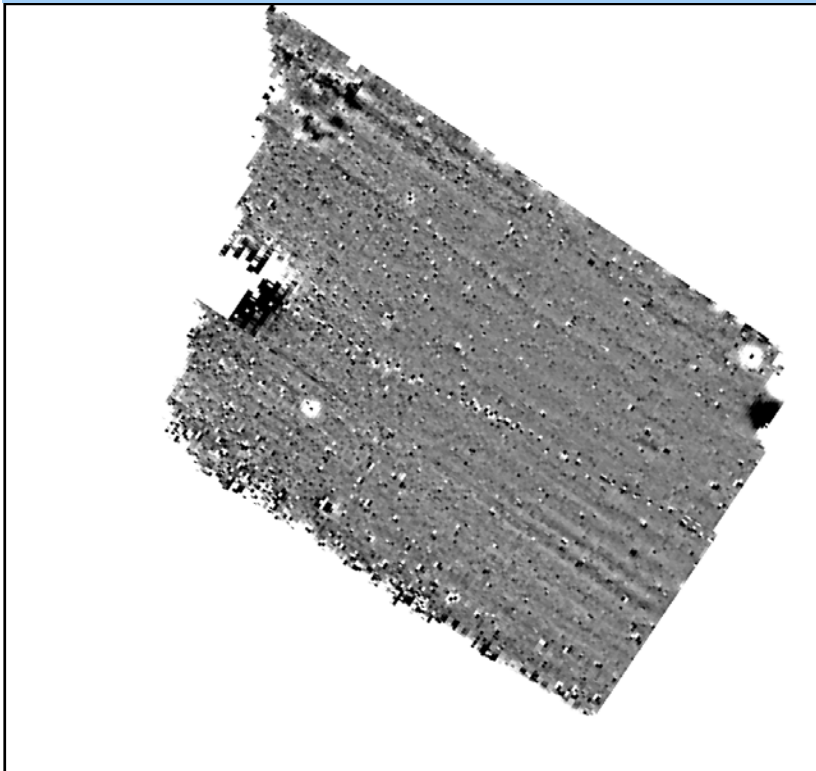




Northamptonshire Archaeology

Archaeological Geophysical Survey on land at Stanage Road, Sileby, Leicestershire X.A3.2010



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Report 10/33
March 2010



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Verified & Approved by	Andy Chapman	<i>AC</i>	10/03/10

OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey on land at Stanage Road, Sileby, Leicestershire X.A3.2010	
Short description	Northamptonshire Archaeology was commissioned by University of Leicester Archaeological Services to conduct archaeological geophysical survey on land at Stanage Road, Sileby. Magnetometry of a 2.7ha area revealed little archaeology other than evidence of ridge and furrow cultivation.	
Project type	Geophysical survey	
Site status	None	
Previous work	Unknown	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	Medieval Ridge-and-Furrow cultivation	
Significant finds	None	
PROJECT LOCATION		
County	Leicestershire	
Site address	Stanage Road, Sileby	
Study area	2.7ha	
OS Easting & Northing	461280 315466	
Height OD	60m-75m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	University of Leicester Archaeological Services (ULAS)	
Project Design originator	Patrick Clay, ULAS	
Director/Supervisor	James Ladocha	
Project Manager	Adrian Butler	
Sponsor or funding body	ULAS	
PROJECT DATE		
Start date	25 January 2010	
End date	19 February 2010	
ARCHIVES	Location	Content
Physical	N/A	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
BIBLIOGRAPHY		
Journal/monograph, published or forthcoming, or unpublished client report		
Title	Archaeological Geophysical Survey on land at Stanage Road, Sileby, Leicestershire	
Serial title & volume	Northamptonshire Archaeology Reports 10/33	
Author(s)	James Ladocha & Adrian Butler	
Page numbers	3	
Date	22/02/2010	

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- Fig 1 Site Location, 1:20,000
- Fig 2 Magnetometer Survey Results, 1:2500
- Fig 3 Magnetometer Survey Interpretation, 1:2500

**ARCHAEOLOGICAL GEOPHYSICAL SURVEY ON LAND AT
STANAGE ROAD, SILEBY, LEICESTERSHIRE**

X.A3.2010

FEBRUARY 2010

ABSTRACT

Northamptonshire Archaeology was commissioned by University of Leicester Archaeological Services to conduct archaeological geophysical survey on land at Stanage Road, Sileby. Magnetometry of a 2.7ha area revealed little archaeology other than evidence of ridge and furrow cultivation.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by University of Leicester Archaeological Services (ULAS), to conduct an archaeological geophysical survey on land at Stanage Road, Sileby, Leicestershire (NGR 461280 315466; Fig 1).

