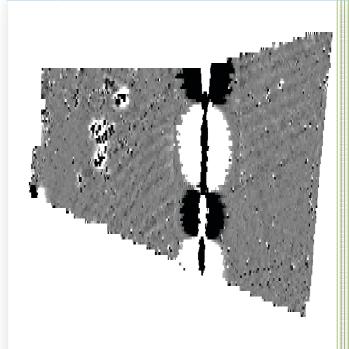


Northamptonshire Archaeology

Archaeological Geophysical Survey on land at Dog and Gun Lane, Whetstone, Leicestershire



Northamptonshire Archaeology

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QUALITY CONTROL

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OASIS REPORT FORM

PROJECT DETAILS			
Project name	Archaeological Co.	ophysical Survey on land at Dog and Gun	
-	Lane, Whetstone,	Leicestershire	
Short description	Northamptonshire Archaeology was commissioned by CgMs		
	Consulting to conduct archaeological geophysical survey on		
		un Lane, Whetstone. Magnetometry of a	
		remnant furrow of medieval ridge-and-	
	furrow field cultivat		
Project type	Geophysical survey		
Site status	None		
Previous work	Unknown		
Current Land use	Arable and pasture		
Future work	Trial trench evaluation		
Monument type/ period	Medieval Ridge-and-Furrow		
Significant finds	None		
PROJECT LOCATION			
County		Leicestershire	
Site address	Dog and Gun Lane	, Whetstone	
Study area	9ha		
OS Easting & Northing	455859 295777		
Height OD	72m AOD		
PROJECT CREATORS			
Organisation	Northamptonshire Archaeology (NA)		
Project brief originator	CgMs Consulting		
Project Design originator	NĂ		
Director/Supervisor	John Walford		
Project Manager	Adrian Butler		
Sponsor or funding body	CgMs Consulting	CgMs Consulting	
PROJECT DATE			
Start date	10 March 2010		
End date	11 March 2010	1	
ARCHIVES	Location	Content	
Physical	N/A		
Paper	NA	Site survey records	
Digital	NA	Geophysical survey & GIS data	
BIBLIOGRAPHY	Journal/monograph client report	n, published or forthcoming, or unpublished	
Title	Archaeological Geophysical Survey on land at Dog and Gun		
	Lane, Whetstone		
Serial title & volume	Northamptonshire Archaeology Reports 10/56		
Author(s)	Charlotte Walker and Ian Fisher		
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ARCHAEOLOGICAL GEOPHYSICAL SURVEY ON LAND AT DOG AND GUN LANE, WHETSTONE, LEICESTERSHIRE MARCH 2010

ABSTRACT

Northamptonshire Archaeology was commissioned by CgMs Consulting to conduct archaeological geophysical survey on land at Dog and Gun Lane, Whetstone. Magnetometry of a 9ha area revealed remnant furrow of medieval ridge-and-furrow field cultivation.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by CgMs Consulting, to conduct an archaeological geophysical survey on land at Dog and Gun Lane, Whetstone, Leicestershire (NGR SP 5585 9577; Fig 1). The survey forms part of a planning application for residential development and associated works. An area adjacent to Whetstone Brook is part of the floodplain; this will remain undeveloped and, therefore, was not surveyed.

The objectives of the geophysical survey were to identify the presence or absence of archaeological remains within the proposed nine hectare development area. The fieldwork consisted of an area magnetic gradiometer survey in three fields totalling 9ha (Fig 2).

2 TOPOGRAPHY AND GEOLOGY

The site is situated to the south of Dog and Gun Lane as it enters the south-eastern edge of Whetstone, in central Leicestershire. Whetstone lies immediately east of Blaby, approximately 7km south-west of central Leicester. The M1 motorway is located 400m to the west of the site and the Lutterworth Road (A426) 300m to the east of the site. Whetstone Brook is situated 140m to the east of the site.

