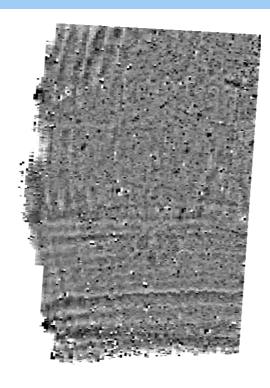


Northamptonshire Archaeology

Archaeological Geophysical Survey on land at Station Road, Scraptoft, Leicestershire X.A129.2010



Northamptonshire Archaeology

2 Bolton House Wootton Hall Park Northampton NN4 8BE t. 01604 700493 f. 01604 702822 e. sparry@northamptonshire.gov.uk

w. www.northantsarchaeology.co.uk



Ian Fisher
Report 10/126
July 2010



STAFF

Project Manager Adrian Butler BSc MA AlfA

Fieldwork Ian Fisher BSc

James Ladocha BA

Adrian Butler

QUALITY CONTROL

	Print name	Signature	Date
Checked by	Adrian Butler	A98	28/07/2010
Verified & Approved by	Andy Chapman	40	28/07/2010

OASIS REPORT FORM

PROJECT DETAILS				
Project name	Archaeological Geo	pphysical Survey on land at Station Road,		
1 Tojout Hamo	Scraptoft, Leicester	shire X.A129.2010		
Short description	Northamptonshire Archaeology was commissioned by CgMs			
	Consulting to condu	uct archaeological geophysical survey on		
		d, Scraptoft, Leicestershire.		
		4ha area revealed little archaeology other		
		o curvilinear ditches, four pits and		
	Medieval ridge and			
Project type	Geophysical survey			
Site status	None			
Previous work	Unknown			
Current Land use	Horse Pasture			
Future work	Unknown			
Monument type/ period		d-Furrow cultivation		
Significant finds	None			
PROJECT LOCATION				
County	Leicestershire			
Site address	Station Road, Scraptoft			
Study area	4ha			
OS Easting & Northing	46485 30530			
Height OD	c100m AOD			
PROJECT CREATORS	T-			
Organisation	Northamptonshire Archaeology (NA)			
Project brief originator	CgMs Consulting			
Project Design originator	Mike Dawson, CgMs			
Director/Supervisor	Ian Fisher			
Project Manager	Adrian Butler			
Sponsor or funding body	CgMs Consulting			
PROJECT DATE				
Start date	15 July 2010			
End date	16 July 2010			
ARCHIVES	Location	Content		
Physical	N/A			
Paper	NA	Site survey records		
Digital	NA	Geophysical survey & GIS data		
BIBLIOGRAPHY	client report	, published or forthcoming, or unpublished		
Title	Archaeological Geophysical Survey on land at Station Road,			
		shire X.A.129.2010		
Serial title & volume	Northamptonshire Archaeology Reports 10/126			
Author(s)	Ian Fisher			
Page numbers	10			
Date	27 July 2010			

Contents

1	INTRODUCTION	1
2	TOPOGRAPHY AND GEOLOGY	1
3	ARCHAEOLOGICAL BACKGROUND	2
4	METHODOLOGY	2
5	SURVEY RESULTS	3
6	CONCLUSION	3
	BIBLIOGRAPHY	3

Figures

Cover	Station Road Gradiometer Survey
Fig 1	Site Location, 1:20,000
Fig 2	Magnetometer Survey Results, 1:2500
Fia 3	Magnetometer Survey Interpretation, 1:2500

ARCHAEOLOGICAL GEOPHYSICAL SURVEY ON LAND AT STATION ROAD, SCRAPTOFT, LEICESTERSHIRE X.A129.2010 JULY 2010

ABSTRACT

Northamptonshire Archaeology was commissioned by CgMs Consulting to conduct archaeological geophysical survey on land at Station Road, Scraptoft, Leicestershire. Magnetometry of a 4ha area revealed little archaeology other than evidence of two curvilinear ditches, four pits and Medieval ridge and furrow cultivation.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by CgMs Consulting Ltd, to conduct an archaeological geophysical survey on land at Station Road, Scraptoft, Leicestershire (NGR 464825 305225; Fig 1).

The objectives of the geophysical survey were to identify the presence or absence of archaeological remains within the proposed four hectare development area. The fieldwork consisted of an area magnetic gradiometer survey. Leicestershire Museums Service has provided the Accession Number X.A.129.2010 for this work.

2 TOPOGRAPHY AND GEOLOGY

The site is situated on the eastern side of Scraptoft, adjacent to the east of Station Road and south of Covert Lane. The investigation area covers a rough 'inverted-L' shape in two fields, bordered to the south and west by housing, and arable fields to the north and east (Fig 1). At the time of fieldwork the field was pasture for horses, the main fields divided by electric fences into small paddocks (Fig 2).

