

*BIRMINGHAM UNIVERSITY
FIELD ARCHAEOLOGY UNIT*

**AN ARCHAEOLOGICAL
EVALUATION
ON LAND AROUND
MEREBROOKSOUGH
ENGINE HOUSE,
WIRKSWORTH,
DERBYSHIRE**

B.U.F.A.U.



Birmingham University Field Archaeology Unit
Project No. 587
March 1999

**AN ARCHAEOLOGICAL EVALUATION
ON LAND AROUND
MEREBROOKSOUGH ENGINE HOUSE,
WIRKSWORTH, DERBYSHIRE**

1999

by
Gino Bellavia & Gary Coates

For further information please contact:
Simon Buteux, Iain Ferris or Gwilym Hughes (Directors)
Birmingham University Field Archaeology Unit
The University of Birmingham
Edgbaston
Birmingham B15 2TT
Tel: 0121 414 5513
Fax: 0121 414 5516
E-Mail: BUFAU@bham.ac.uk
Web Address: <http://www.bufau.bham.ac.uk>

Contents

	Page
1.0 SUMMARY	1
2.0 INTRODUCTION	1
3.0 SITE LOCATION	1
4.0 ARCHAEOLOGICAL BACKGROUND	1
5.0 OBJECTIVES	2
6.0 METHOD	2
7.0 THE EVALUATION TRENCHES	2
8.0 ASSESSMENT OF THE ARCHAEOLOGICAL IMPORTANCE OF THE SITE	4
9.0 RECOMMENDATIONS	5
10.0 ACKNOWLEDGMENTS	5
11.0 REFERENCES	5

Appendix 1: Specification For An Archaeological Evaluation, Land Around
Merebrooksough Engine House, Wirksworth, Derbyshire

List of Figures

Figure 1	Site Location
Figure 2	Site Boundaries
Figure 3	Trench Locations
Figure 4	Sections

**AN ARCHAEOLOGICAL EVALUATION ON LAND AROUND
MERE BROOKSOUGH ENGINE HOUSE,
WIRKSWORTH, DERBYSHIRE**

By Gino Bellavia & Gary Coates

1.0 Summary

A total of six trial trenches was excavated by staff from the Birmingham University Field Archaeology Unit in March 1999 on the land surrounding Merebrooksough Engine House, Wirksworth (hereafter referred to as the site) and ahead of the proposed planning application for the land by Haslam Homes. The purpose of the evaluation was to assess the extent to which any archaeological deposits survived and the nature of these deposits, although within the course of the evaluation no archaeological features were identified. The area investigated had been subject to a degree of disturbance and levelling due to modern activity on the site.

2.0 Introduction

This report describes the results from six evaluation trenches on an area of open ground in the northern half of the site. This area was designated as Zones 1 and 2 in the desktop assessment and as an area of potential archaeological survival (Coates 1998, 7-9). The work was carried out in preparation for a planning application to assess the impact of the housing development on any surviving archaeology. Birmingham University Field Archaeology Unit was commissioned to carry out the excavations to define the survival, nature, extent and significance of any archaeological deposits encountered. The work was carried out in accordance with a specification prepared by B.U.F.A.U., Appendix 1, and conformed to the Institute of Field Archaeologists' *'Standard and Guidance for Archaeological Field Evaluations'*.

3.0 Site Location (Figs. 1 & 2)

The site lies to the north of the town centre of Wirksworth and encompasses an area of land bounded to the east by a disused mineral railway track and to the south by a pond and the Fanny Shaw Playing Field. To the west, Thorntree and Ecclesbourne cottages border the proposed development area. The ruin of Merebrooksough Engine House (NGR SK 2284 5457) is in the centre of the development area, but within a plot of land under different ownership and subject to separate planning permission.

4.0 Archaeological Background

A more detailed account of the archaeological background of the site and its locality can be found in the desk-top assessment (Coates 1998), a summary of which is included here.

There is no recorded evidence of prehistoric activity in Wirksworth and the earliest dated artifacts suggest transitory Roman activity in the area, although there remains a

possibility that this was a Roman lead mining district referred to as *Latudarium* in the *Ravenna Cosmography*.