The investigation site covers a roughly rectangular area of land and is spread over three fields. All three fields were bounded to the west by Springwell Lane and to the east by further fields that form part of the flood plain adjacent to Whetstone Brook. Field 1 is an arable field bounded to the north by housing. Field 2 is also an arable field and Field 3 is a pasture field bounded to the south by further fields.

The site lies at approximately 72m aOD. The geology of the site comprises sand and gravel (www.geodata.bgs.ac.uk/website/leicester/viewer.htm).

3 ARCHAEOLOGICAL BACKGROUND

There is no indication of any previous archaeological work having been carried out on the site and nor are there any records on the Leicestershire and Rutland Historic Environment Record within the site. An Iron Age beehive quern base was found c 900m to the north-west. Situated c 200m to the east of the site, Lutterworth Road is thought to be the Roman road that connected Leicester (*Ratae Corieltauvorum*), the main town of the region, to the small town of *Tripontium*, south of Lutterworth.

Whetstone has been variously known as *Weston, Whestone* and *Hevetsan*. It was held by Ralph, one of the Count of Meulan's men at the time of the Domesday Survey. The late Saxon, medieval and post-medieval settlement core is located some 1.5km to the north of the development area. The settlement was almost certainly surrounded by open fields during these periods and it is likely that the development area was part of this system.

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 split into Fields 1, 2 and 3, with each of these divided into a network of 110 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 anomaly was a strongly dipolar, ferrous anomaly aligned north-south through all three fields. This represented the course of a gas pipeline.

In Field 1, there were ceramic field drains, chains of small dipolar anomalies, aligned north-north-east to south-south-west.

In Field 3 there were alternate linear positive and negative bands, aligned east north east to west south west, representing the remnant furrows of a ridge and furrow cultivation pattern. Earthworks of the ridge and furrow were still visible in this field. An area of dipolar anomalies in the western part of Field 3 may reflect small ferrous and ceramic (e.g. brick) debris.

6 CONCLUSION

The magnetometer survey at Dog and Gun Lane produced evidence of medieval ridgeand-furrow field cultivation in Field 3.

