	0	1	0	0	0	0	0	0	1	3	?IC3-C4	x4 fc
34	3404	0	0	0	0	0	0	1	0	0	1	5	Roman	
34	3404	0	0	0	0	0	0	1	0	0	1	5	Roman	
35	3503	0	0	0	0	0	0	5	0	0	5	106	Roman	
35	3503	0	0	0	0	0	0	5	0	0	5	106	C2	
36	3602	2	0	1	0	0	0	7	0	6	16	123	Med	
36	3603	0	0	0	0	0	0	3	0	0	3	182	Roman	
36	3603	0	0	0	0	0	0	3	0	0	3	182	Roman	
36	spoil	0	0	0	1	0	0	9	0	0	10	117	Roman	
36	spoil	0	0	0	1	0	0	9	0	0	10	117	mid C2+	
37	3701	0	0	0	0	0	0	1	0	4	5	39	Ro/Med	1
37	3701	0	0	0	0	0	0	0	0	5	5	39	Med	1
37	3704	0	0	0	0	0	0	1	0	0	1	71	Roman	
38	3801	0	0	0	0	0	0	3	0	0	3	39	C2+	
38	3802	4	1	0	0	0	0	14	0	0	19	433	C2+	1
38	spoil	0	0	0	0	1	0	0	0	0	1	3	IC3-C4	
39	3901	0	0	0	1	0	0	15	0	0	16	101	C2-C3	1
39	3903	0	0	0	0	0	0	5	0	0	5	11	C2	1
39	spoil	0	0	0	0	0	0	1	0	0	1	6	Roman	
40	4003	1	0	1	0	0	0	29	0	0	31	382	mid C2+	
40	4010	3	0	0	0	0	0	0	0	0	3	114	C2	
40	spoil	2	0	1	0	0	0	15	0	0	18	185	C3	
49	4900	0	0	0	0	0	0	1	0	0	1	10	?Roman	
50	5001	0	0	0	0	0	0	1	0	6	7	30	Med	
56	5600	0	0	0	1	0	0	0	0	1	2	53	Ro/?Med	
56	5602	0	0	0	0	0	0	0	0	4	4	50	Med	
56	5604	0	0	0	0	0	0	1	7	0	8	44	?post-Ro	
56	5606	0	0	0	0	0	0	0	0	4	4	11	?Med	
56	5608	0	0	0	0	0	0	0	1	0	1	2	?post-Ro	
56	5616	0	0	0	0	0	0	0	0	1	1	2	Med	
57	5701	0	0	0	0	0	0	0	0	1	1	11	?Med	
58	5801	0	0	0	0	0	0	3	0	0	3	84	C2+	
58	5803	0	0	0	0	0	0	8	0	0	8	25	C2+	
59	5901	0	0	0	0	0	0	1	0	0	1	2	C2+	
60	6000	0	0	0	0	0	0	6	0	0	6	10	Roman	1

[illegible][illegible]

**Appendix iii**

**Table 2: Assessment results for charred plant remains from Red Hill Marina, Ratcliffe on Soar**

Sample Number	Context	Sample Vol. (L)	Context Type	Bone	Charcoal	Charred Plant remains observed (flot only)		Further Analysis	Comments on Flot
						Grain	Chaff		
1	1101			-	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
2	1105			-	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
3	1103			-	-	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
4	2304			-	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
5	2003			-	+	+++	-	NO	100% of the sample scanned. The sample contains wheat grains ( <i>Triticum</i> CF. <i>spelta</i> .) charcoal and modern root. ASSESSED AS SATISFACTORY.
6	2102			+	+	-	-	NO	100% of the sample scanned. The sample contains bone fragments, charcoal and modern root. ASSESSED AS POOR.
7	3402			-	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
8	3201			+	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
9	3802			-	+	+	-	NO	100% of the sample scanned. The sample contains 1 grain of barley ( <i>Hordeum vulgare</i> ) slag, charcoal and modern root and metal spheres. ASSESSED AS POOR.
10	5603			-	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
11	3504			+	-	-	-	NO	100% of the sample scanned. The sample contains fragments of bone, charcoal and modern root. ASSESSED AS POOR.
12	2405			+	+	-	-	NO	100% of the sample scanned. The sample contains fragments of bone, charcoal and modern root. ASSESSED AS POOR.
13	5503			-	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
14	4010			-	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.
15	6801			-	+	+	-	NO	100% of the sample scanned. The sample contains a few grains of wheat ( <i>Triticum</i> sp.), charcoal and modern root. ASSESSED AS POOR.
16	6506			-	+	+++	-	NO	100% of the sample scanned. The sample contains grains of oat ( <i>Avena</i> sp.) and wheat ( <i>Triticum</i> CF. <i>spelta</i> ) charcoal and modern root. ASSESSED AS RICH.
17	6605			+	+	-	-	NO	100% of the sample scanned. The sample contains charcoal and modern root. ASSESSED AS POOR.

Key: n/a – no information available. + = < 10 items, ++ = 10 – 30 items, +++ > 30 items.

## Appendix iv

## THE IRON SLAG AND RELATED DEBRIS by Lynne Keys (Aug 2007)

## Methodology

Almost 2.4kgs of slag and related debris were presented for examination. Most had been recovered by hand during excavation although some came from soil samples (shown as ^ in the spreadsheet). For this report the assemblage was examined by eye and categorised on the basis of morphology alone. Each slag type in each context was weighed; smithing hearth bottoms were individually weighed and measured to obtain statistical information. Quantification data are given in the table below in which weight (wt.) is shown in grams; length (len), breadth (br) and depth (dep) in millimetres.

## Slag table for the iron slag

Ratcliffe on Soar,  
Notts.

BA 1588

tr.	cxt	^	slag identification	wt.	len	br	dep	comment
11	110	1	magnetic residue	4				iron flakes, v. occ. flake hammerscale & fired clay
11	110	3	magnetic residue	1				iron flakes, v. occ. flake hammerscale & fired clay
11	110	2	magnetic residue	3				iron flakes, v. occ. flake hammerscale & fired clay
19	spoil		iron object	37				
19	spoil		undiagnostic	82				
20	200	5	magnetic residue	10				lots hammerscale (flakes & spheres), iron flakes & magnetic clay
21	210	6	magnetic residue	7				hammerscale (flake & occ. large spheres), iron flakes & fired gravel
23	230		vitrified hearth lining	16				
23	230	4	magnetic residue	10				lots hammerscale (flakes & spheres), iron flakes & magnetic clay
24	240		cinder	9				
24	240		fuel ash slag	7				
24	240		vitrified hearth lining	70				
24	240	12	magnetic residue	3				hammerscale (flake & spheres) but more magnetic gravel
24	240		vitrified hearth lining	20				
31	310		undiagnostic	34				
33	330	8	magnetic residue	11				very occ. hammerscale flakes but mostly magnetic gravel
33	330		fuel ash slag	5				