The investigation area is located on the south-facing slope of Scraptoft Hill and sits at approximately 100m AOD. The site appears to be situated on boulder clay in the south and sand and gravel in the north, both over a Mercia mudstone solid stratum which is exposed centrally to the site area (www.geodata.bgs.ac.uk/website/leicester/viewer.htm).

3 ARCHAEOLOGICAL BACKGROUND

Details of the archaeological background to the site may be found in a desk-based assessment by CgMs (Dawson 2010). This found no indication of any previous

archaeological work having been carried out on the site, although a 3rd-century Roman pot was found in a garden adjacent to the west. In the wider area there are five records in the Leicestershire Historic Environment Record (LHER) for the fields immediately north-east of the site, south of Covert Lane. Aerial photography indicates possible, undated, enclosures approximately 200m to the north-east of the site (LHER2285). The enclosures correspond with fieldwalking finds indicating a possible Roman settlement (LHER2280) orientated along Covert Lane from the edge of the current site 300m north-east. Anglo Saxon finds suggesting the presence of a cemetery were recovered in the same area (LHER2281).

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 45 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

Possible archaeology was identified in Fields 1 and 4 (Figs 2 & 3).

Field 1

The survey detected a curvilinear positive magnetic anomaly that may represent an enclosure ditch and four discrete positive anomalies indicating possible pits. Ridge and furrow cultivation was also identified, orientated north to south and east to west.

Field 2

The field was divided up into smaller paddocks by electric fencing. The survey identified a ridge and furrow cultivation pattern, orientated north to south, and two unknown ferrous objects in the western part of the field.

Field 3

No archaeological features were detected by the survey. The survey detected thermoremnently magnetised anomalies representing the brick debris of a former building that was visible on the ground.

Field 4

A curvilinear feature was identified by the survey that may indicate the presence of an enclosure ditch. North to south ridge and furrow cultivation was also detected.

6 CONCLUSION

The magnetometer survey of land at Station Road, Scraptoft produced evidence of archaeological remains. Two curvilinear ditches, four pits and ridge-and-furrow cultivation patterns the only features of note.

STATION ROAD, SCRAPTOFT

BIBLIOGRAPHY

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

Dawson, M, 2010 Archaeology Desk Based Assessment, Land at Station Road, Scraptoft, Leicestershire, CgMs Consulting

EH 2008 Geophysical Survey in Archaeological Field Evaluation, English Heritage

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

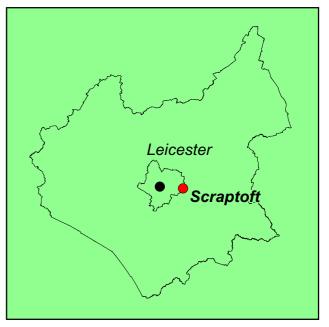
WEBSITES

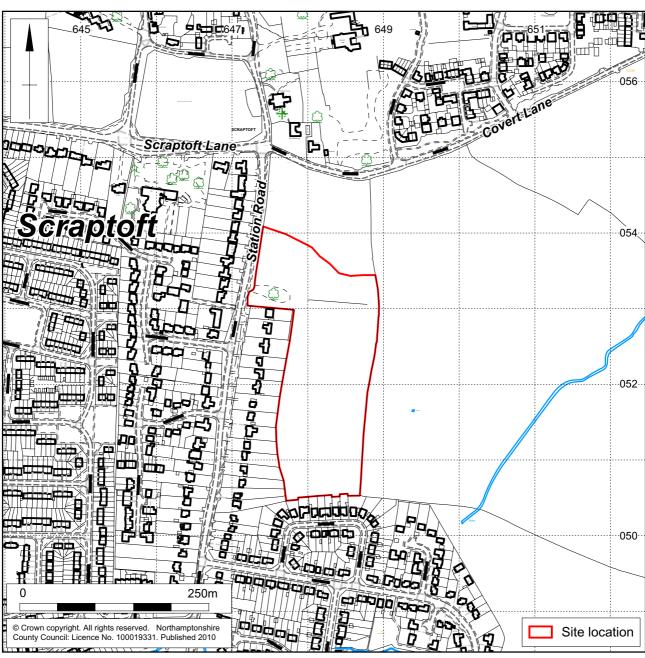
<u>www.geodata.bgs.ac.uk/website/leicester/viewer.htm</u> Geology of Leicestershire and Rutland, accessed 20/07/10

Northamptonshire Archaeology

28 July 2010







Scale 1:5000 Site Location Fig 1







Northamptonshire County Council

Northamptonshire Archaeology

Northamptonshire Archaeology

2 Bolton House
Wootton Hall Park
Northampton NN4 8BE
t. 01604 700493 f. 01604 702822