The objectives of the geophysical survey were to identify the presence or absence of archaeological remains within the proposed 2.7 hectare development area. The fieldwork consisted of an area magnetic gradiometer survey.

2 TOPOGRAPHY AND GEOLOGY

The site is situated on the eastern outskirts of Sileby, at the eastern end of Stanage Road. The investigation site covers a roughly rectangular field, bordered to the west and south by housing, and arable fields to the north and east (Fig 1). At the time of fieldwork the field was pasture for horses, with a stable and related trailers located in the centre of the north-western edge. This boundary also had a double fence-line with an overgrown narrow strip of land between (Fig 2).

The site is located on the western slope of a low hill and sits between approximately 60m and 75m AOD. Sileby appears to be situated on Anglian till over Mercia mudstone (www.geodata.bgs.ac.uk/website/leicester/viewer.htm).

3 ARCHAEOLOGICAL BACKGROUND

Desk-based assessment by NA found no indication of any previous archaeological work having been carried out on the site. In the wider area there is little of relevance to this geophysical survey. There are a few find spots, including Roman pottery and quern to the north of the site, and an Anglo-Saxon spear head found on the northern edge of Sileby (Foard-Colby 2009).

4 METHODOLOGY

The survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanotesla (nT).

The area was divided into a network of 32 contiguous, whole and partial, 30m x 30m grid squares. These were set out manually by tape measure and optical square. The instruments were carried at a brisk but steady pace through each grid, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per grid.

All fieldwork was carried out in accordance with the guidelines issued by English Heritage and by the Institute for Archaeology (EH 2008; Gaffney, Gater and Ovendon 2002).

The data was processed using Geoplot 3.00u software. Striping, occasionally caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function (ZMT) and destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of a greyscale plot (scale +4nT to -4nT black ~ white). This has been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative plot has been produced and is shown overlain onto the data in Figure 3.

5 SURVEY RESULTS

The major detected magnetic anomalies at Sileby were alternate linear positive and negative bands. These anomalies represent a ridge and furrow cultivation pattern and were orientated north-west to south-east, parallel to the field boundaries (Figs 2 & 3). The chain of weak dipolar anomalies, running north-west to south-east across the centre of the field, represents an electric fence that was present, although not powered during the fieldwork.

There were also a few possible ferrous objects within the survey area, particularly the two stronger magnetic anomalies located in the west and east of the field. The number of small dipolar anomalies detected, particularly in the western half of the field, may indicate quantities of ferrous and ceramic debris in the topsoil. The magnetic disturbance in the centre of the north-western boundary is related to the stable and trailers that were present during the fieldwork (Figs 2 & 3).

6 CONCLUSION

The magnetometer survey of land at Stanage Road, Sileby produced little evidence of archaeological remains with ridge-and-furrow cultivation patterns the only feature of note.

BIBLIOGRAPHY

Bartington, G, and Chapman, C, 2003 A high-stability fluxgate magnetic gradiometer for shallow geophysical survey applications, *Archaeological Prospection*, **11**, 19-34

EH 2008 *Geophysical Survey in Archaeological Field Evaluation*, English Heritage

Foard-Colby, A 2009 *A desk-based assessment of land off Seagrave Road, Sileby, Leicestershire*, Northamptonshire Archaeology, **09/142**