34	340	7 magnetic residue	7				lots hammerscale (flakes & occ. spheres) & magnetic gravel
	2						
34	340	vitified hearth lining	28				
	2						
35	350	11 magnetic residue	1				magnetic gravel
	3						
36	spoil	iron object	58				
38	380	cinder runs	50				
	2						
38	380	fuel ash slag	46				
	2						
38	380	hammerscale	1				broken flake
	2						
38	380	undiagnostic	329				
	2						
38	380	undiagnostic	152				30 half a smithing hearth bottom?
	2						
38	380	vitified hearth lining	371				
	2						
38	spoil	iron object	12				
38	spoil	undiagnostic	25				
39	390	smithing hearth bottom	385	95	80	55	
	1						
39	spoil	iron object	12				separated in bag
39	spoil	smithing hearth bottom	166	75	60	30	
39	spoil	undiagnostic	154				
40	401	14 magnetic residue	3				mainly gravel & fired clay; two hammerscale flakes
	0						
40	spoil	iron object	11				
40	spoil	iron object	5				
40	spoil	undiagnostic	29				
50	500	cinder	30				
	1						
55	550	13 magnetic residue	1				hammerscale spheres, one flake, & magnetic gravel
	4						
58	580	10 magnetic residue	1				mostly magnetic gravel; one hammerscale flake
	4						
58	spoil	iron object	6				
58	spoil	undiagnostic	11				
60	u/s	undiagnostic	36				
65	650	16 magnetic residue	3				magnetic gravel
	7						
66	660	17 magnetic residue	1				one tiny hammerscale sphere but rest is magnetic gravel
	5						
68	680	cinder	2				
	1						
70	700	vitified hearth lining	20				
	2						
38	380	9 ferruginous concretion	13				contains hammerscale
	2						
38	380	9 magnetic residue	21				lots hammerscale (flake & spheres), occ. magnetic gravel
	2						

39	390	15	magnetic residue	27	v. occ. hammerscale (flake & spheres) but mainly fired clay & magnetic gravel
	1				

**Total weight =**  
**2345g**

### Explanation of terms

Activities involving iron can take two forms:

1) *Smelting* is the manufacture of iron from ore and fuel in a smelting furnace. The resulting products are

spongy mass called an unconsolidated bloom (iron with a considerable amount of slag still trapped inside) and slag (waste). The latter may take various forms depending on the technology used: tap slag, run slag, dense slag, or furnace slag.

2a) *Primary smithing* (hot working by a smith using a hammer) of the bloom on a stringhearth (usually near the smelting furnace) to remove excess slag. The bloom becomes a rough lump of iron ready for use; the slags from this process include smithing hearth bottoms and micro-slugs, in particular tiny smithing spheres.

2b) *Secondary smithing* (hot working by a smith using a hammer) of one or more pieces of iron to create an object or repair it. As well as bulk slags, including the smithing hearth bottom, this generates micro-slugs: hammerscale flakes from ordinary hot working of a piece of iron or tiny spheres from high temperature welding to join two pieces of iron.

All these activities produce slag, some diagnostic of the process, others not. Some slag may be described as undiagnostic because it has been broken up during deposition, re-deposition or excavation. Other types of debris in the slag assemblage may be the result of a variety of high temperature activities - including domestic fires - and cannot be taken on their own to indicate iron-working was taking place. These include fired clay, vitrified hearth lining, cinder, and fuel ash slags. However if found in association with iron slag they may be products of the process.

### DISCUSSION OF THE ASSEMBLAGE

There was **no diagnostic smelting slag** amongst the assemblage from Ratcliffe on Soar; **all the diagnostic slag had been produced by iron smithing**. The smithing is likely to have been secondary smithing to make or repair objects.

The hammerscale evidence is greatest in Sample 9 (3802, Trench 38), a context which also produced the largest and most interesting group of bulk slag. Following this, trenches 20, 23, and 34 produced the greatest amount of hammerscale.

Hammerscale (not visible to the naked eye when it is in soil) usually remains in the immediate area of smithing activity (around the anvil and between it and the hearth) when larger (bulk) slags are cleared out. The further away from the focus of smithing or the more re-distributed the deposits containing bulk slags, the less of it there is likely to be. The likelihood is that smithing activity was taking place in or near the areas where hammerscale is greatest. Given that the slag came from occupation layers or pit fills **there is every indication iron smithing was taking place on the site (probably in a building or buildings)**. Structures adjacent to features such as pits or those with substantial deposits of hammerscale and slag may be candidates for forges/smithies.

