

## **Geophysical Survey of land at Field Road, Ramsey, Cambridgeshire February 2014**

Accession No. ECB 4136

Report No. 14/49

Author: Ian Fisher

Illustrators: Ian Fisher  
Amir Bassir





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## FIELD ROAD, RAMSEY

**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		OASIS No: molanort1-172717	
Project name	Geophysical survey of land at Field Road, Ramsey, Cambridgeshire, February 2014		
Short description	MOLA was commissioned to carry out an archaeological geophysical survey on c4ha of land at Field Road, Ramsey, Cambridgeshire. The survey identified an undated ditch and pits and medieval ridge and furrow.		
Project type	Geophysical survey		
Site status	None		
Previous work	Desk-based assessment		
Current Land use	Arable		
Future work	Unknown		
Monument type/ period	None		
Significant finds	None		
<b>PROJECT LOCATION</b>			
County	Cambridgeshire		
Site address	Field Road, Ramsey, PE26 1JP		
Study area	c 4ha		
OS Easting & Northing	TL 279 851		
Height aOD	c10 - 15m aOD		
<b>PROJECT CREATORS</b>			
Organisation	MOLA		
Project brief originator	CgMs Consulting		
Project Design originator	MOLA		
Director/Supervisor	Ian Fisher		
Project Manager	Mark Holmes		
Sponsor or funding body	CgMs Consulting		
<b>PROJECT DATE</b>			
Start date	12 February 2014		
End date	13 February 2014		
<b>ARCHIVES</b>	Location	Content	
Physical	N/A	None	
Paper	MOLA Northampton	Site survey records	
Digital		Geophysical survey & GIS data	
<b>BIBLIOGRAPHY</b>			
Title	Geophysical survey of land at Field Road, Ramsey, Cambridgeshire, February 2014		
Serial title & volume	MOLA 14/49		
Author(s)	Ian Fisher		
Page numbers	15 (including figures)		
Date	27 February 2014		

# Contents

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

## Figures

Front cover: Overall survey results

Fig 1	Site location	1:10,000
Fig 2	Magnetometer survey results	1:2500
Fig 3	Magnetometer survey interpretation	1:2500
Fig 4	Magnetometer survey raw data	1:2500

**GEOPHYSICAL SURVEY OF LAND AT FIELD ROAD  
RAMSEY, CAMBRIDGESHIRE  
FEBRUARY 2014**

***Abstract***

*MOLA was commissioned to carry out an archaeological geophysical survey on c4ha of land at Field Road, Ramsey, Cambridgeshire. The survey identified an undated ditch and medieval ridge and furrow.*

**1 INTRODUCTION**

MOLA (formerly Northamptonshire Archaeology) was commissioned by CgMs Consulting to carry out an archaeological geophysical survey on land at Field Road, Ramsey, Cambridgeshire (Fig 1). The fieldwork was conducted on 12 to 13 February 2014 and comprised the detailed magnetometer survey of c4ha of arable land.

**2 TOPOGRAPHY AND GEOLOGY**

The survey area is located on the western edge of Ramsey, centred on NGR TL 279 851. It comprises a single arable field bounded to the north and east by residential development and by arable fields to the south and west. The site has a gentle north-east facing slope and lies at 10m to 15m aOD.

The underlying solid geology is mapped as mudstone of the Oxford Clay Formation. Superficial deposits of Diamicton of the Oadby Member are recorded across the survey area (<https://www.bgs.ac.uk/geoindex/>).

**3 ARCHAEOLOGICAL BACKGROUND**

A desk-based assessment of the survey area has been undertaken and provides the main source for this summary (Clark 2013).

The desk-based assessment has not identified any designated Heritage Assets (Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Battlefields or Parks and Gardens) or non-designated Heritage Assets within the survey area (Fig 1). No previous archaeological works have been recorded within the survey area either.

The desk-based assessment concludes that there is a low potential for significant archaeological remains within the survey area.

