



Northamptonshire Archaeology

Archaeological geophysical survey of land at Shilton Road, Barwell, Leicestershire



Northamptonshire Archaeology

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QUALITY CONTROL

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SHILTON ROAD, BARWELL, LEICESTERSHIRE

OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological geophysical survey of land at Shilton Road, Barwell, Leicestershire	
Short description	Northamptonshire Archaeology undertook a detailed magnetometer survey of c 1.3 ha of land at Shilton Road, Barwell, Leicestershire, on 14 August 2012. The survey identified no significant archaeological remains.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	None	
Significant finds	None	
PROJECT LOCATION		
County	Leicestershire	
Site address	108 Shilton Road, Barwell	
Study area	1.3ha	
OS Easting & Northing	SP 4500 9690	
Height OD	c 119-133 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	None	
Project Design originator	NA	
Director/Supervisor	Ian Fisher	
Project Manager	Anthony Maull	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date	14 August 2012	
End date	17 August 2012	
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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 of land at Shilton Road, Barwell, Leicestershire	
Serial title & volume	Northamptonshire Archaeology Reports 12/154	
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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND AT
SHILTON ROAD, BARWELL, LEICESTERSHIRE
AUGUST 2012**

ABSTRACT

Northamptonshire Archaeology undertook a detailed magnetometer survey of c 1.3 ha of land at Shilton Road, Barwell, Leicestershire, on 14 August 2012. The survey identified no significant archaeological remains.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by CgMs Consulting, on behalf of David Wilson Homes, to conduct an archaeological geophysical survey at Shilton Road, Barwell, Leicestershire (NGR SP 450 969; Fig 1). The fieldwork was conducted on 14 August 2012 and comprised the detailed magnetometer survey of two fields with a total area of c 1.3ha.

2 LOCATION, TOPOGRAPHY AND GEOLOGY

The survey area comprises a nearly square block of pasture land located on the southern side of Barwell, immediately south of Shilton Road. It is divided into two pasture fields, both of which are grazed by horses.

The survey area occupies a south-east facing slope at an elevation of between 119m and 133m AOD. The geology of the northern part of the site is Mercian mudstone, predominately red, less commonly green-grey, mudstones and subordinate siltstones with thick halite-bearing units in some basinal areas. Thin beds of gypsum/anhydrite widespread; sandstones are also present. Woolston clay and silts are found on the lower slopes (Dawson 2012).

3 ARCHAEOLOGICAL BACKGROUND

A Heritage Assessment was undertaken by CgMs Consulting in 2011 and amended in 2012. The evidence was collated from the Leicestershire Historic Environment Record (HER) from a study area of 750m around the site and documentary evidence for the parish was consulted (Dawson 2012). The assessment concluded that there is a slight potential for archaeological evidence of local interest. Map regression showed that during the 19th century, and earlier, the site has been open farmland. The proposed development plot has probably been farmland throughout the medieval period.

Within the surrounding landscape there is the site of a Roman Villa (MLE17947) and the historic core of the village of Barwell.

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).

An independent system of 30m grids was established within each of the fields to be surveyed. The grids were established with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by means of a Leica Systems 1200 dGPS. The gradiometers were carried at a brisk but steady pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

The fieldwork methods were in accordance with the written scheme of investigation for the project (NA 2012), and complied with the guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; IfA 2011).

The survey data were processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function, and destaggering of the data was performed as necessary.

The processed data are presented in this report in the form of grey-tone plots, at a scale of +/- 4nT black/white. The plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay has been produced and is shown in Figure 3.

5 SURVEY RESULTS

The survey data contains a few weak linear anomalies oriented from north-west to south-east, parallel with the modern hedgerows. These probably represent plough furrows or the edges of small strip fields. There is one slightly more pronounced negative linear anomaly on the same alignment. This could represent a particularly large furrow, but would also be consistent with a non-ferrous (eg plastic or concrete) pipe.

There are two isolated dipolar anomalies in Field 1, each representing a buried piece of iron. There is also a concentration of smaller dipoles at the northern end of the field, representing an accumulation of iron debris and/or brick rubble.

Ferrous halos occur at several points around the edges of the survey area, as a result of adjacent buildings and fences.

Nothing in the data appears to be of archaeological significance.

6 CONCLUSION

The survey has detected a few anomalies relating to the former cultivation of the fields, but nothing of greater archaeological significance.