The importance of this region for lead mining is reflected in the late Anglo-Saxon references to the granting of land in return for the annual payment in lead, and in the discovery of a 9th-century A.D. coffin lid and a fragment of a 10th-century Saxon cross in St. Mary's Church, Wirksworth.

Lead mining continued throughout the Medieval and Tudor period at Wirksworth and was an influential factor in the development of Wirksworth as a market town. The town and the surrounding villages also developed as centres for mining communities in the area. Expansion in the lead mining industry in the 17th century led to a subsequent surge in development in the town with a substantial number of 17th-century buildings surviving. This development of Wirksworth continued into the 18th century, from which time dates the Merebrookough mine, which, along with the other mines recorded, reflects a hiatus in the lead mining history of the region. In the mid-to-late-19th century, the mines became too deep to exploit profitably against foreign imports and this resulted in a decline in the lead mining industry.

Up to the beginning of the 18th century the site was an area of open fields, but the cartographic sources from the 19th century fail to conclusively detail the land use changes which the documentary sources suggest start with the Merebrookough in 1772. Clearly by 1880 the mine is extant along with the engine house and mineral railway track. By 1898 allotments are present on the site, as are the recently-built Ecclesbourne and Thomtree Cottages. This is essentially the current state of the site.

5.0 Objectives

The general objectives of the trial trenching were to define the survival, nature, extent and significance of any archaeological deposits encountered, so that appropriate mitigation strategies could be devised.

6.0 Method

Six trial trenches were excavated by machine, ranging from 15-17m in length. The overburden in the trenches was removed by a J.C.B. Excavator, fitted with a 1.6m wide, toothless ditching bucket and operated under archaeological supervision. Any significant archaeological deposits were excavated by hand and recorded on pro-forma record cards supplemented by scale plans, section drawings and photographs, where appropriate. Where no archaeological deposits were identified the stratigraphy was recorded and photographed. These records comprise the site archive, which, at the time of writing, is currently stored at Birmingham University Field Archaeology Unit. After completion of the excavations the trenches were backfilled by machine.

7.0 The Evaluation Trenches (Fig. 4)

The Survey Area had been used until quite recently as allotments and so a layer of very rich brown to black silty organic topsoil covered the site and is present over the

area of each trench (called variously 1000, 2000, 3000 etc). The natural subsoil encountered was Ashover and Cbatworth Grit.

Trench 1 (not illustrated)

The entire trench was covered with a 0.2m to 0.4m-thick deposit of topsoil (1000), reducing in thickness down slope towards the east. Underlying the topsoil was a much-disturbed layer (1001), with patches of redeposited natural, clay lenses and brick rubble. At the eastern end of this trench, and under 1001, were two patches of green brown silty clay containing some charcoal flecking (1002). These were interpreted as root disturbance or natural hollows filled with 1002. The subsoil (1003) was identified at a depth of between 0.8m to 0.5m below the present ground surface.

The overall level of the ground drops from 161.54 A.O.D. at the top of the western end of the trench to 159.72m A.O.D. at the eastern end, and would seem to indicate a natural break of slope that has been subsequently disturbed by the modern activity on the site.

Trench 2 (Fig. 4)

Most of the trench was covered with a 0.1 to 0.3m-thick deposit of topsoil (2000). However, towards the northern end of the trench, a layer of hardcore (2001) lay above the topsoil and was identified as a modern trackway drive into the site. Underlying 2000 was a much-disturbed layer (2002) with patches of redeposited natural, clay lenses and brick rubble. A lens of shale debris was visible in the east-facing section. Below 2002 was the subsoil (2003), at between 0.4-0.7m below present ground.

The level of the ground varies from 160.46m A.O.D. at the top of the southern end of the trench to 160.8m A.O.D. at the northern end.

Trench 3 (not illustrated)

The entire trench was covered with a shallow, 0.05 to 0.3m-thick deposit of topsoil (3000). Below 3000 was a very mixed layer (3001) with shale, clay and yellow gravel lenses. Also present were clinker fragments, possibly associated with modern industrial activity. Below 3001 was the subsoil (3002).

The level of the ground varies from 159.64m A.O.D. at the top of the eastern end of the trench to 158.33m A.O.D. at the western end.