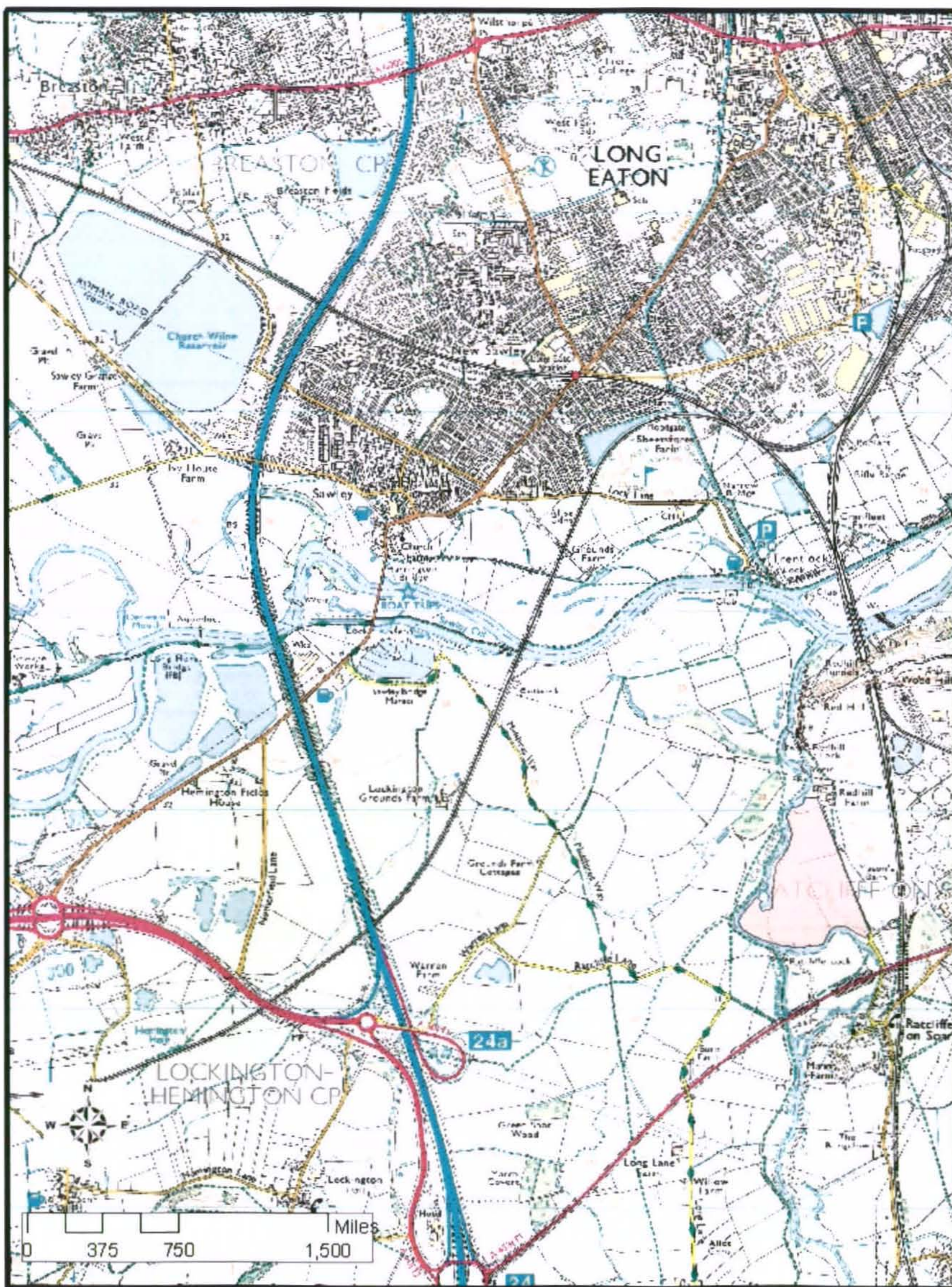


Fig.1

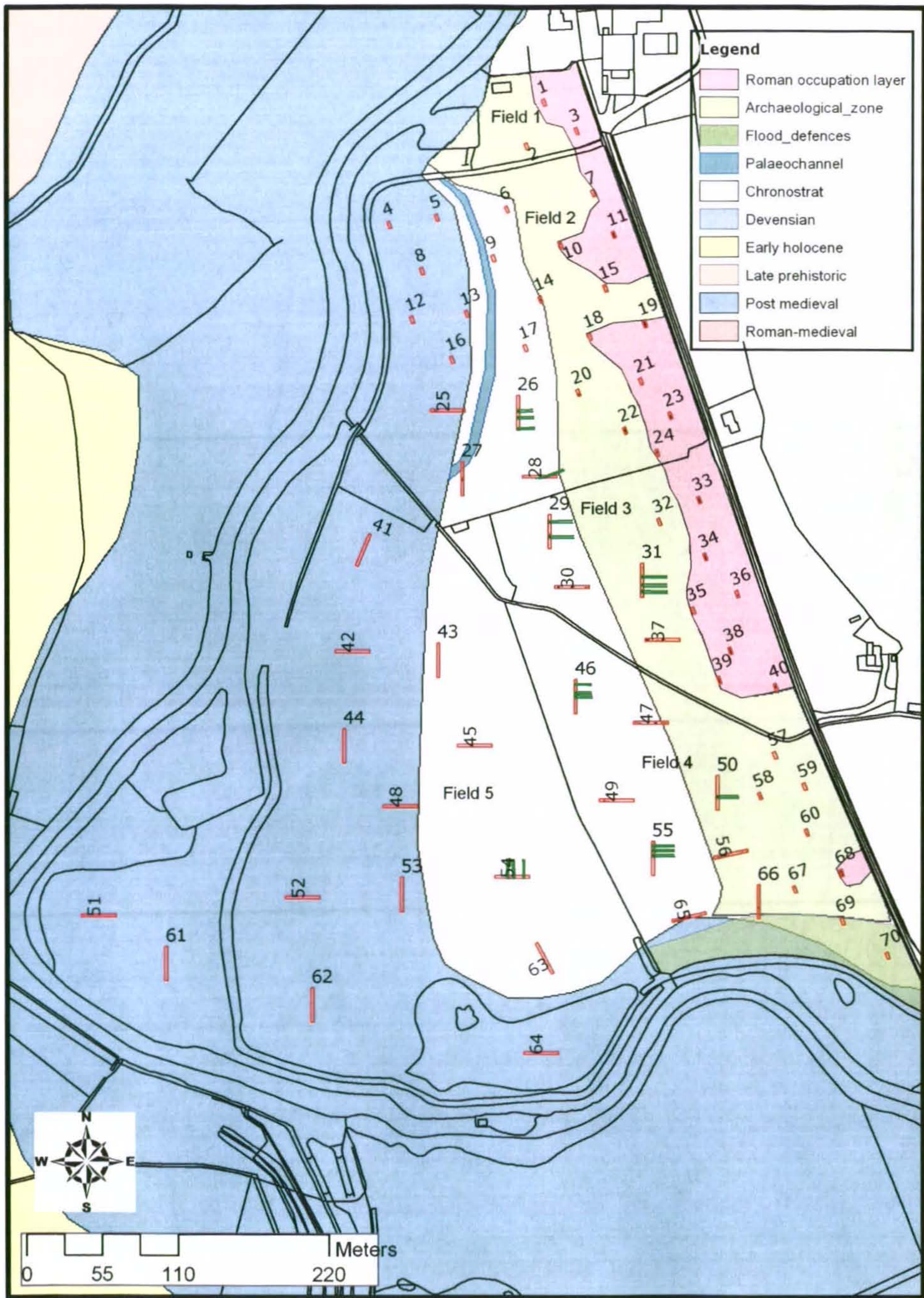


Fig.2

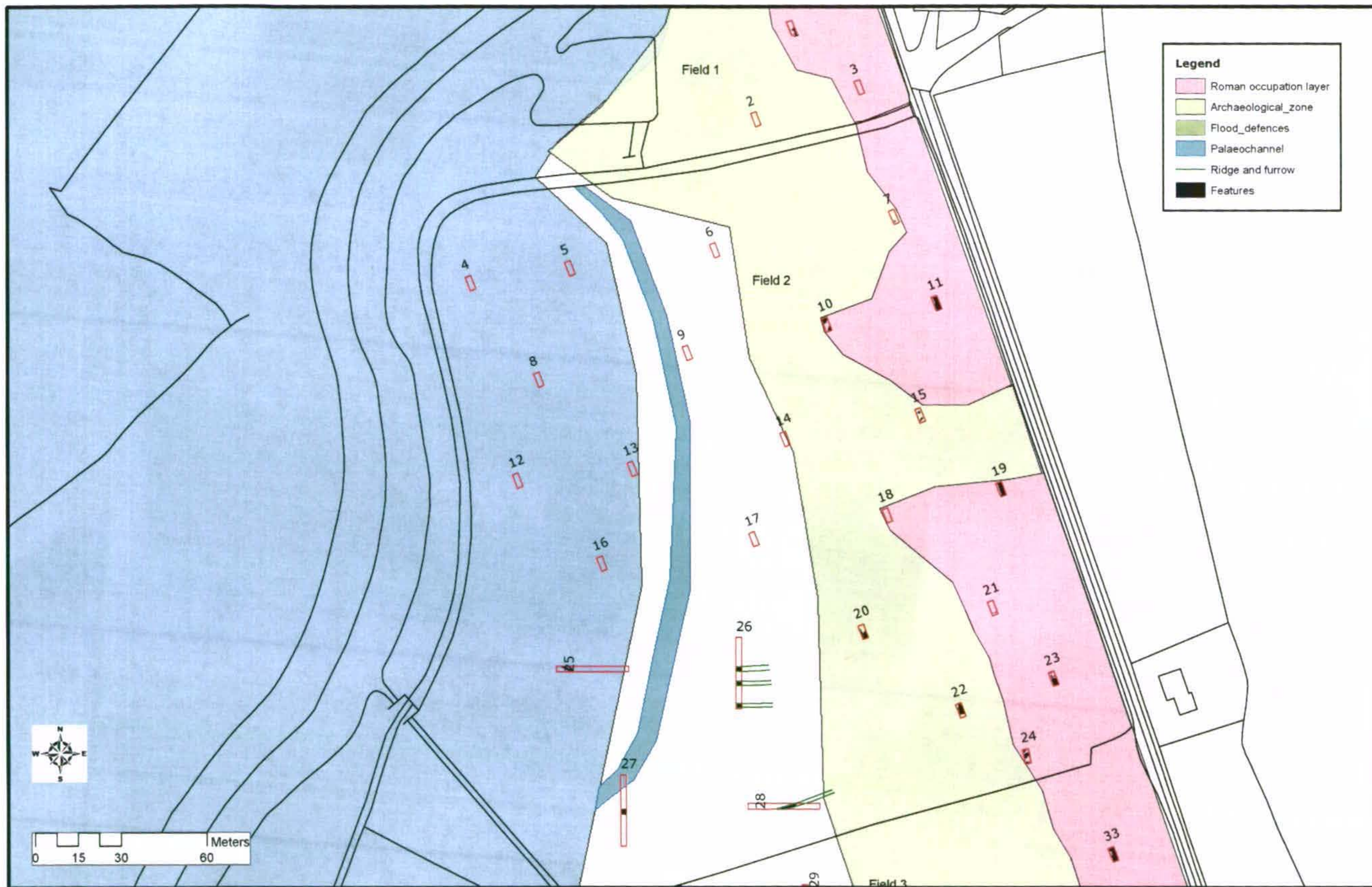