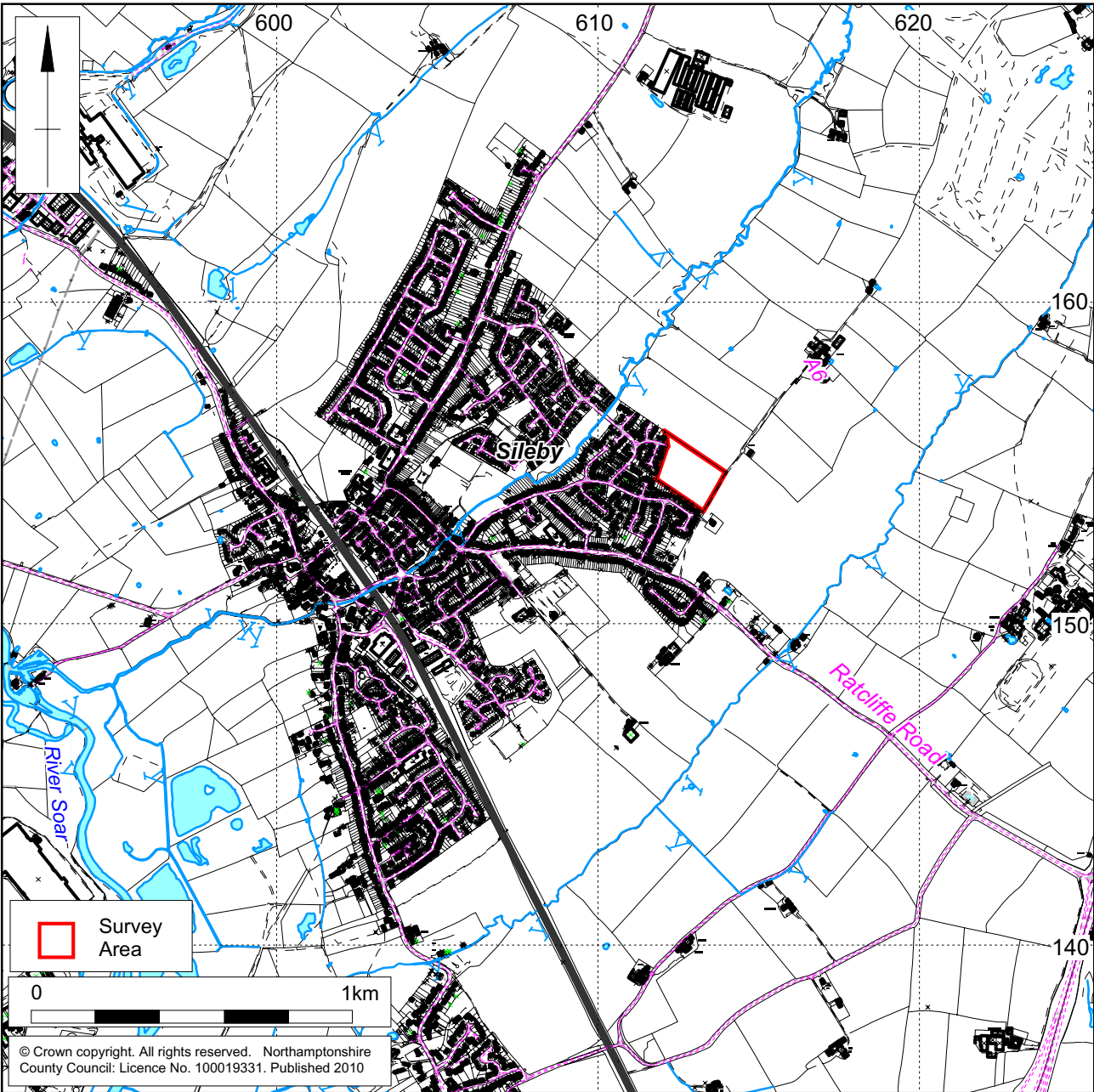
Gaffney, C, Gater, J, and Ovendon, S, 2002 *The Use of Geophysical Techniques in Archaeological Evaluations*, Institute of Field Archaeologists Technical Paper, **6**

WEBSITES

www.geodata.bgs.ac.uk/website/leicester/viewer.htm Geology of Leicestershire and Rutland, accessed 19/02/10

Northamptonshire Archaeology
a Cultural Service of Northamptonshire County Council

10 March 2010



1:20,000

Site Location Fig 1

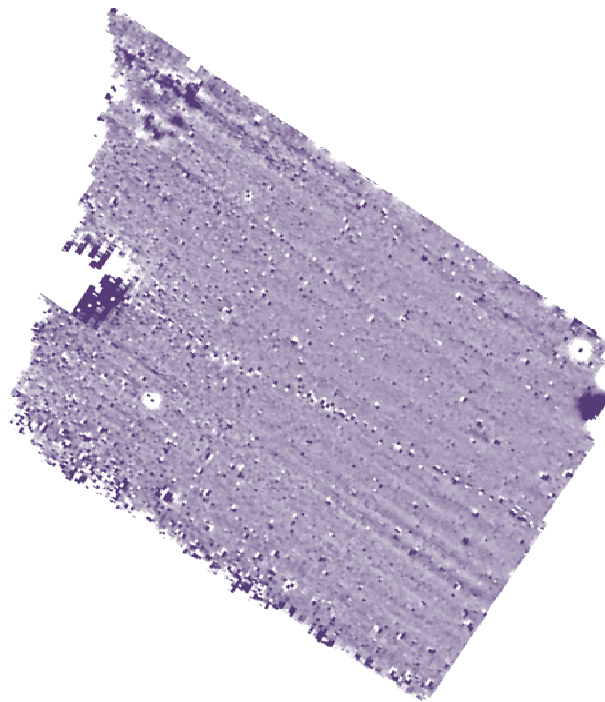






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