Trench 4 (Fig. 4)

The entire trench was covered with a 0.3 to 0.4m-thick deposit of topsoil (4000). Over most of the western end of the trench this topsoil sealed a disturbed layer of topsoil containing redeposited natural (4001). However, towards the eastern end of the trench, the natural subsoil sloped down rapidly and represented an earlier break in slope, with a corresponding increase in the depth of overlying stratigraphy. Underlying 4000 was a layer of hardcore in a matrix of clayey silt (4002), which may have represented the levelling of the ground for a driveway at the back of the existing houses and the edge of the allotments. To the east, under the hardcore was a layer of redeposited natural clay (4003), overlying a 0.3m-thick, disturbed layer of brown clay with hardcore inclusions (4004). Under this layer was a dark grey to black clay (4005) with an oily aroma which had a maximum depth of 0.2m.

Below layer 4005, and also under 4002, was a 0.25-0.35m-thick deposit of brown friable silty clay (4006) sloping downhill. This layer also contained a small amount of evenly-distributed charcoal flecks and was the only context in this trench to produce some artifacts; these included clay pipe stems and a fragment of bowl, along with modern blue/white glazed ware. All the evidence indicated that this layer (4006) was probably a buried garden soil. Below 4006 was a 0.1m-thick, very-disturbed clayey silt (4007), with orange clay and black clay lenses. Overlying the subsoil and directly under 4007 and 4006 was a layer (4008) of pure shale fragments with iron panning present.

The level of the ground drops from 158.33m A.O.D. at the top of the western end of the trench to 156.86m A.O.D. at the eastern end.

Trench 5 (not illustrated)

This trench was located further down the slope towards the railway line, and was excavated to a safe depth of 1.5m. The entire trench was covered by a 0.2-0.3m-thick layer of topsoil (5000). Below this topsoil was a series of deposits associated with 19th and 20th-century dumping and levelling. The earliest of these deposits was 5007, a green brown silty clay (5007), visible in the northern end of the trench. Above this were two mixed silty clay deposits (5005-5006) containing modern artifacts. These were sealed by a grey hardcore (5004), approximately 0.5m thick. Visible in the middle of the trench, above the hardcore, was a 0.5-0.8m-thick rubbish deposit containing rubble and modern domestic debris. The southern end of the trench was characterised by a mixed, clay levelling layer (5001).

The level of the ground ranges from 154.69m A.O.D. at the top of the northern end of the trench to 153.54m A.O.D. at the southern end.

Trench 6 (not illustrated)

The entire trench was covered with a layer of topsoil (6000), 0.3m to 0.4m thick and directly above the subsoil (6001). Some ephemeral patches of shale, along with a large patch of clinker at the northern end of the trench, were present under the topsoil.

The level of the ground ranges from 160.23m A.O.D. at the top of the northern end of the trench to 159.68m A.O.D. at the southern end.

8.0 Assessment of the Archaeological Importance of the Site

No surviving archaeology was identified in the six evaluation trenches excavated on this site.

The higher part of the site east of Cromford Lane was characterised by a shallow topsoil deposit, on average 0.2-0.4m thick, with areas of extensive disturbance probably created by the former use of the land as allotments and some associated construction for the adjacent Cromford Lane.

The lower part of the site, towards the railway line, was sampled by Trench 5. The character of the stratigraphy in this trench suggests formation by periods of dumping

of mixed soils, followed by re-excavation and/or levelling of the area. This level of activity and its resulting high disturbance, along with the lack of pre-19th or 20th-century artifacts, suggests that there is a minimal possibility of earlier archaeology surviving, but this has not been conclusively resolved by the trial trench here.

9.0 Recommendations

The area investigated by the trial trenching indicates that there is no surviving archaeology pre-dating the 19th and 20th centuries, and even this is contained within very disturbed levelling and dumping deposits. It is therefore unlikely that any archaeology survives on this site and no further excavation is recommended. The trial trenches provide a strong indication of the lack of archaeological deposits, but a targeted watching brief on any groundworks here might be considered an appropriate mitigation response, a final decision on which must be made in consultation with the archaeological officers of Derbyshire County Council.