Fig.3

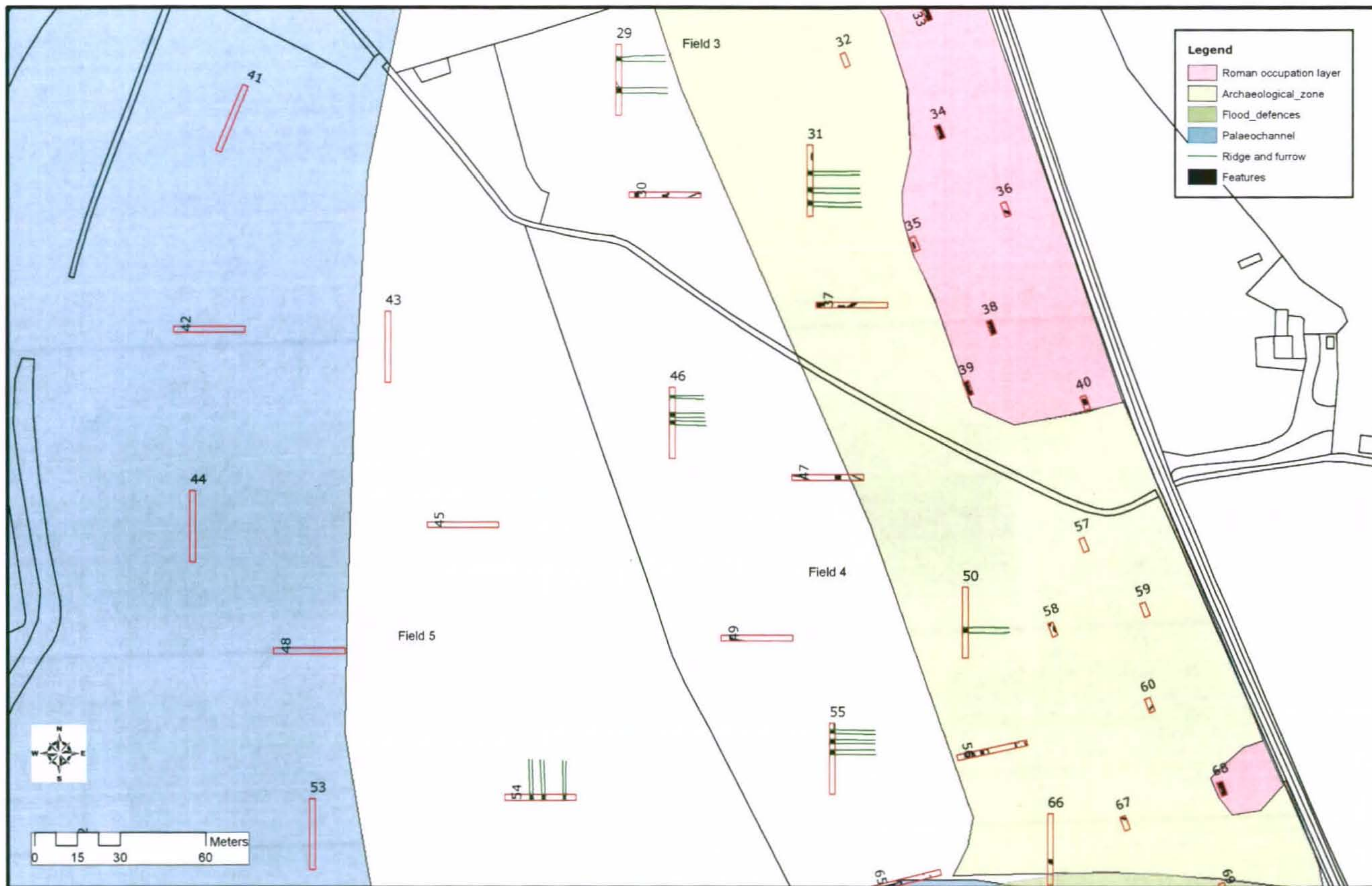
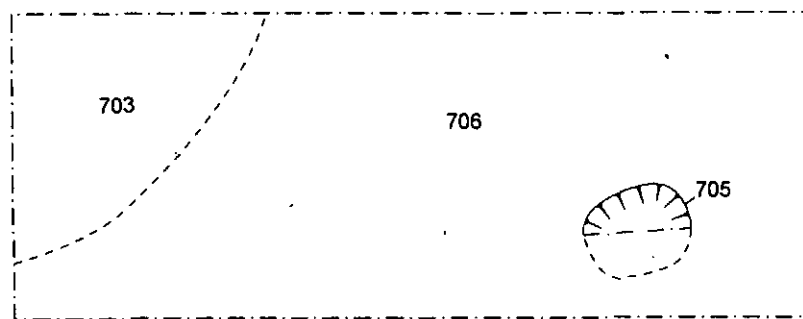
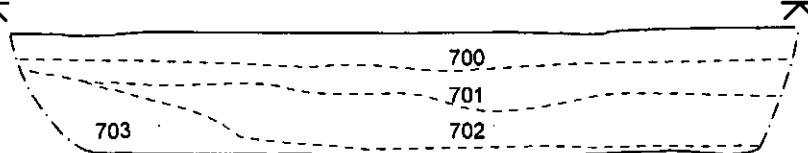


