



**Geophysical Survey of land at Manor Farm  
Market Harborough, Leicestershire  
January 2014**

Report No. 14/46

Author: Ian Fisher

Illustrators: Ian Fisher  
Amir Bassir





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Author: Ian Fisher

Illustrators: Ian Fisher  
Amir Bassir

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MOLA  
Bolton House  
Wootton Hall Park  
Northampton  
NN4 8BN  
01604 700 493  
[www.mola.org.uk](http://www.mola.org.uk)  
[sparry@mola.org.uk](mailto:sparry@mola.org.uk)

**STAFF**

Project Manager: Mark Holmes BA MA MifA

Fieldwork: Adam Meadows BSc  
Tom Coates BA PGDip  
Laura Cogley BA  
Olly Dindol BSc  
Gemma Hewitt BA  
Benn Kidd BA  
Chris Pennell BA

Text: Ian Fisher

Illustrations: Ian Fisher & Amir Bassir BSc

MANOR FARM, MARKET HARBOROUGH

**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		OASIS No: molanort1-172408	
Project name	Geophysical survey of land at Manor Farm, Market Harborough, Leicestershire, January 2014		
Short description	MOLA (formerly Northamptonshire Archaeology) was commissioned to carry out an archaeological geophysical survey on c35ha of land at Manor Farm, Market Harborough, Leicestershire. The survey identified an extensive complex of enclosures, roundhouses and droveway/trackway of Iron Age or Roman date. Medieval ridge and furrow was also recorded.		
Project type	Geophysical survey		
Site status	None		
Previous work	Desk-based assessment (Flitcroft 2013)		
Current Land use	Arable		
Future work	Trial trench evaluation		
Monument type/ period			
Significant finds	Iron Age and Roman enclosures and droveways/tracks. Medieval ridge and furrow		
<b>PROJECT LOCATION</b>			
County	Leicestershire		
Site address	Manor Farm, Market Harborough		
Study area	c35 ha		
OS Easting & Northing	SP 719 877		
Height aOD	c94 - 112m aOD		
<b>PROJECT CREATORS</b>			
Organisation	MOLA (formerly Northamptonshire Archaeology)		
Project brief originator	CgMs Consulting		
Project Design originator	MOLA		
Director/Supervisor	Adam Meadows		
Project Manager	Mark Holmes		
Sponsor or funding body	CgMs Consulting		
<b>PROJECT DATE</b>			
Start date	13 January 2014		
End date	22 January 2014		
<b>ARCHIVES</b>	Location	Content	
Physical			
Paper		Site survey records	
Digital		Geophysical survey & GIS data	
<b>BIBLIOGRAPHY</b>			
Title	Geophysical survey of land at Manor Farm, Market Harborough, Leicestershire, January 2014		
Serial title & volume	MOLA 14/46		
Author(s)	Ian Fisher		
Page numbers	16 (including figures)		
Date	24 February 2014		

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**GEOPHYSICAL SURVEY OF LAND AT MANOR FARM  
MARKET HARBOROUGH, LEICESTSHIRE  
JANUARY 2014**

***Abstract***

*MOLA (formerly Northamptonshire Archaeology) was commissioned to carry out an archaeological geophysical survey on c35ha of land at Manor Farm, Market Harborough, Leicestershire. The survey identified an extensive complex of enclosures, roundhouses and a droveway/trackway of Iron Age or Roman date. Medieval ridge and furrow was also recorded.*

**1 INTRODUCTION**

MOLA (formerly Northamptonshire Archaeology) was commissioned by CgMs Consulting to carry out an archaeological geophysical survey on land at Manor Farm, Market Harborough, Leicestershire (Fig 1). The fieldwork was conducted in January 2014 and comprised the detailed magnetometer survey of c35ha of arable land.

**2 TOPOGRAPHY AND GEOLOGY**

The survey area is located on the north-western edge of Market Harborough, centred on NGR SP 719 877. It comprises a block of arable farmland to the north of the A4304 Lubenham Hill (Fig 1). The eastern part of the site is bound by a small stream with arable fields extending from the other three sides. The site is undulating and lies at 93m to 112m aOD.

The underlying solid geology is mapped as Jurassic mudstone and siltstone of the Dryham formation. Superficial deposits of Glacial Till are recorded in the surrounding area but not in the survey area (Flitcroft 2013).

**3 ARCHAEOLOGICAL BACKGROUND**

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

The desk-based assessment has identified two small settlements, a possible late prehistoric settlement (HER MLE16335) just outside the survey area and a probable

Roman rural settlement (HER MLE10192) within the survey area. A post-medieval spring (HER MLE10191) has been identified on the northern edge of the site (Fig 1).