#### **4 METHODOLOGY**

The magnetometer 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).

A grid of contiguous 30m squares was established across the field to be surveyed. The grid points were set out with a tape measure and optical square and were tied in to the Ordnance Survey National Grid using Leica System 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. All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; IfA 2011).

The survey data was processed using Geoplot 3.00v software. The striping was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed where necessary.

The processed data is presented in this report in the form of a greyscale plots at a range of +4nT (black) to -4nT (white). This has been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping in Figure 2, and is shown with an interpretative overlay in Figure 3. A raw data plot is provided in Figure 4.



## **5 SURVEY RESULTS**

The geophysical survey has identified a positive linear anomaly of probable archaeological interest near the western edge of the survey area. It is aligned east to west, approximately 40m long, and probably represents a section of ditch. The survey has also identified four small discrete positive anomalies, which perhaps represent pits, randomly distributed throughout the area.

Regularly spaced positive linear anomalies cross the whole of the survey area on parallel north-west to south-east alignments. They represent the furrows of medieval or early post-medieval ridge and furrow cultivation.

At least two, and probably three, pipes have been detected by the survey. One is represented by a linear anomaly of alternating polarity in the north-eastern field corner (on the data plot, this anomaly is partially obscured by the surrounding magnetic noise). The second, which is located near the south-western field corner, is represented by a discontinuous chain of intense positive anomalies. The possible third example is suggested by a line of six large, regularly spaced ferrous anomalies, which might represent metal collars or other fittings on a non-magnetic (plastic or concrete) pipe. The second and third pipes run perpendicular to each other, with the third one passing through a gap in the second as if truncating it.

Many small randomly distributed ferrous anomalies have been recorded across the survey area, indicating pieces of scrap metal buried within the ploughsoil. They are particularly concentrated at the north-eastern edge of the area, where they merge into a band of incoherent magnetic noise along the line of a modern track.

## **6 CONCLUSION**

The geophysical survey has identified a few isolated anomalies which may represent archaeological features, comprising a ditch and four pits. Medieval to early post-medieval ridge and furrow has also been identified, along with two or three pipes of recent date.

## **BIBLIOGRAPHY**

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

Clarke, P, 2013 *Archaeological Desk-Based Assessment Field Road, Ramsey, Cambridgeshire* CgMs Consulting