BIBLIOGRAPHY

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

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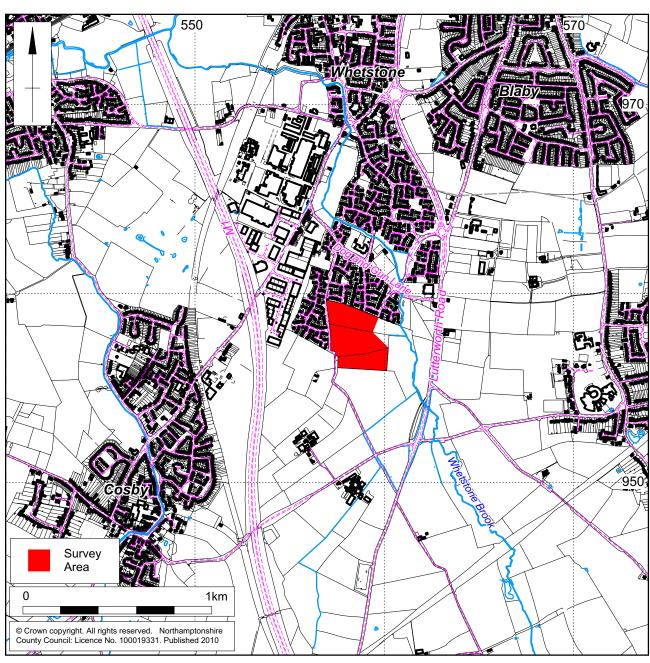
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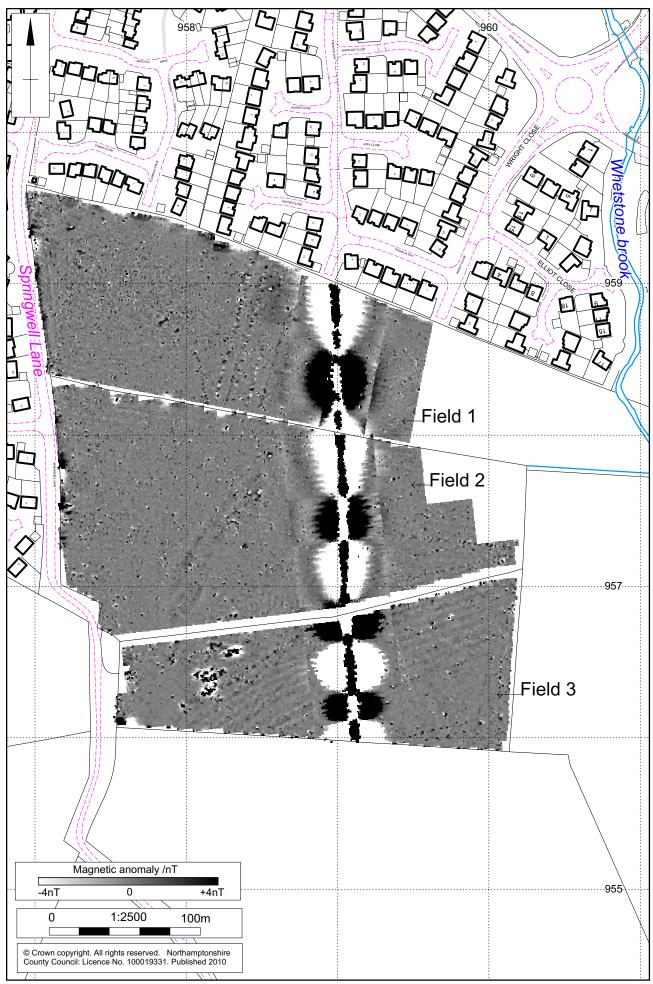
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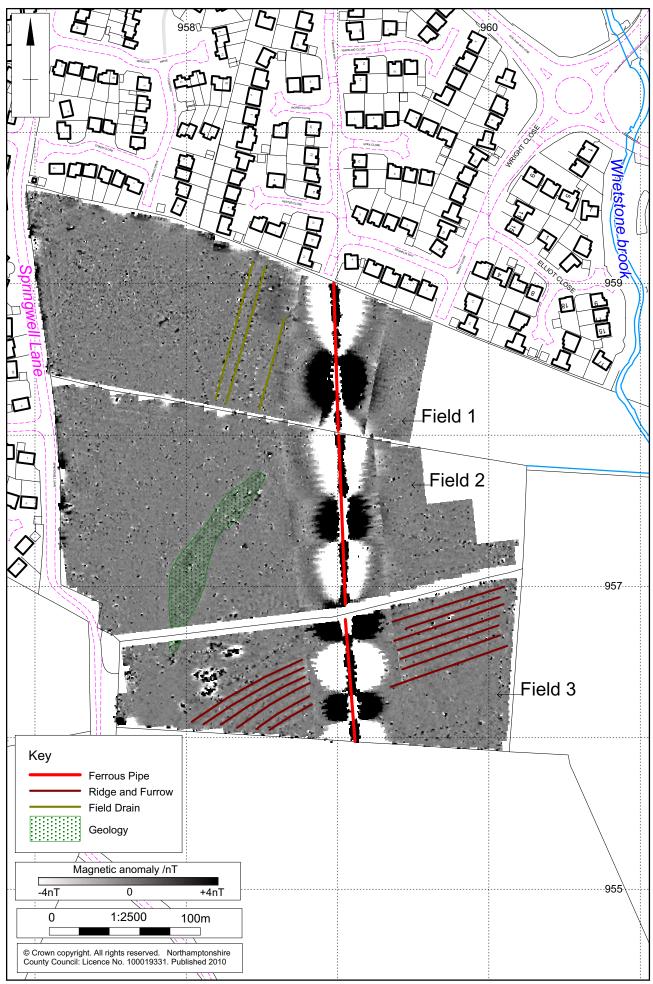




1:20,000 Site Location Fig 1



1:2500



1:2500

Dog and Gun Lane, Whetstone: Magnetometer Survey Interpretation



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