Fig.4

Trench 7

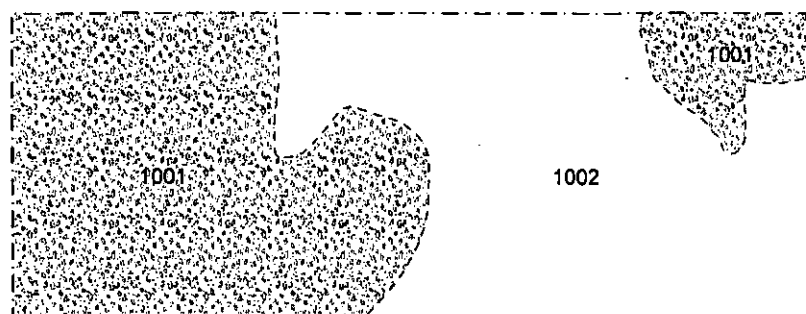


N Trench 7 S



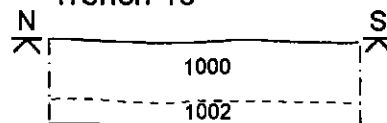
0 2m

Trench 10

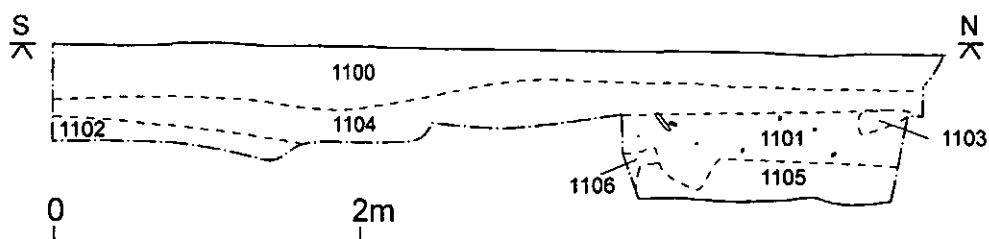


0 2m

Trench 10



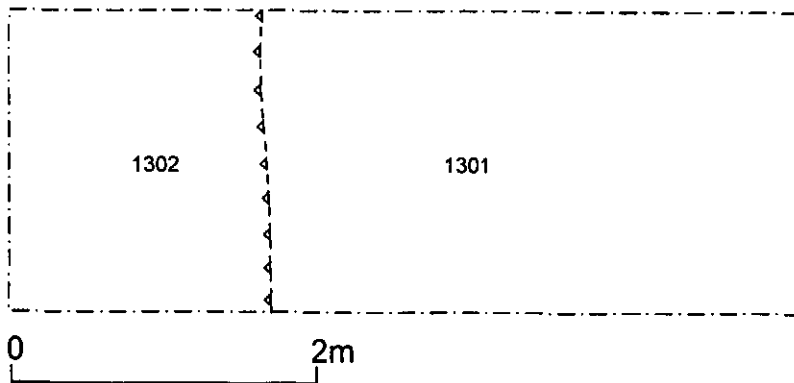
Trench 11



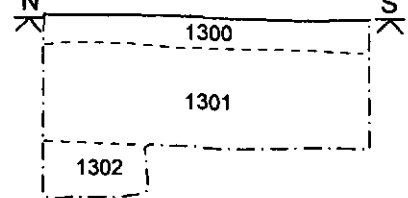
0 2m

Fig. 5

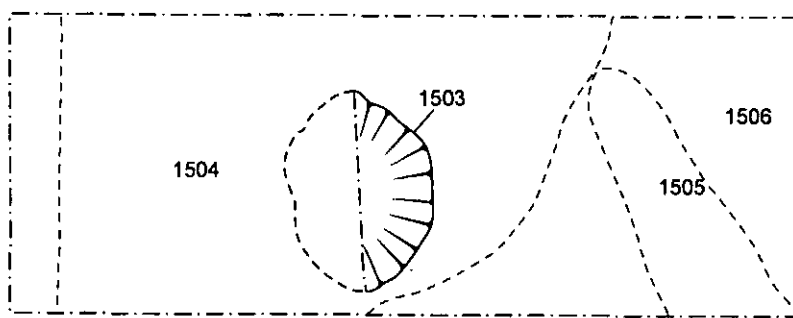