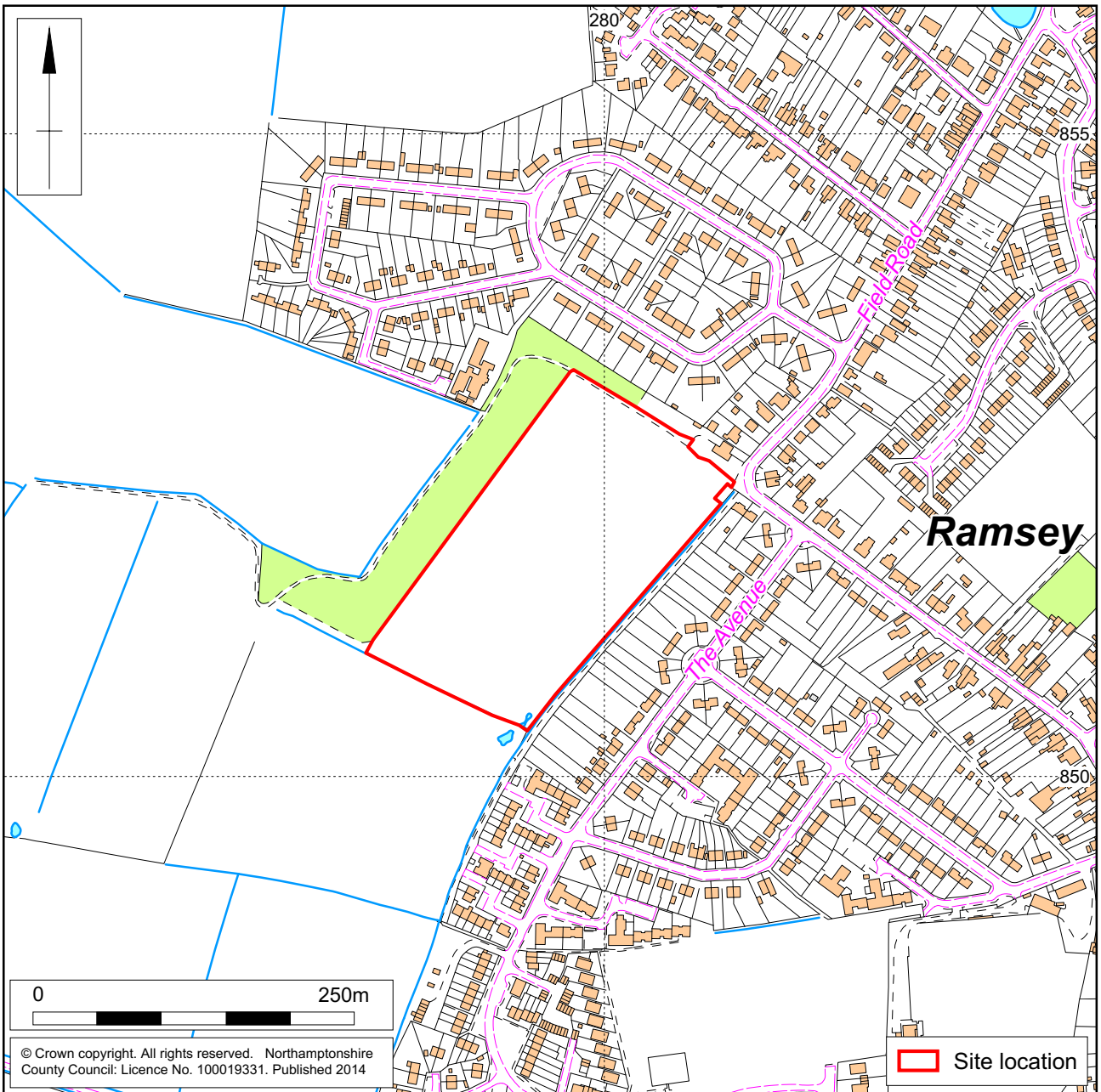
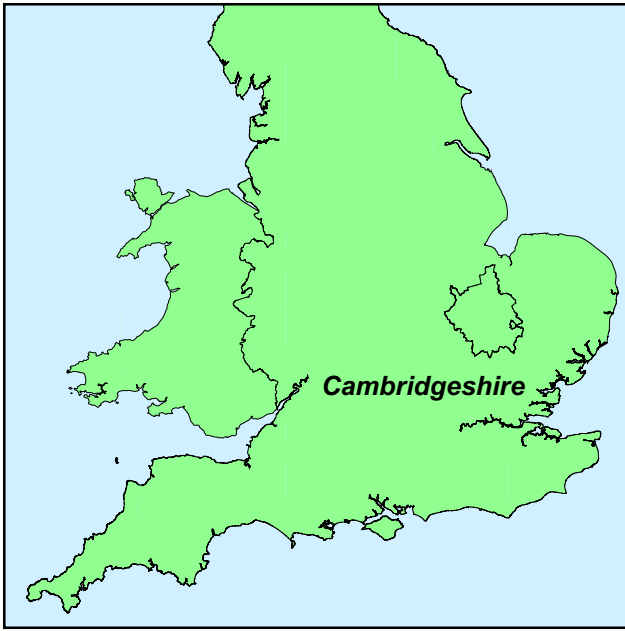
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## **Websites**