Previous archaeological works have been undertaken to the north and south of the survey area and indicate that the site has the potential for early-late prehistoric and Roman period remains. Anglo-Saxon and Medieval remains may also be present. Previous works include geophysical survey and archaeological excavation at Airfield Farm (HER ELE4236, 5464, 6434, 6070, 6517, 7713, 7460) to the north (Butler & Fisher 2010, Clarke 2009 & 2010, Westgarth & Clarke 2007 and GSB 2005) and at Lubenham Hill (HER ELE7686, 7688, 8036) to the south (Clarke 2011, Walford 2011).

#### **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).

An independent network of 30m grid squares was established within each of the fields to be surveyed. The grids were set out with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by means of a Leica 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 were 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 greyscale plots at a range of +4nT (black) to -4nT (white). These have been scaled, rotated and resampled



(georectified) for display against the Ordnance Survey base mapping in Figures 2 and 4. Interpretative overlays are presented in Figures 3 and 5.

## 5 SURVEY RESULTS

The geophysical survey identified an extensive complex of enclosures, roundhouses and a probable ditched droveway/trackway indicating the presence of an Iron Age or Roman settlement. Remnant furrows of medieval ridge and furrow field cultivation were also identified (Figs 2-5).

Field 4 is dominated by a dense cluster of linear and curvilinear anomalies which represent ditched enclosures. The enclosure system measures approximately 400m in length (north to south) and 250m wide (east to west). The complex is confined to Field 4 as similar anomalies were not identified in Field 3 to the west, nor in the adjacent fields surveyed previously to the north and east (Butler & Fisher 2010). The complex consists of rectilinear, subcircular and amorphous enclosures but a detailed interpretation is difficult due to medieval ridge and furrow obscuring the enclosure system. On the north-east edge of the complex a rectilinear enclosure contains a single circular anomaly which may represent the location of a roundhouse. Five more such possible roundhouses have been identified on the north-west side of the field. These are possibly associated with a separate linear group of enclosures.

A pair of parallel magnetically weak anomalies extend north-east from Field 1 into Field 3 and continues northwards on a sinuous course. Similar anomalies were identified as ditched droveways/trackways in the previous surveys to the north (Airfield Farm, Butler & Fisher 2010) and south (Lubenham Hill, Walford 2011). In Field 3, the droveway/trackway may branch eastwards and extend towards the enclosure complex. However, the trackway here is on the same alignment as the later ridge and furrow and it is impossible to fully distinguish the anomalies. In the southern part of Field 4, two isolated linear anomalies maybe ditches associated with the droveway/trackway.

A second, less complex, enclosure system has been identified straddling Fields 1 and 2 abutting the southern side of the droveway/trackway. The enclosure system continues outside the survey area to the south-west. It consists of two rectilinear adjoining enclosures, measuring approximately 100m by 100m. There may be evidence of pits

and smaller internal enclosures. An isolated subcircular enclosure has been identified to the north-east abutting the droveway/trackway.

Isolated lengths of ditch have been identified in Fields 1, 2, 3 and 5. In Fields 2 and 5, the ditches are curvilinear and maybe part of further circular enclosures.

A sinuous linear anomaly in the southern part of Field 2 correlates with a pair of parallel ditches identified in the geophysical survey at Lubenham Hill to the south (Walford 2011). The anomalies were interpreted as a trackway, so the feature identified may be a continuation of the trackway. A linear anomaly, aligned north-west to south-east, is visible on the west side of Field 1. This may be another branch of the droveway/trackway or simply an isolated length of ditch.

Medieval ridge and furrow has been mapped across the entire survey area aligned east to west. In the north-west corner it is aligned north to south.

In the southern part of Field 2, a probable area of quarrying has been identified. Immediately to the south of this there is a magnetically enhanced area which maybe an associated lime kiln.