Trench 13



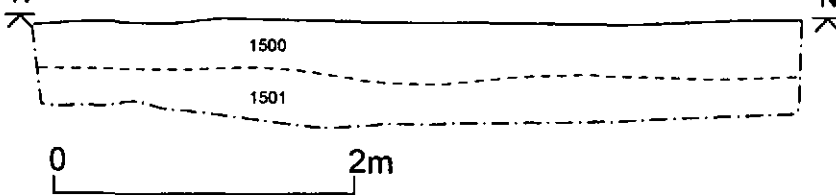
Trench 13



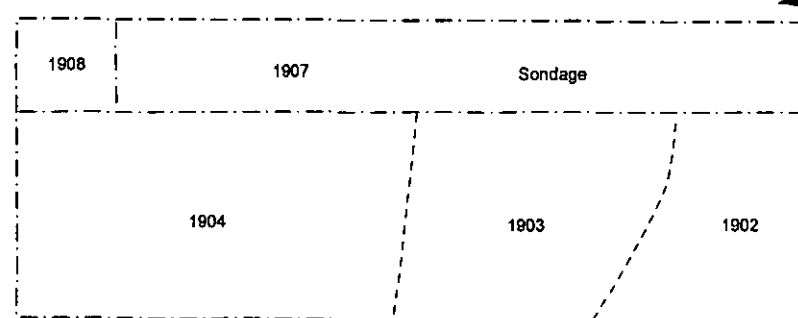
Trench 15



Trench 15



Trench 19



Trench 19

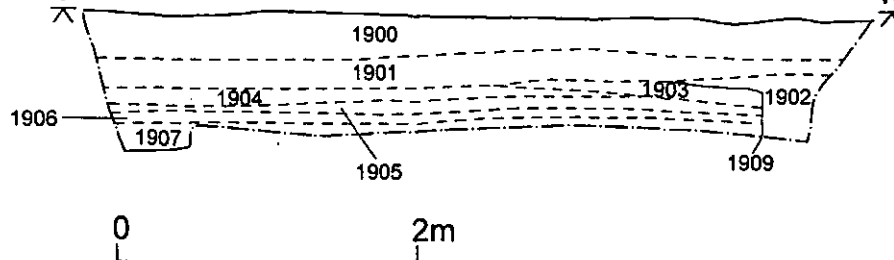


Fig. 6

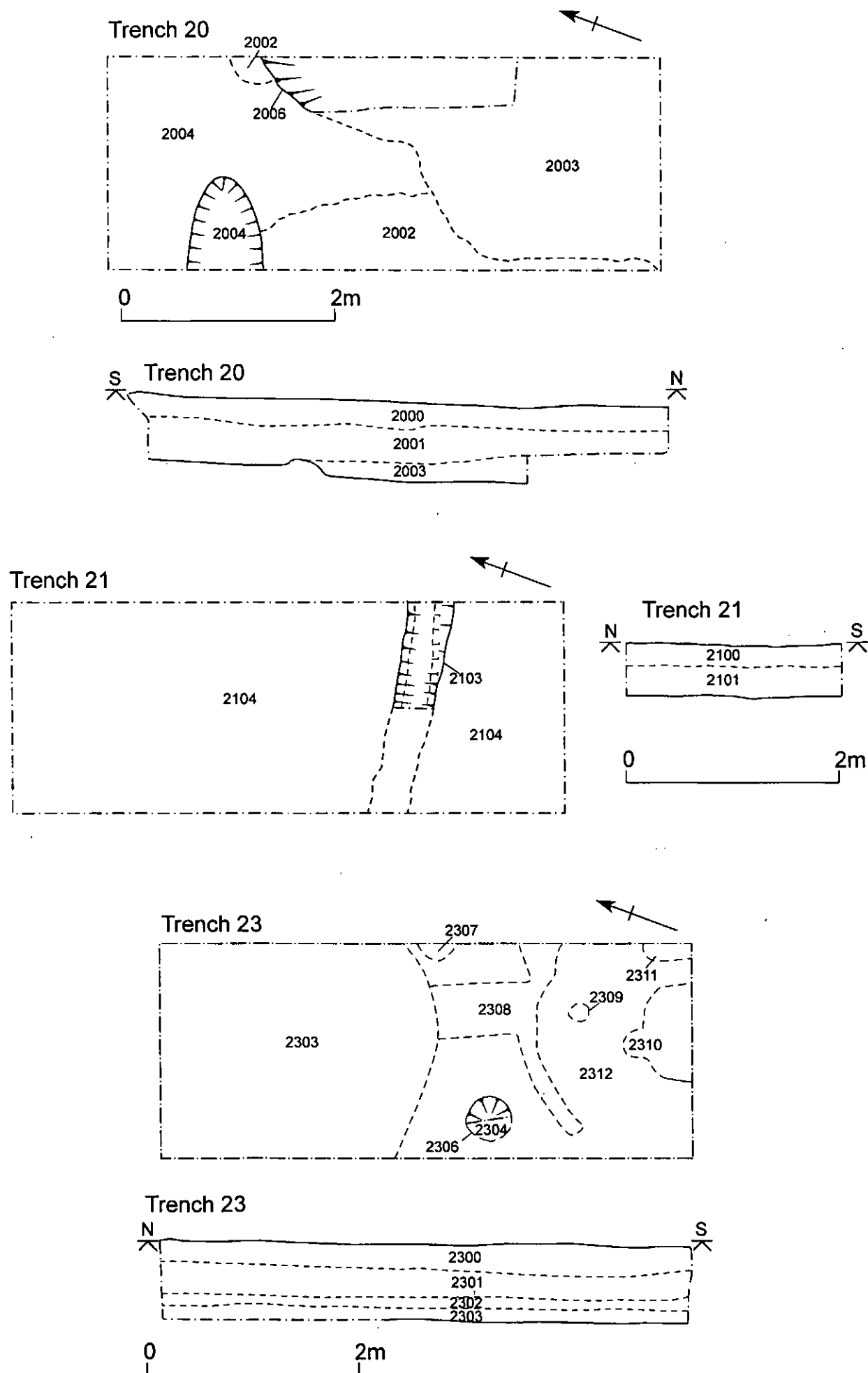
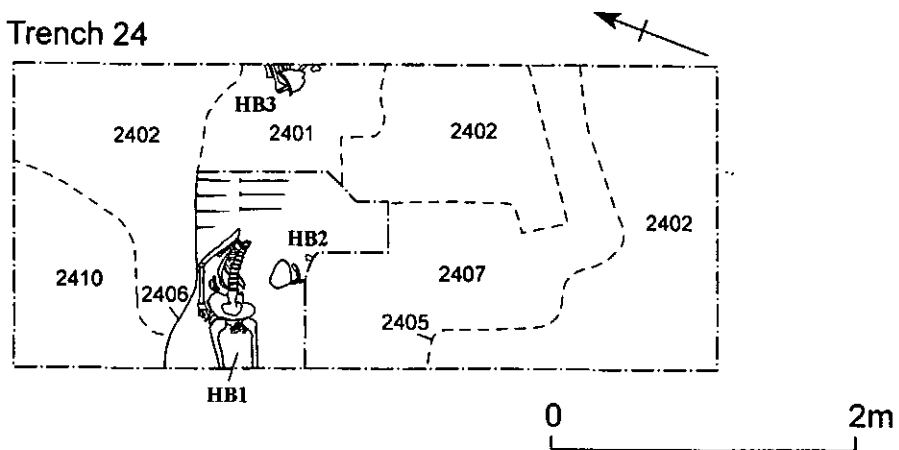
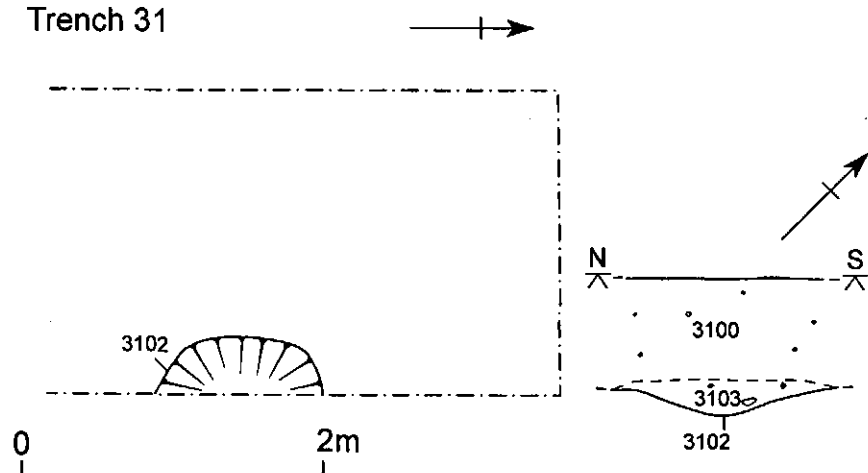