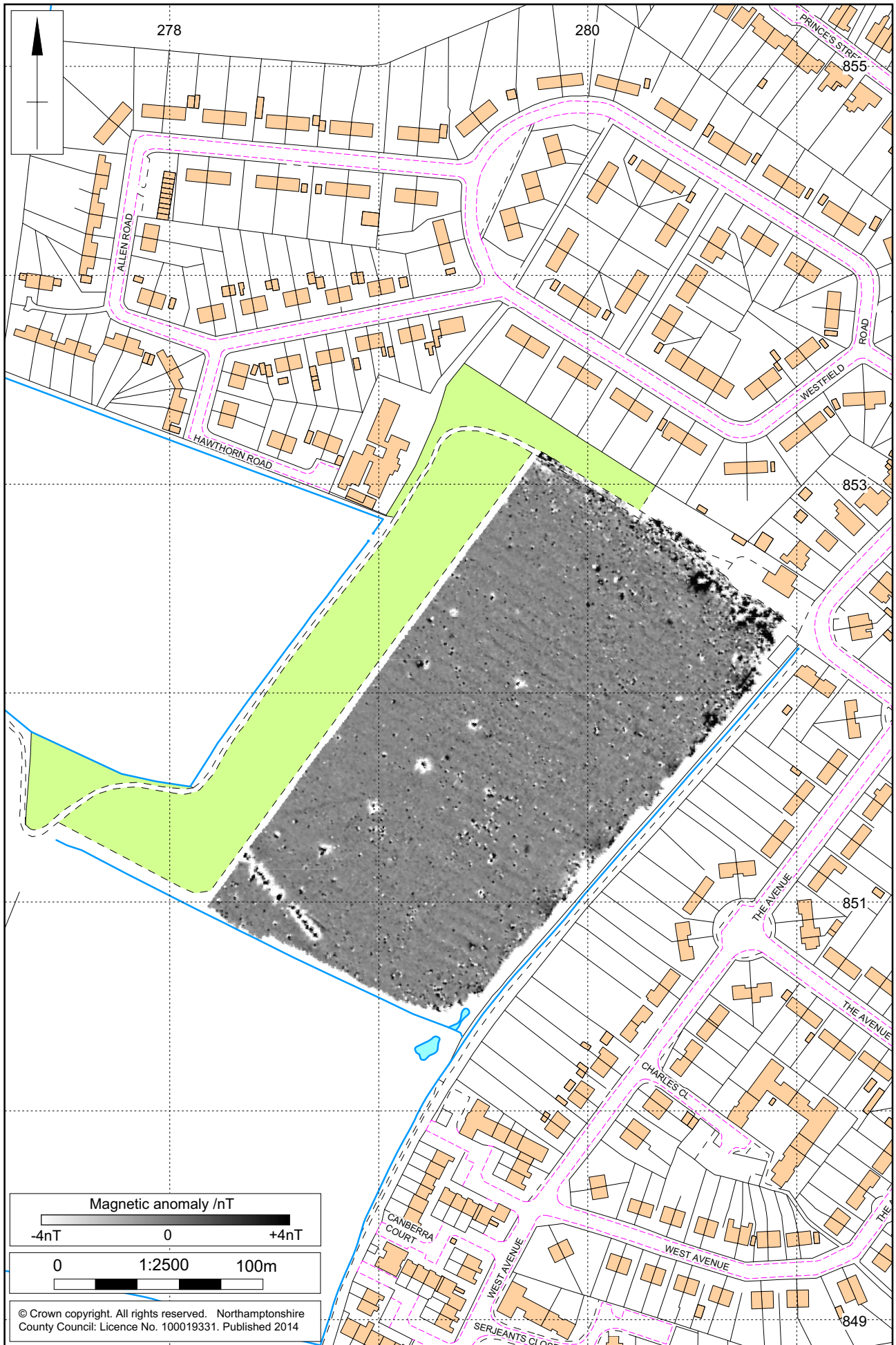
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25 February 2014