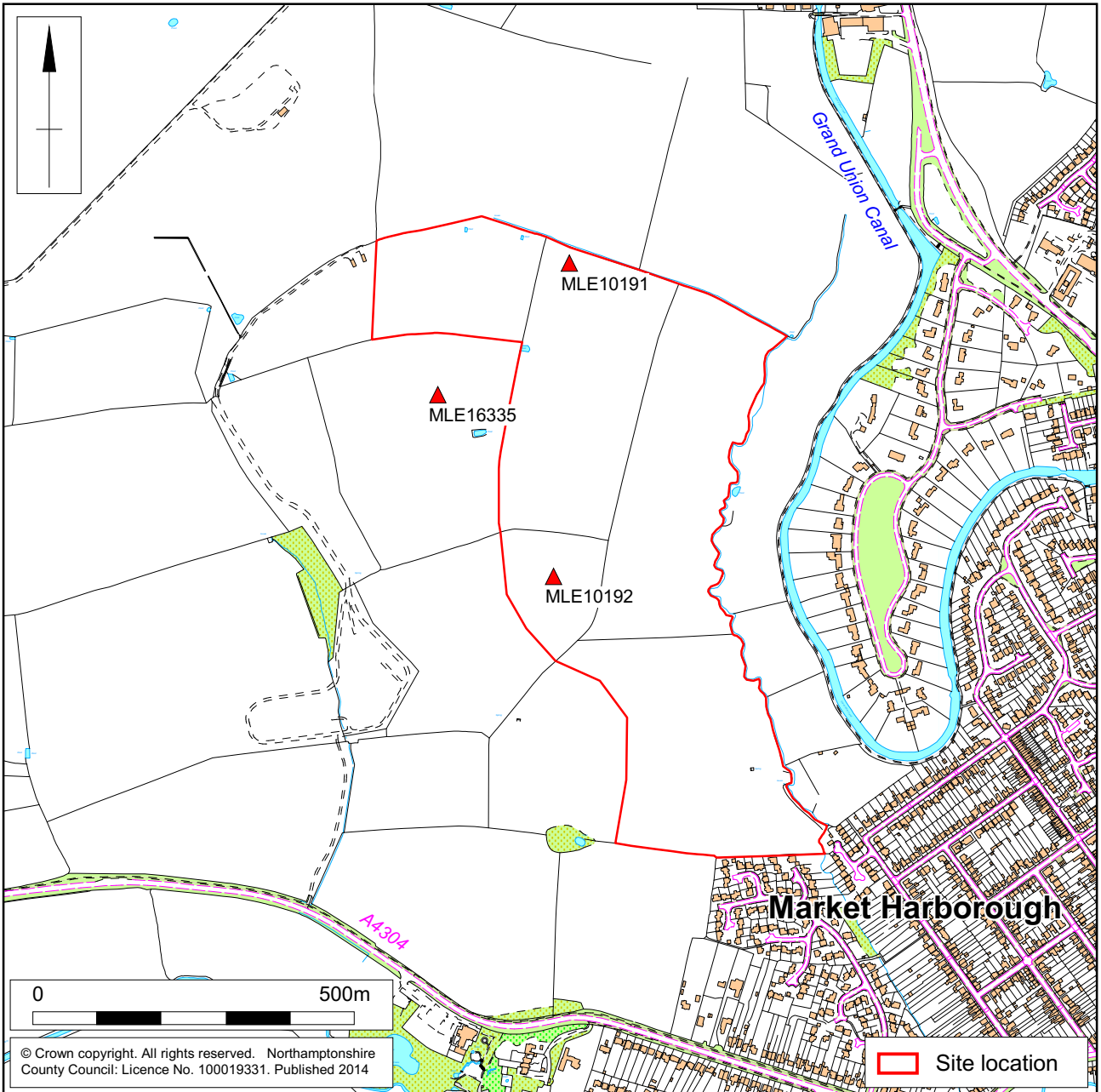
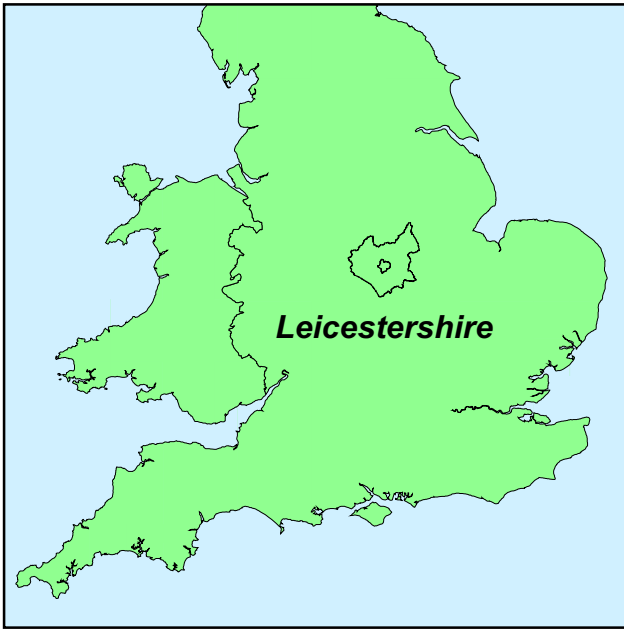
Randomly distributed ferrous objects have been detected in all of the fields surveyed and an area of weak magnetic noise has been identified in Field 5. The latter anomaly may indicate burnt soil such as caused by a bonfire. Along the northern edge of the survey area in Fields 3, 4 & 5 amorphous anomalies deriving from the underlying geology are present.