Fig. 7

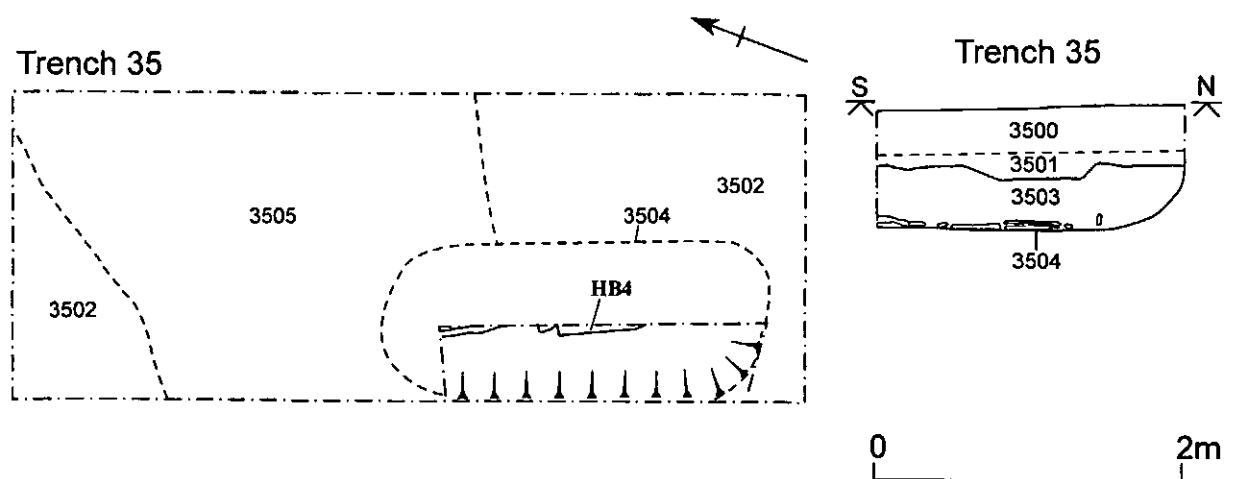
Trench 24



Trench 31



Trench 35



Trench 36

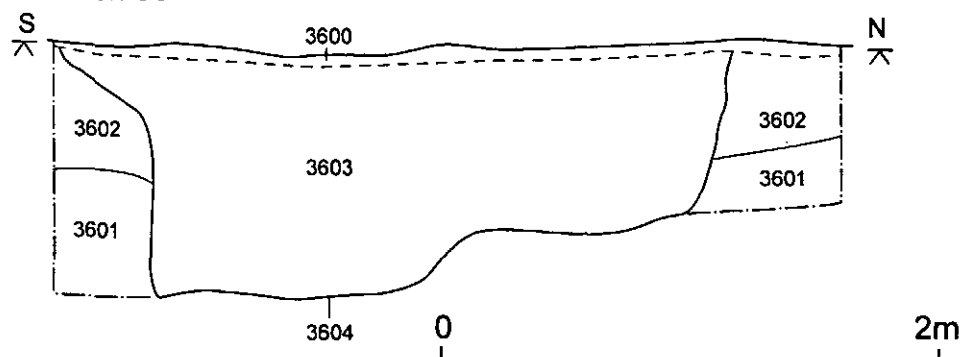


Fig. 8

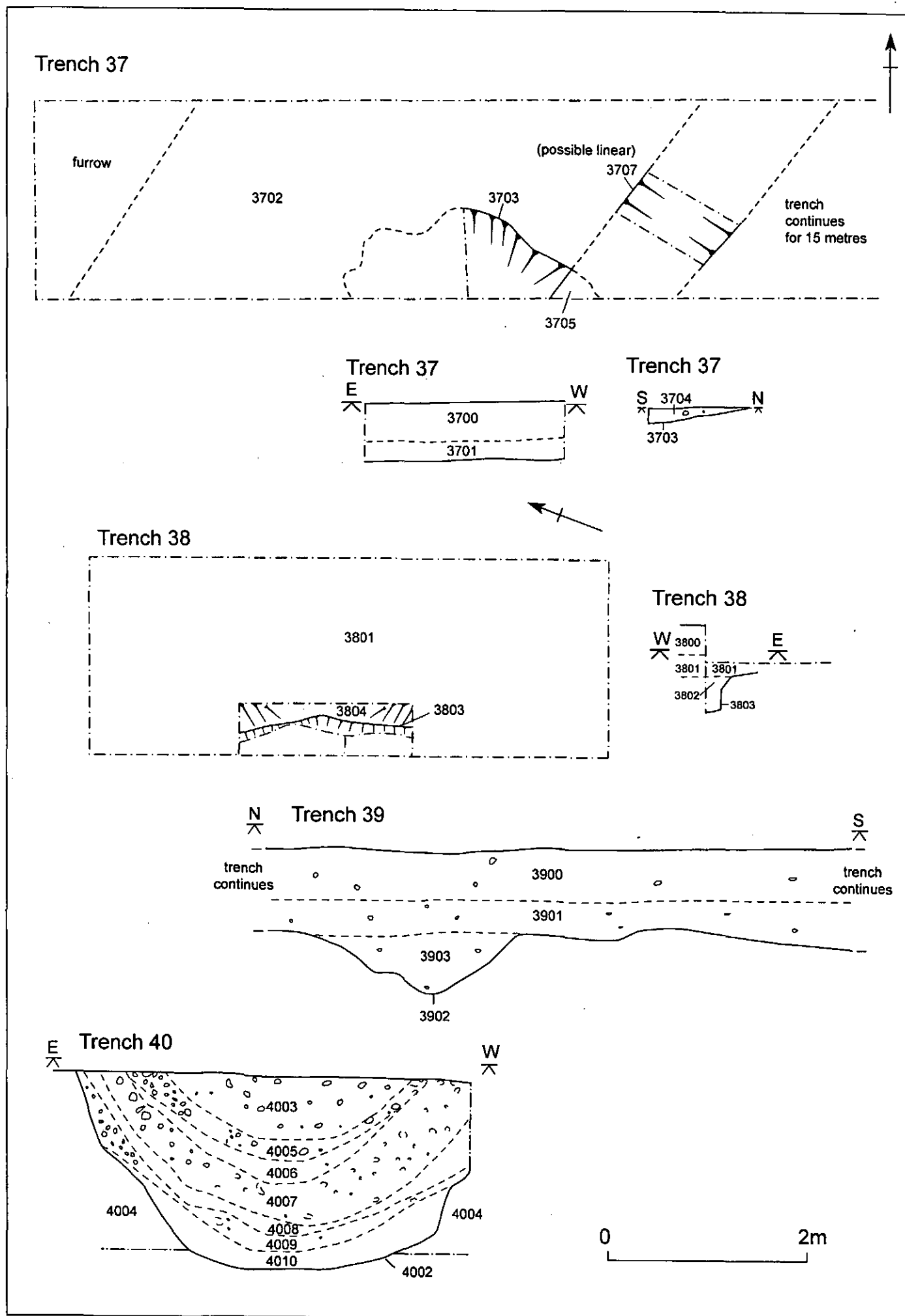