10.0 Acknowledgments

The excavation was supervised by Gary Coates, assisted by Gino Bellavia, Christine Winter and Rachel Heaton. The project was managed by Iain Ferris. The illustrations were prepared by Nigel Dodds and the report was edited by Iain Ferris.

The excavations were sponsored by Haslam Homes and we are grateful to Doug Beadling and Andy Watson for their assistance. Thanks also to Dr. Andrew Myers, County Sites and Monuments Officer, Derbyshire County Council for his assistance.

The JCB was provided by Haslam Homes for which we are grateful.

11.0 References

Coates, G. 1998 *An Archaeological Desk-Based Assessment and Walkover Survey of Land Around Merebrooksough Engine House*. BUFAU Report No 573.

Appendix 1

SPECIFICATION FOR AN ARCHAEOLOGICAL EVALUATION: LAND AROUND MERE BROOKSOUGH ENGINE HOUSE, WIRKSWORTH, DERBYSHIRE

1 INTRODUCTION

This document provides the specification for an archaeological field evaluation of land around Merebrooksough Engine House, Wirksworth to be undertaken in advance of a planning application for residential building development of the area. The specification has been requested by Haslam Homes. The appointed archaeological contractor will undertake fieldwork in line with the Institute of Field Archaeologists' 'Standard and Guidance for Archaeological Field Evaluations', with approval in advance by the County Archaeological Officer (CAO).

2 AIMS OF THE EVALUATION

2.1 Background

There has been a desk-top assessment (Coates 1998; BUFAU Report No.573) and the developer has provided a copy of a Geotechnical/Contamination survey (Eastwood and Partners 1998). Details of the desktop study will not be repeated here, save that six zones of Archaeological Potential were identified, of which only Zones 1 and 2 are recommended for evaluation. Zone 6-directly around the engine house-is of great interest but is outside the present development proposal.

The evaluation will aim to assess the presence/absence, extent, depth, date and condition of any archaeological features or deposits present in the development zone, in order for any necessary mitigation strategy to be defined by DCC.

3 AREAS 1 and 2 INVESTIGATIONS (see attached figure)

Archaeological fieldwork in Areas 1 and 2 will comprise trial trenching- seven trenches will be opened- and testing of topsoil artefact content by sample sieving as trenching progresses.

Duration of fieldwork: maximum 5 days. Team of Supervisor + 3 Site Assistants.

3.1 Archaeological Objectives

The field evaluation will provide sufficient evidence for the CAO to advise the Local Planning Authority if the area contains evidence for prehistoric or historic settlement and other activities particularly connected to mineral extraction, its age, character, state of preservation and the impact which the proposed development will have.

3.2 Methodology

All excavation, whether by machine or by hand, and all recording of archaeological features and deposits, will be carried out to IFA-related archaeological standards. The evaluation can be envisaged to fall into two stages.

3.3 Programme of trial trenching

A programme of trial trenching and sample excavation of exposed features is based on the desk-top study results. Layout of trenches is given on the attached figure. Following removal of topsoil by machine, under archaeological supervision, all cleaning and excavation will proceed by hand. Samples of topsoil along the length of each trench -at regular intervals- will be sieved for recovery of artefacts. All archaeological deposits will be excavated sequentially to a sufficient extent to fulfill the aims of the evaluation. All features will be sampled; soil samples for environmental analysis will be taken on a pragmatic basis.

3.4 Finds

Artefact collection policy will be concerned with the provision of adequate samples for meeting the objectives of the work. All finds will be retained, cleaned, marked, catalogued and packed in materials, as appropriate, for long term storage. Analysis of finds will be undertaken, as necessary, by suitably qualified archaeologists.

3.5 Human Remains

In the event of human remains being encountered site works will cease and the Coroner's office notified. Such remains will remain *in situ* until authorised to continue by the Coroner.

3.6 Arrangements for Site Monitoring

The CAO will be notified of the commencement of the evaluation fieldwork providing at least 5 working days notice, or as agreed. In addition, the CAO will be appraised of the progress of the evaluation by the archaeological contractor and invited to inspect any archaeologically significant deposits.

