

*NORTHAMPTONSHIRE ARCHAEOLOGY
NORTHAMPTONSHIRE COUNTY COUNCIL
NOVEMBER 2001*

*A6 ROTHWELL AND DESBOROUGH BYPASS
ARCHAEOLOGICAL ASSESSMENT: STAGE 5
GEOPHYSICAL SURVEY
FINAL REPORT
VOLUME 1: TEXT*



**Northamptonshire
County Council**
Planning, Transportation & Environment

County Planning, Transportation & Environment Officer
Stephen Heaver BA(Hons) MBA MRTPI

Northamptonshire Archaeology
2 Bolton House
Wootton Hall Park
Northampton NN4 8BE

Tel: (01604) 700493/4
Fax: (01604) 702822

Will Rogers
URS Thorburn Colquhoun
200 Harpur Centre
Horne Lane
Bedford
MK40 1TS

URS CONSULTANTS		
DATE: 29 NOV 2001		
DIV.		
INITIAL	DATE	ACTION



Awarded for excellence



INVESTOR IN PEOPLE

Please ask for
Andy Mudd

Tel (01604)

Our ref

01/1085

Your ref

Date

23rd November 2001

We may have to pass on any additional costs if access is not available when needed. There is also no provision for fencing other than temporary 'netlon' fencing. I understand that Tilhill Forestry expect stock to be moved from the fields during site clearance, but if this is not achievable for the trenching, we may need to erect stockproof fencing whose expense will be passed on, at cost.

Finally, I find I need to pass on some additional costs for my time at attendance at two meetings and management time which cannot be covered by the fieldwork budget. This amounts to **£420 + VAT**.

I look forward to hearing from you at your earliest convenience.

Yours sincerely,

Andy Mudd
For Head of Northamptonshire Archaeology

enc.

cc. Simon Amor – Highways Agency
David Freke - RPS

Project Manager A Mudd BA MIFA
 Text A Mudd, M Holmes MA & P Masters
 Illustrations P Masters BA IIND PIFA
 Fieldwork I Fisher BSc, M Holmes, P Kent MSc
 P Masters, S Morris

QUALITY CONTROL

	Print name	Signed	Date
Checked by	A Mudd	<i>A Mudd</i>	26/11/01
Verified by	A Chapman	<i>A Chapman</i>	26/11/01
Approved by	S Parry	<i>S Parry</i>	26/11/01

CONTENTS (VOLUME 1)

1	INTRODUCTION	4
2	GEOPHYSICAL SURVEY METHOD	5
3	RESULTS	5
4	DISCUSSION	7
5	BIBLIOGRAPHY	7

ILLUSTRATIONS (VOLUME 2)

FIG. 1	SITE LOCATION, 1:15000
FIG. 2	NORTHERN END OF ROUTE, ECKLAND LODGE FARM, RESULTS, 1:2500
FIG. 3	CENTRAL SECTION OF ROUTE, RIVER JORDAN, RESULTS, 1:2500
FIG. 4	CENTRAL SECTION OF ROUTE, ARTHINGWORTH ROAD, RESULTS, 1:2500
FIG. 5	CENTRAL SECTION OF ROUTE, MANOR FARM, RESULTS, 1:2500
FIG. 6	CENTRAL SECTION OF ROUTE, ROWELL WOOD, RESULTS, 1:2500
FIG. 7	SOUTHERN END OF ROUTE, A14 INTERCHANGE, RESULTS, 1:2500
FIG. 8	SITE 13, RESULTS (DETAIL), 1:1250
FIG. 9	SITE 15, RESULTS (DETAIL), 1: 1250
FIG. 10	TRIAL TRENCH LOCATIONS, ECKLAND LODGE FARM, 1:2500
FIG. 11	TRIAL TRENCH LOCATION, RIVER JORDAN, 1:2500
FIG. 12	TRIAL TRENCH LOCATION, ARTHINGWORTH ROAD, 1:2500
FIG. 13	TRIAL TRENCH LOCATION, MANOR FARM, 1:2500
FIG. 14	TRIAL TRENCH LOCATION, RIVER ISE, 1:2500
FIG. 15	TRIAL TRENCH LOCATION, ROWELL WOOD, 1:2500
FIG. 16	TRIAL TRENCH LOCATION, A14 INTERCHANGE, 1:2500

**A6 ROTHWELL AND DESBOROUGH BYPASS
ARCHAEOLOGICAL ASSESSMENT: STAGE 5
GEOPHYSICAL SURVEY
FINAL REPORT**

Summary

Detailed geophysical survey has been undertaken on a total length of 3.5 km along the proposed route of the A6 Rothwell and Desborough bypass. The work, undertaken in areas not previously subject to detailed geophysical survey, has resulted in the discovery of three additional sites of archaeological interest. These comprise; an enclosure with associated ring ditches (Site 13), an area of possible industrial activity (Site 14) associated with the previously discovered Iron Age Site 9, and a pattern of enclosures with a pit alignment (Site 15). This report provides a summary of the finding from all three sites.

1 INTRODUCTION

- 1.1 Northamptonshire Archaeology undertook a fifth stage of archaeological fieldwork along the route of the proposed A6 Rothwell and Desborough Bypass, Northamptonshire (Fig 1). This comprised detailed geophysical survey on areas of the road corridor not previously subject to such survey, a length of approximately 3.5km. These areas had undergone a geophysical reconnaissance with largely negative results (NA 2001a), although detailed survey on some potential sites yielded unexpected results in the form of an unsuspected Iron Age settlement (Site 9) and several minor features (NA 2001b). Under advice from the Highways Agency's Archaeological Adviser, further detailed work was undertaken in order to minimise the risk of encountering unforeseen sites at a later stage.
- 1.2 The work was undertaken on behalf of URS Thorburn Colquhoun as part of the Environmental Assessment of the impacts of the proposed new road. This report incorporates the results from the Interim Report and includes the results from the Stage 4 survey where these were significant. Proposed trial trench locations are included (Figs 10-16), and show the grids from the previous geophysical surveys.