Fig. 9

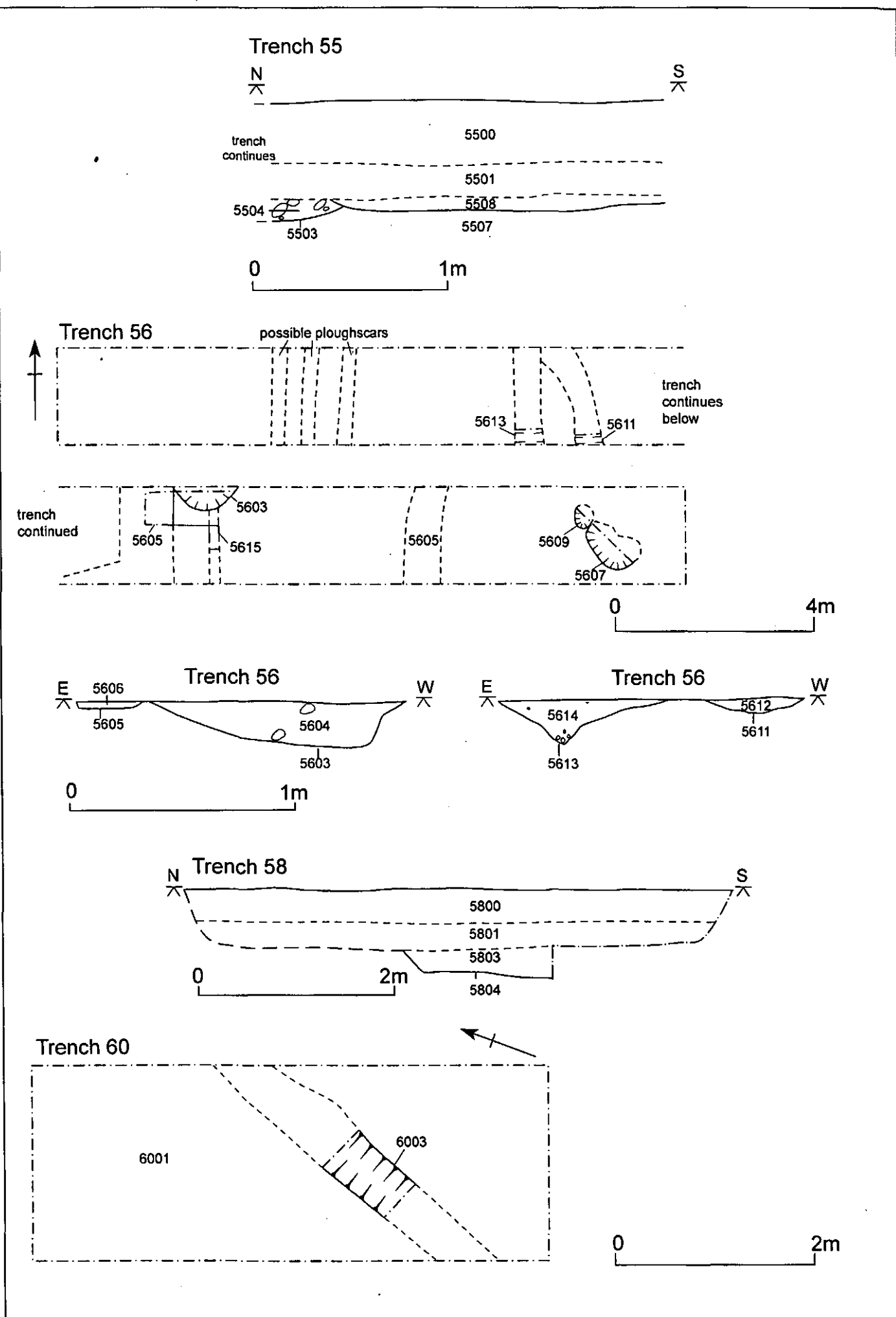


Fig. 10

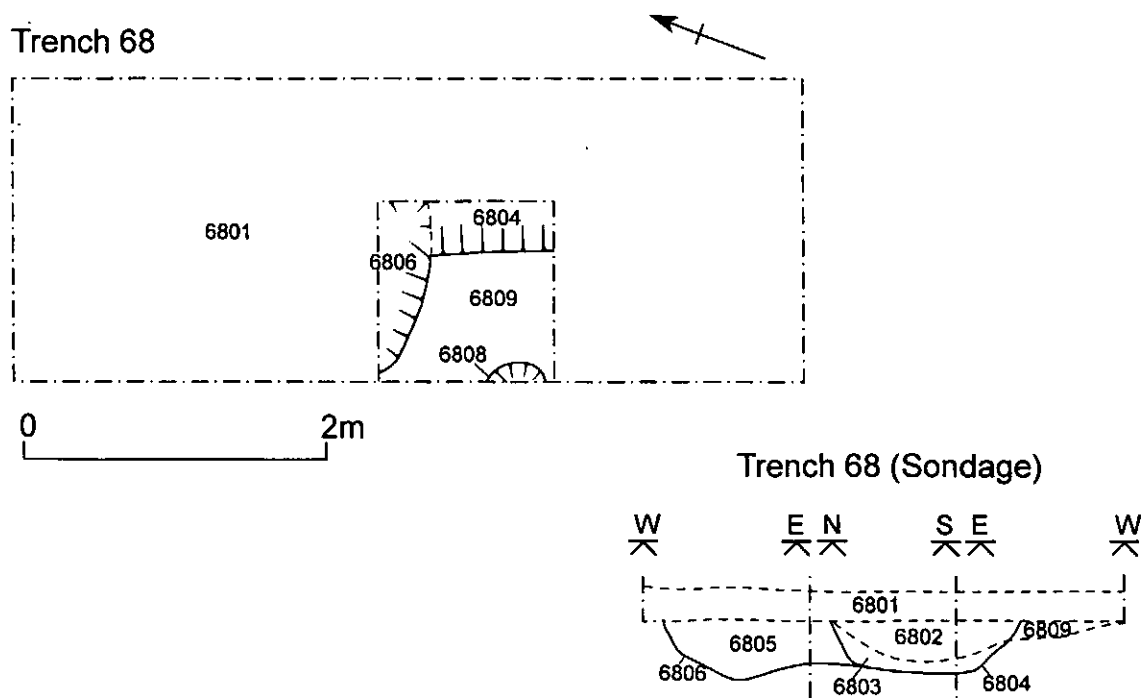
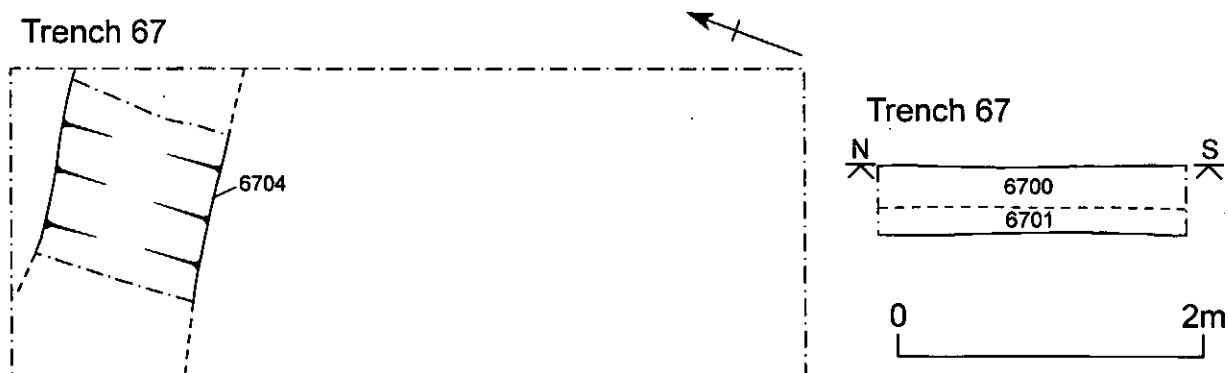
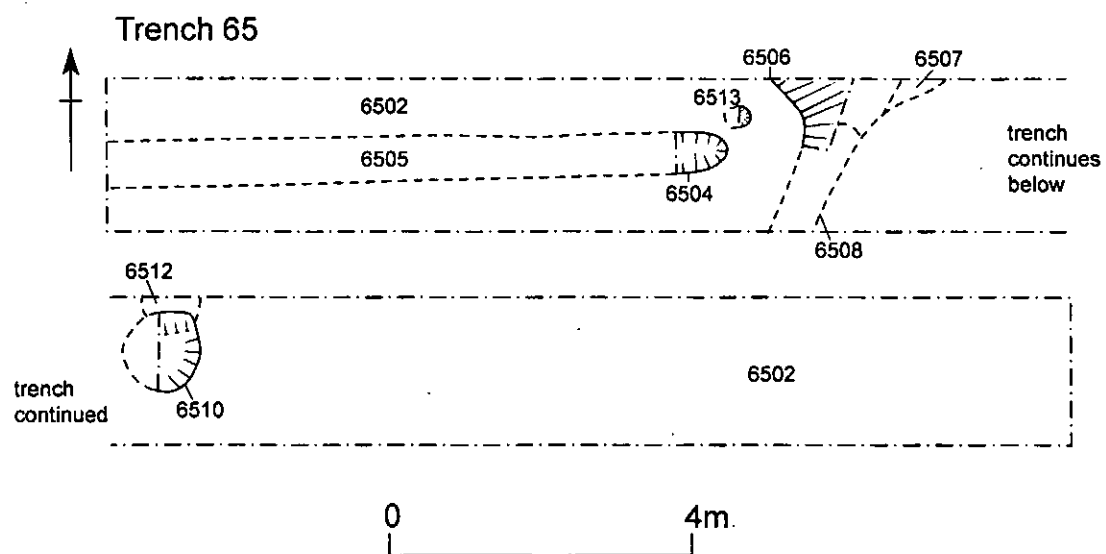


Fig. 11