4 REPORTING

4.1 Project Report

A final report draft will be produced and submitted to the LPA and CAO within three weeks of the completion of the fieldwork. This applies equally if the project does not identify archaeological deposits or features. A copy of the final report, to consist of both a printed and a digital copy, will be deposited with the County Sites and Monuments Record within six months of the completion of the fieldwork.

The report will contain as a minimum:

- i) Site NGR (to at least 8 figures), site name
- ii) Date and duration of fieldwork
- iii) Name of archaeologist(s) Directing and Supervising the fieldwork
- iv) Report author and date
- v) Summary of the background and objectives of the fieldwork
- vi) Detailed account of techniques employed
- vii) Plans of the site showing the results from all trenches

- viii) Interpretative plans if required
- ix) Selected illustrations of artefacts retained
- x) Record of retained and field recorded artefactual material
- xi) Analysis of nature and significance of the archaeology
- xii) Statement on the arrangements for the deposition of the site archive, including the artefactual material. Where appropriate, accession numbers for the archive should be obtained and presented in the report.

4.2 Project Archive

Where archaeological deposits and/or features are encountered a project archive will be prepared in accordance with the requirements specified in Management of Archaeological Projects, Appendix 3 (HBMG 1991) and in accordance with the Guideline for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990). The archive will contain, as a minimum:

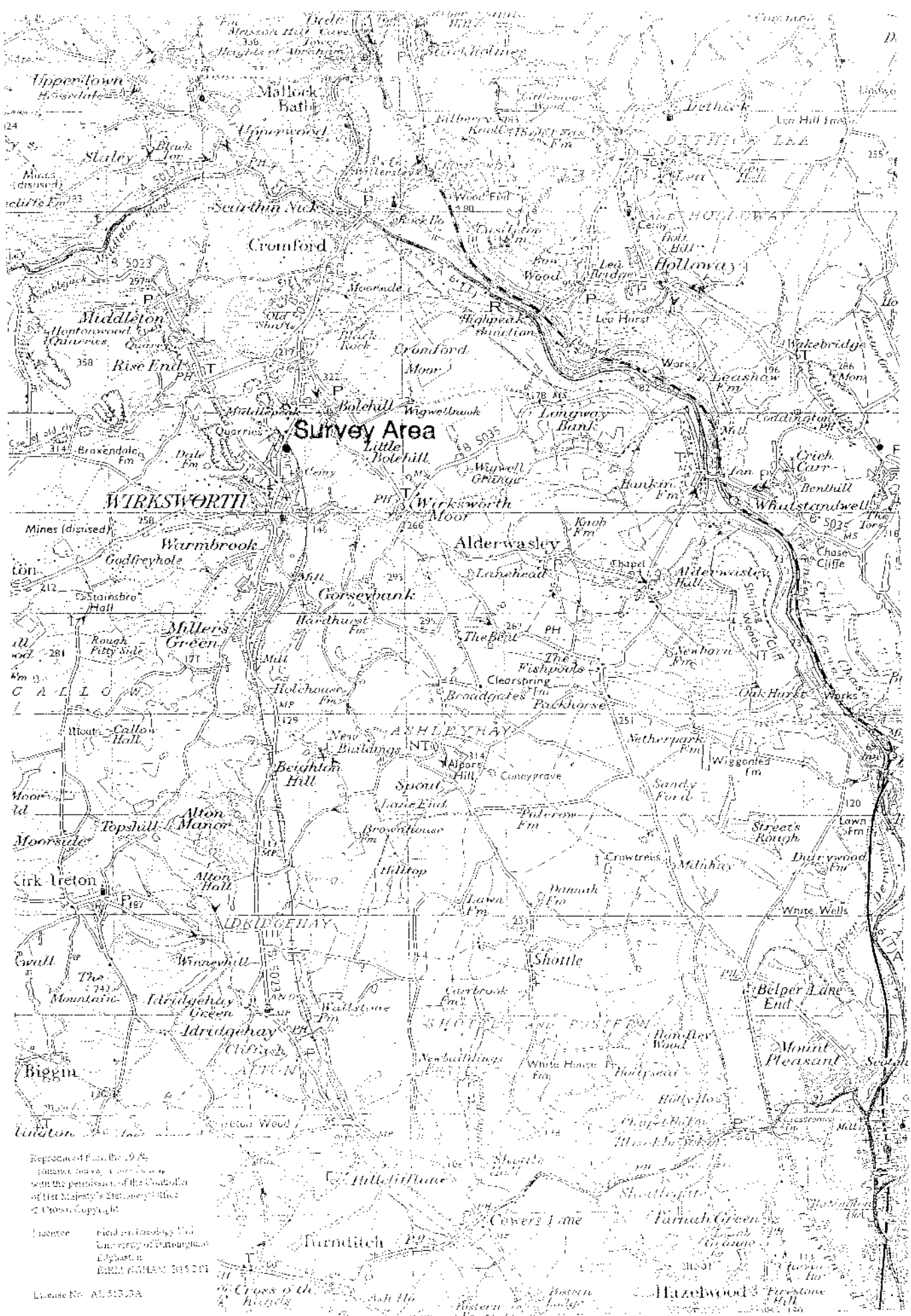
- i) A guide to the archive
- ii) A summary of the project
- iii) A copy of the final report
- iv) All records, plans, drawings, photographs, analyses produced during the project
- v) Retained artefactual and environmental material (subject to client consent), suitably indexed, conserved and packaged.