- 1.3 The fieldwork was carried out in September and October 2001 in good field conditions. The areas surveyed comprised both pasture and ploughed fields.

2 *GEOPHYSICAL SURVEY METHOD*

- 2.1 A 40 m wide corridor was surveyed along the line of the proposed road (excepting landfill sites) in areas not previously surveyed. Figure 1 includes grids from the Stage 4 survey. The survey was carried out using Geoscan Research FM36 Fluxgate Gradiometers fitted with a ST1 sample trigger. The survey areas were divided into 20m grid-squares, which were traversed at 1m intervals in a parallel fashion. Each traverse was walked at a rapid walking pace with the sample trigger taking readings every 0.25m. At the end of each grid, sensor alignment was checked in order to maintain a tilt error of below $\pm 2nT$ per $\pm 2^\circ$ tilt.
- 2.2 The data were analysed using the Geoplot v3.0 software (Geoscan 2000). The plots have been, where necessary, filtered and smoothed using 'Despiking', 'Zero Mean Traverse' and 'Add' algorithms in order to produce clearer images. On all the resulting plots low magnetism is shown as white and high magnetism is shown as black.

3 *RESULTS*

3.1 Site 13 (Fig 1 location; Figs 2 and 8 results)

A possible ditched enclosure was discovered at the north of the field. It was aligned north-east/south-west and contained two ring-ditches, 10m and 8m in diameter respectively. The size of the ring-ditches would suggest that they might represent the gullies of Iron Age roundhouses. The strength of the features was very low, being generally only 1nT – 2nT above the background magnetic readings. These faint features were further obscured by the presence of a very strong anomaly at the west. This anomaly had high positive reading at its centre (over 200nT) which were surrounded by a 'halo' of negative readings c 20m in diameter. Although the proximity of this anomaly to the ditched enclosure may mean that it represents an archaeological feature, the strength of the readings indicates that it is likely to be of more recent origin.

3.2 Site 14 (Fig 1 location; Fig 6 results)

The survey revealed an area of strong magnetic anomalies in the north-western corner of Field 9. The individual anomalies may represent pits containing burnt material or other

debris indicative of industrial activity. They are possibly associated with the Iron Age/Roman enclosures previously discovered to the south and designated Site 9 (NA June 2001).

3.3 **Site 15** (Fig 1 location; Figs 5 & 9 results)

A total area of 260 m by 40 m was surveyed at this location just south of the former Ironstone quarries. A group of significant anomalies were detected. Close to the south-east hedge boundary a series of individual anomalies aligned north-south indicates a possible pit alignment, likely to be of Iron Age or earlier origin. Towards the north-west, a series of rectilinear ditches appear to form enclosures and trackways. These are probably of Roman date. A number of individual high magnetic anomalies within this area may indicate pits or hearths associated with the enclosures, or perhaps just as likely, modern metallic waste from the former quarry or recent agriculture.

An area of modern disturbance clearly shows as a large amorphous anomaly. Two highly visible linear anomalies crossing the grid mark the locations of present footpaths. The ploughed-out remains of ridge-and-furrow cultivation, running NW-SE, show weakly.

3.3 **Other anomalies**

Most of the survey corridor was devoid of archaeologically significant features. Extensive remains of ridge-and-furrow cultivation was found throughout the survey area (Fields 25, 26, 27, 28, 29, 30, 31, 33). These are of minor interest.

Although other anomalies were detected during the survey, they are all likely to be of modern or non-archaeological origin. They comprise:

Field 19 (Fig 2): A pipe or field drain

Field 15 (Fig 2): Possible former field boundaries.

Field 27 (Fig 4): Pipes or field drains

Field 32 (Fig 6): Quarry disturbance and pipe

4 **DISCUSSION**

- 4.1 The fieldwork was undertaken in good conditions and the results are considered to be reliable. The clear depiction of ridge and furrow cultivation marks, and in some cases field drains, in areas of uniform geology gives an indication that very subtle features were detected in many of the fields. Confusing geological variations appear only to have been present at the southern end of the route (Field 16 and grids from previous survey).
- 4.2 Generally, the detailed survey confirmed the negative results of the original scanning reconnaissance. However, three new areas of archaeological interest were detected. These are discussed above (Sites 13, 14 and 15).
- 4.3 The weak readings of Site 13 are masked by the presence of a very strong anomaly. The pattern of features here is therefore unclear but they do not appear to be extensive. Site 14 is possibly, but not obviously archaeological. Site 15 is the most extensive new site and can clearly be seen to relate to the known Iron Age and Roman site (Site 2 of this project) destroyed in the quarry to the north. The pit alignment – a characteristic boundary marker of the late Bronze Age and Iron Age – is likely to be peripheral to settlement. The enclosures may contain evidence of occupation, although on current evidence this does not appear to be dense, if present.
- 4.4 A low level of trial trenching is proposed to investigate the anomalies found and to test apparently blank areas, particularly on ridges and close to the already known sites (Figs 10-16)

5 **BIBLIOGRAPHY**

NA 2001a *A6 Rothwell and Desborough Bypass Archaeological Assessment Stage 3*
Northamptonshire Archaeology, Jan 2001

NA 2001b *A6 Rothwell and Desborough Bypass Archaeological Assessment Stage 4: Geophysical Survey* Northamptonshire Archaeology, June 2001

Northamptonshire Archaeology
A service of Northamptonshire County Council
21 November 2001