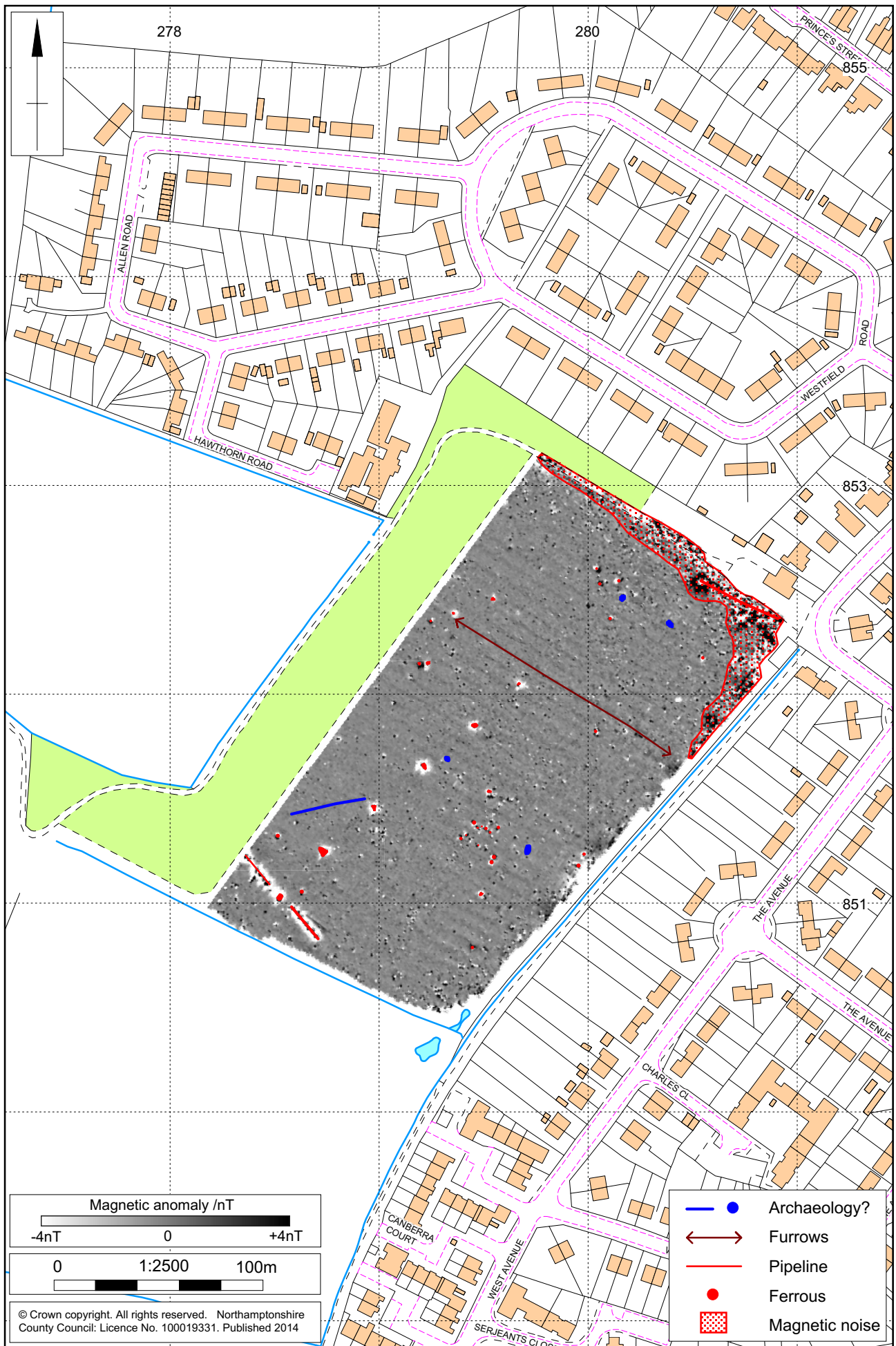
Scale 1:5000

Site location Fig 1



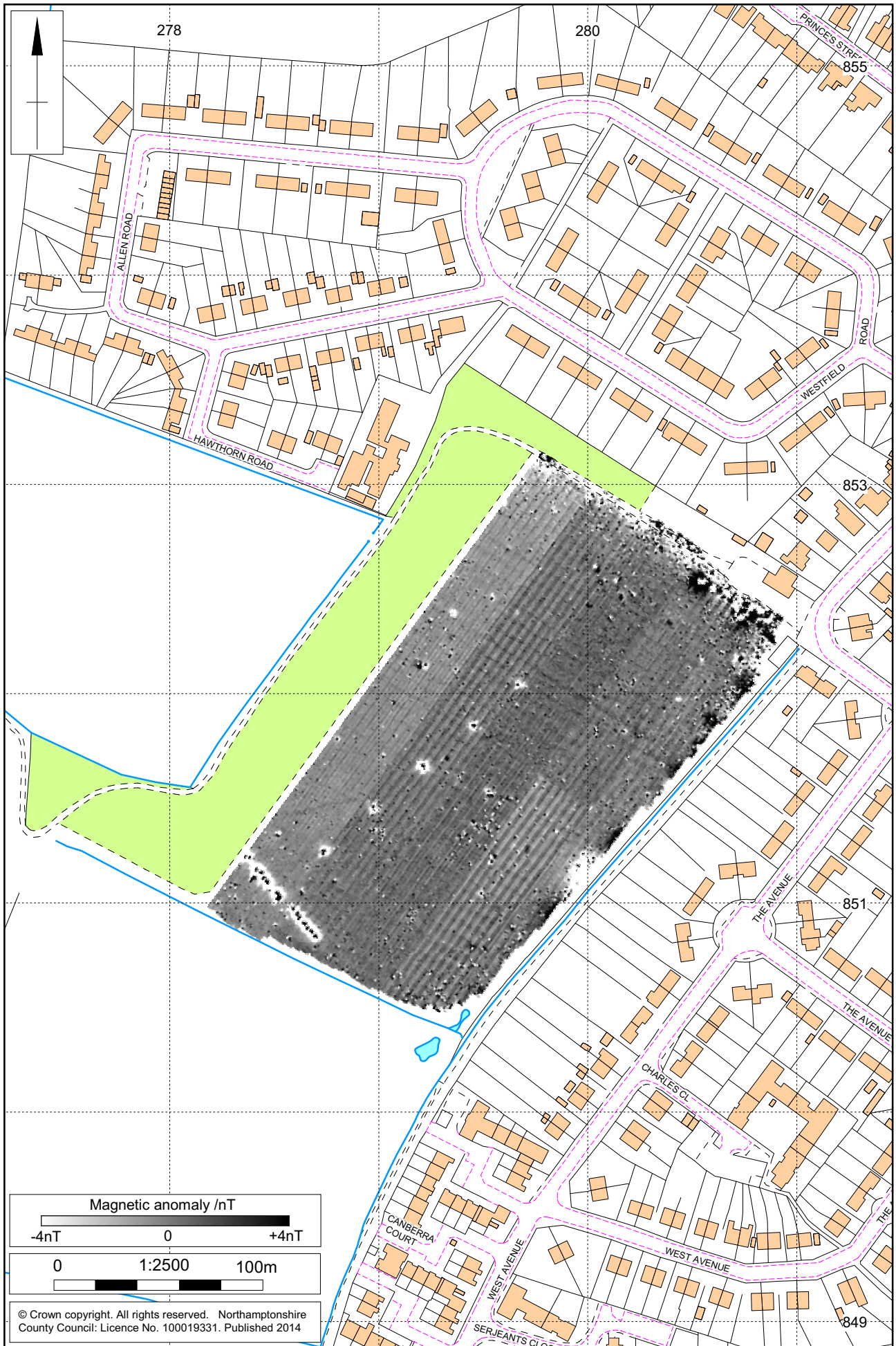
1:2500 (A4)

Magnetometer survey results Fig 2



1:2500 (A4)

Magnetometer survey interpretation Fig 3



1:2500 (A4)

Magnetometer survey raw data Fig 4



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