4.3 Project Staff

The project will be monitored for BUFAU by I. Ferris BA MIFA (Director and Research Fellow) and will be undertaken by a Supervisor (to be named) and three Site Assistants. Finds and environmental specialists will be involved as appropriate. The archaeological contractor will abide by the Code of Practice of the Institute of Field Archaeologists. BUFAU is a Registered Organisation with the IFA.

I Ferris
26.2.99

Figures



Reproduced from the 1974
 Ordnance Survey 1:50,000 scale
 with the permission of the Controller
 of Her Majesty's Stationery Office
 © Crown Copyright

Author: *[Name obscured]*
 University of Birmingham
 Department of Geography
 Birmingham B15 2TT

License No: ALA100A

Fig 1

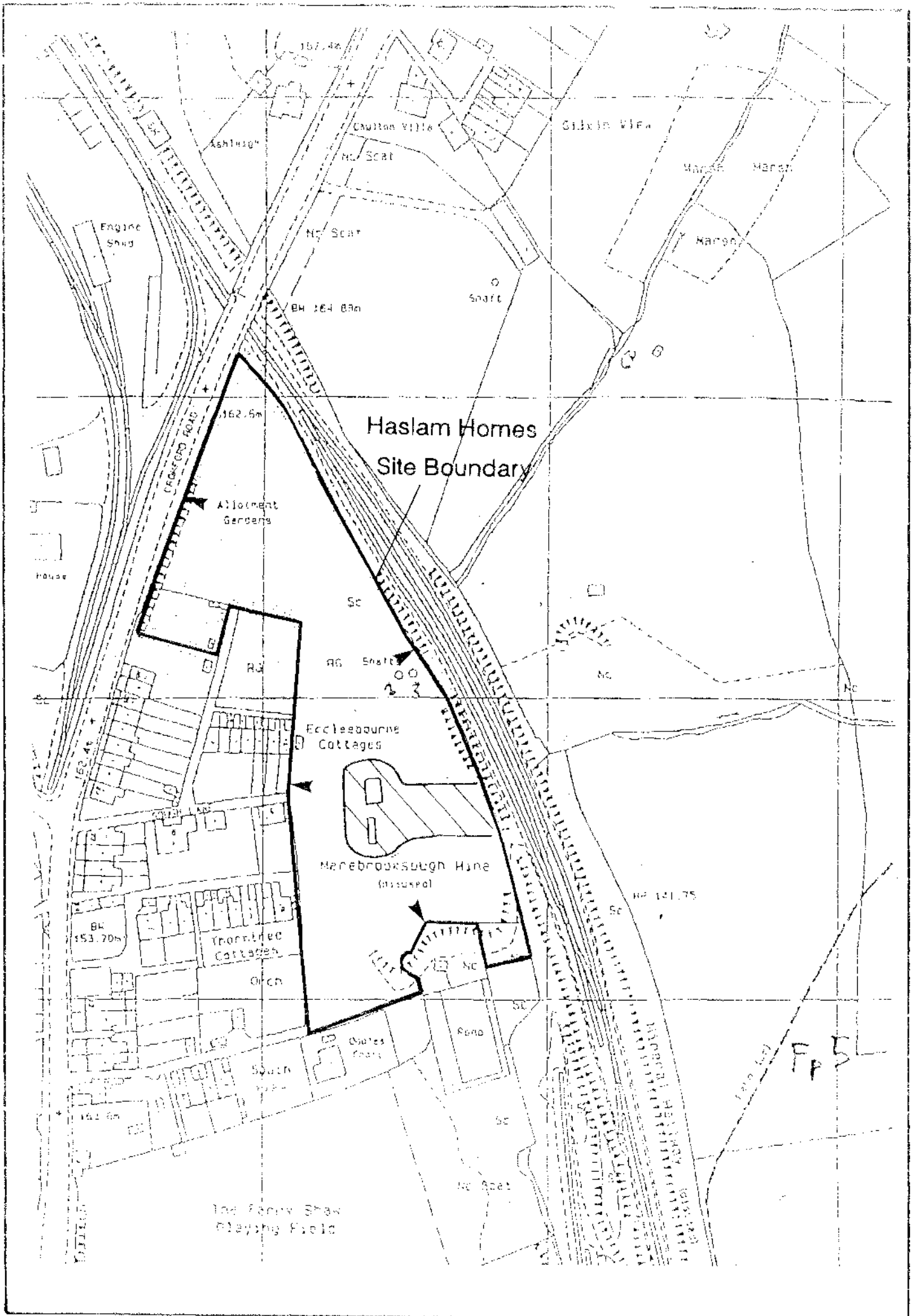


Fig 2

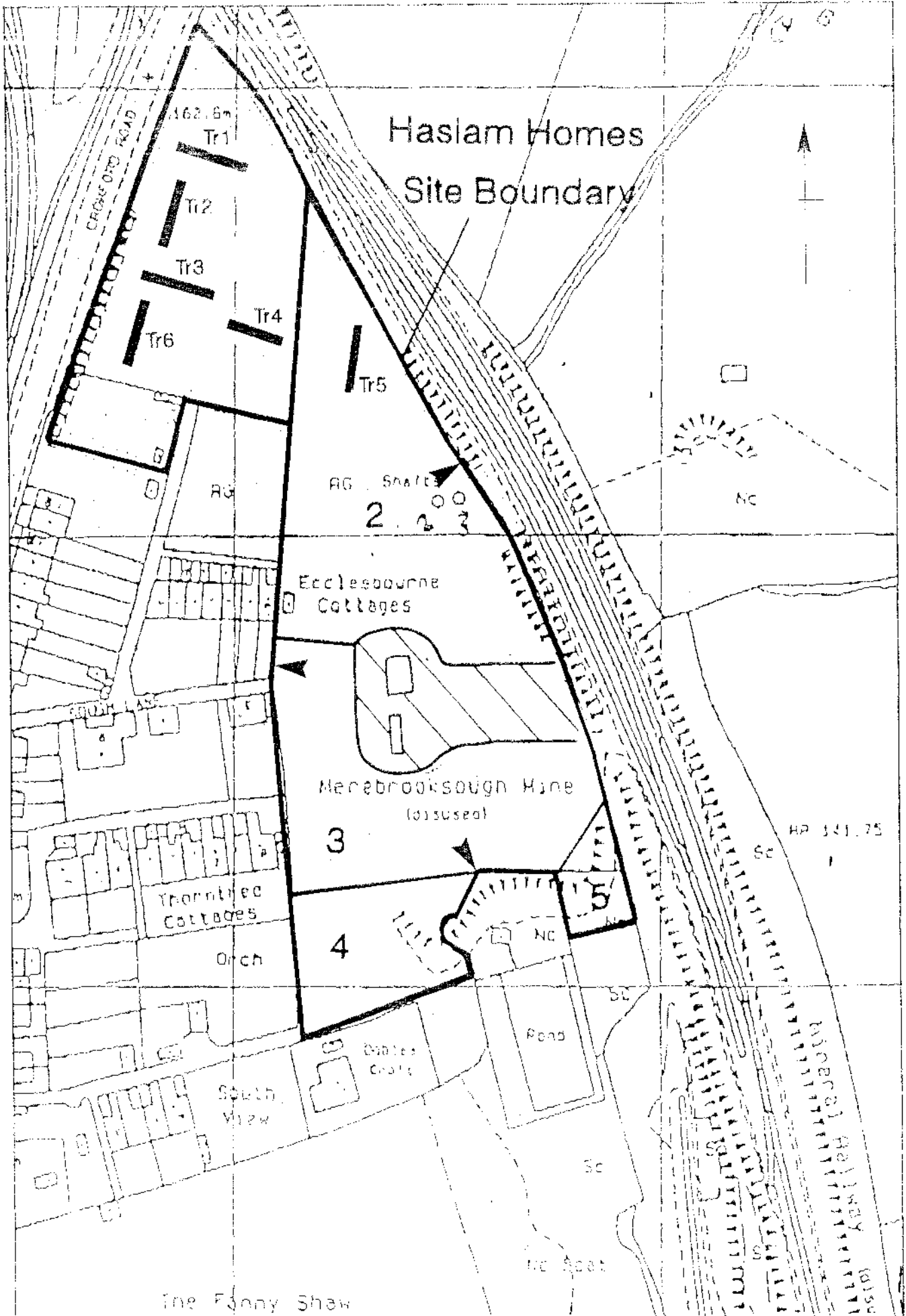
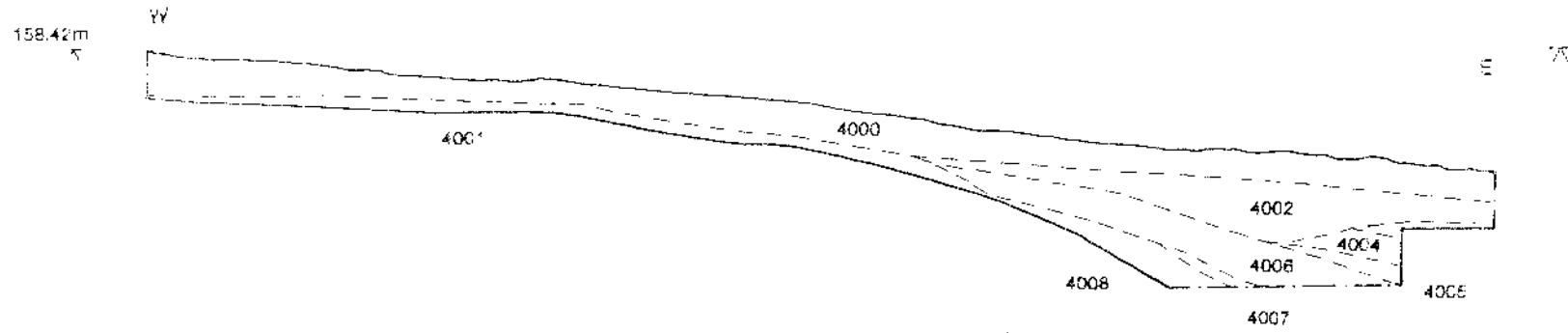


Fig. 3

TRENCH 4 South Facing Section



TRENCH 2 East Facing Section

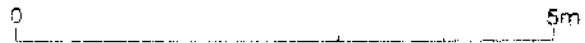
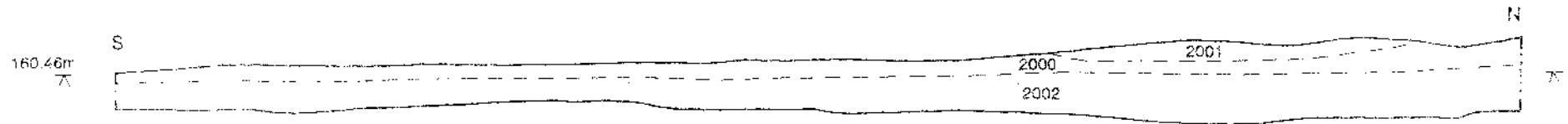


Fig. 4