BIBLIOGRAPHY

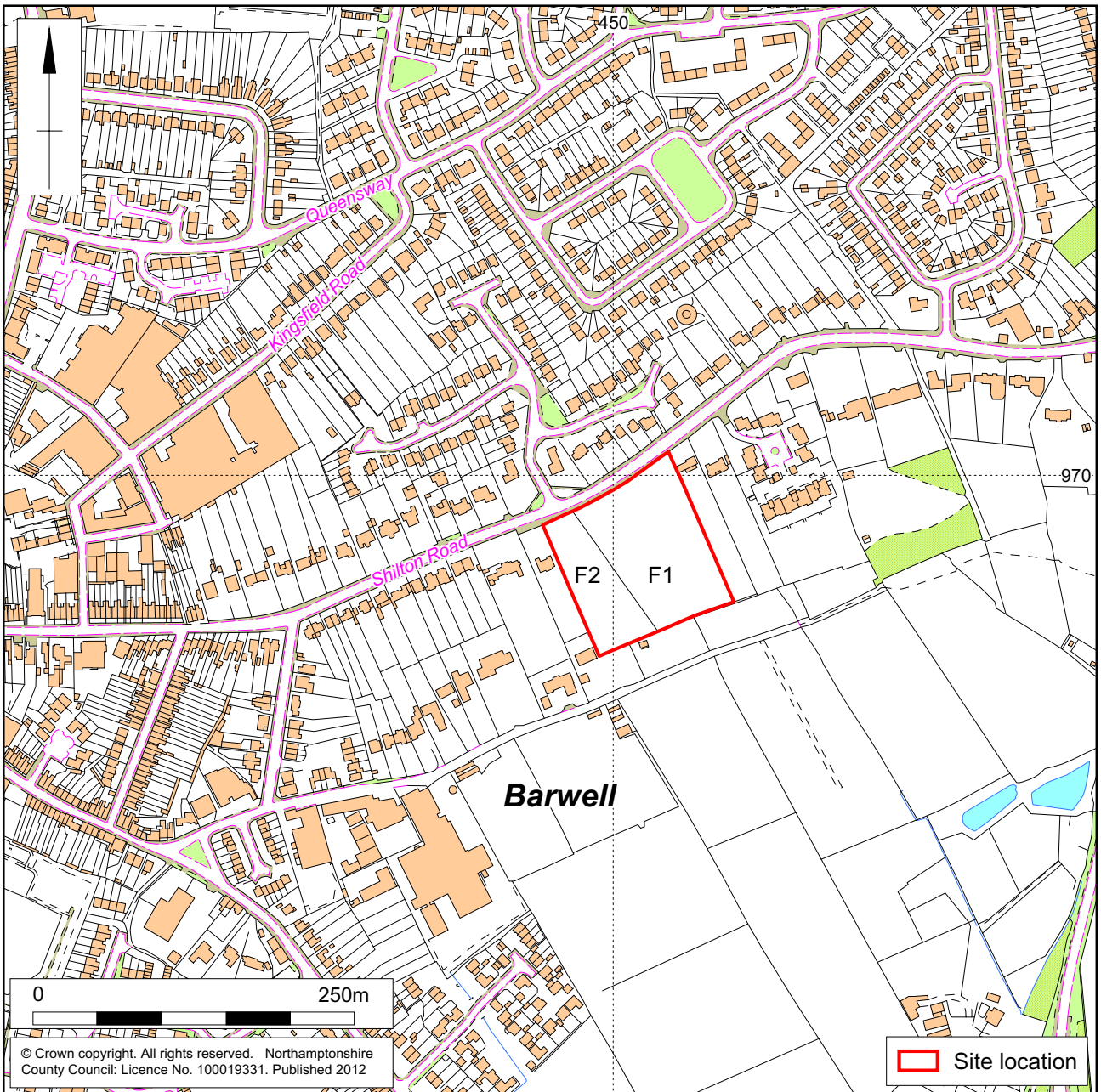
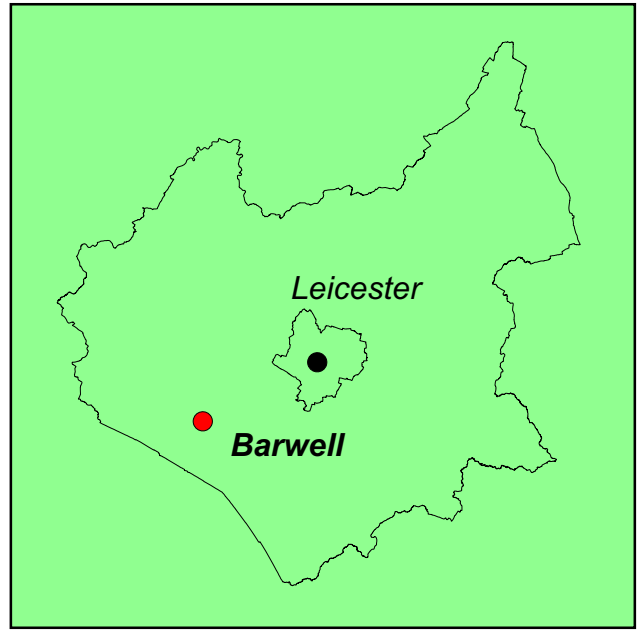
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EH 2008 *Geophysical Survey in Archaeological Field Evaluation*, English Heritage

IfA 2011 *Standard and Guidance for Archaeological Geophysical Survey*, Institute for Archaeologists

NA 2012, *Archaeological Geophysical Evaluation, Shilton Road, Barwell, Leicestershire: Written scheme of investigation for geophysical survey*, Northamptonshire Archaeology



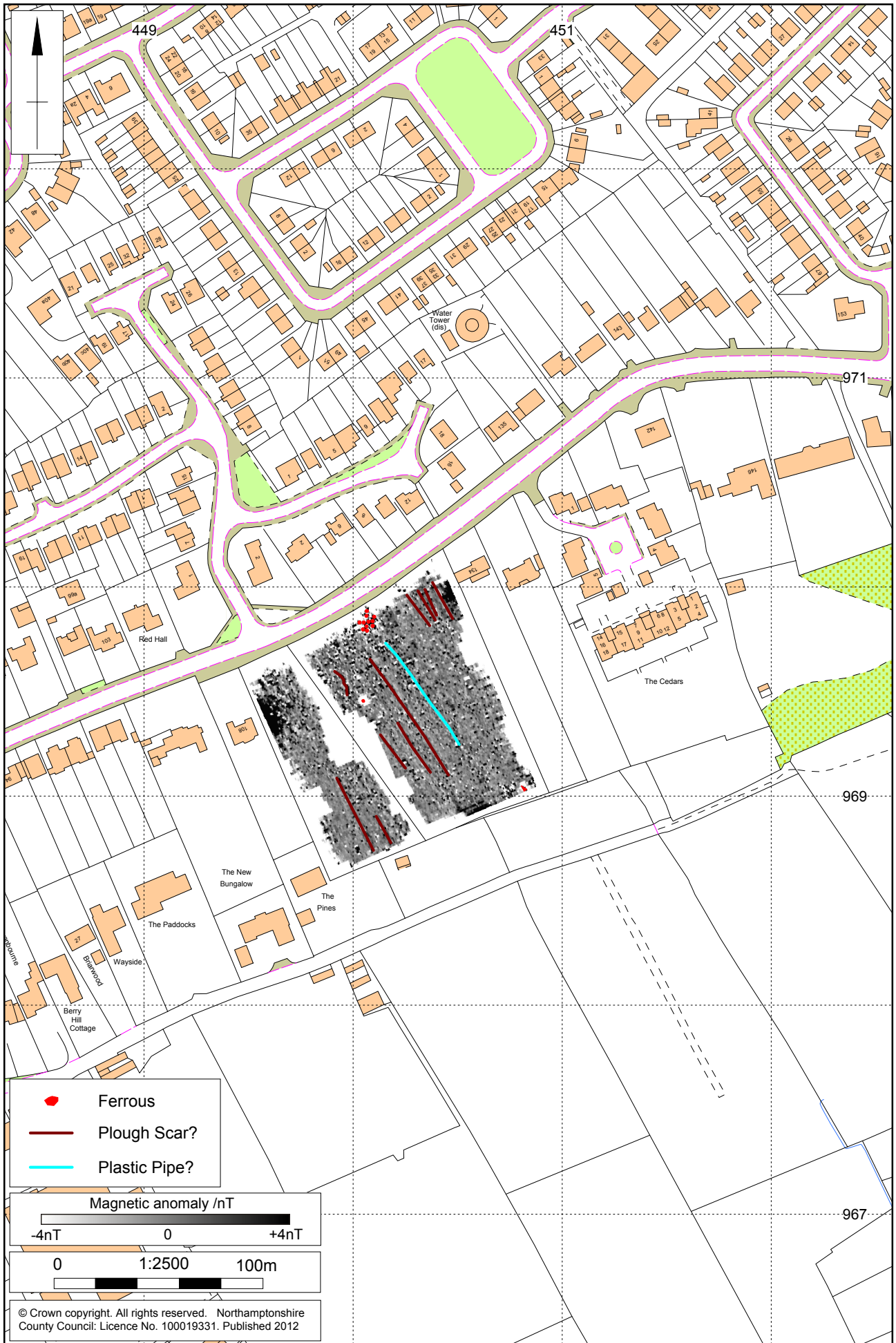
Scale 1:5000

Site Location Fig 1



1:2500

Magnetometer survey results Fig 2



1:2500

Magnetometer survey interpretation Fig 3



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