## **6 CONCLUSION**

The geophysical survey was successful in mapping significant archaeological features that probably relate to features identified in previous surveys to the north and south and suggests an Iron Age or Roman date. Medieval ridge and furrow was also detected across the whole site.

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Scale 1:10,000

Site location Fig 1

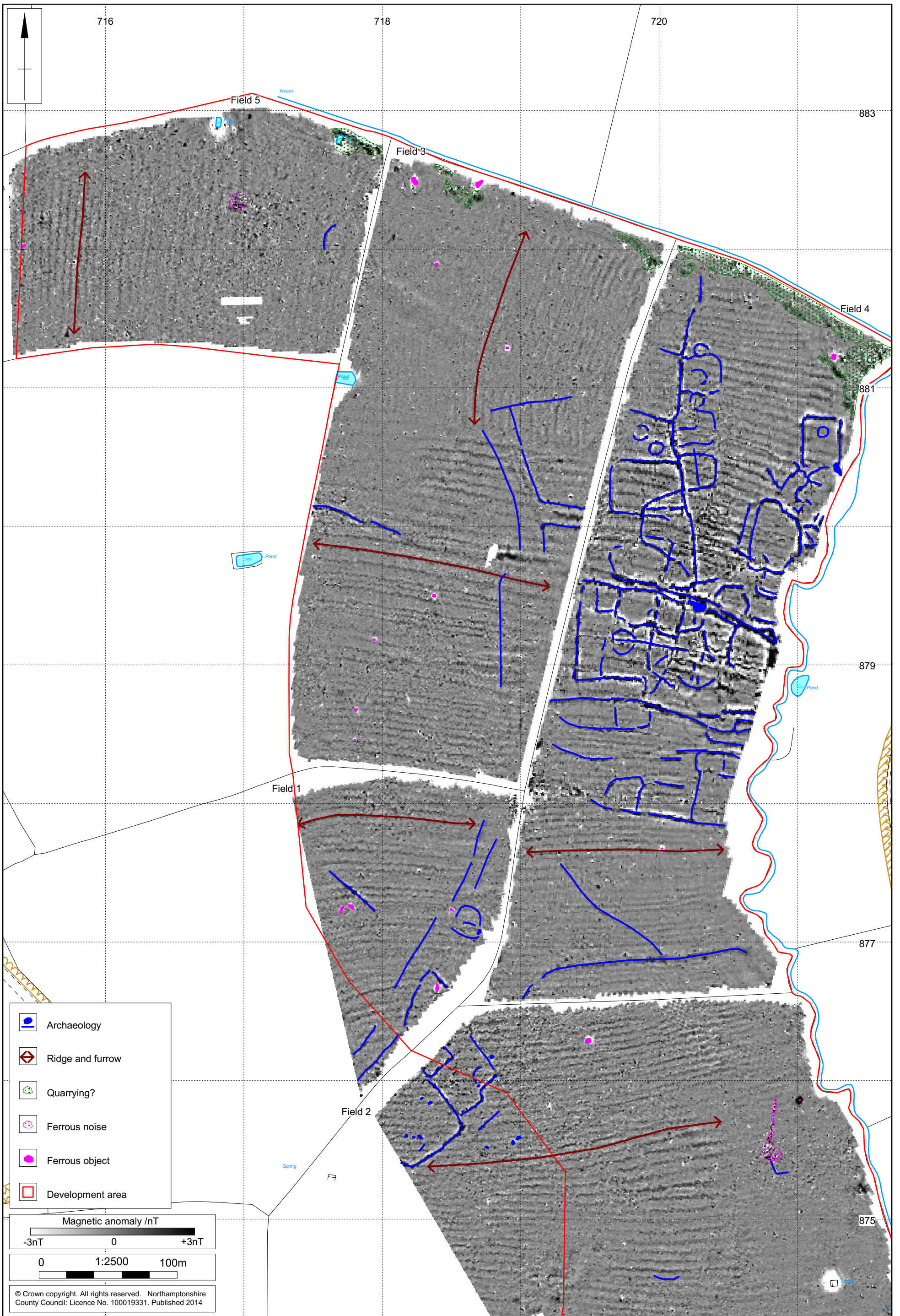
Scale 1:2500 (A3)



Geophysical Survey Results Fields 1, 3, 4 & 5 Fig 2

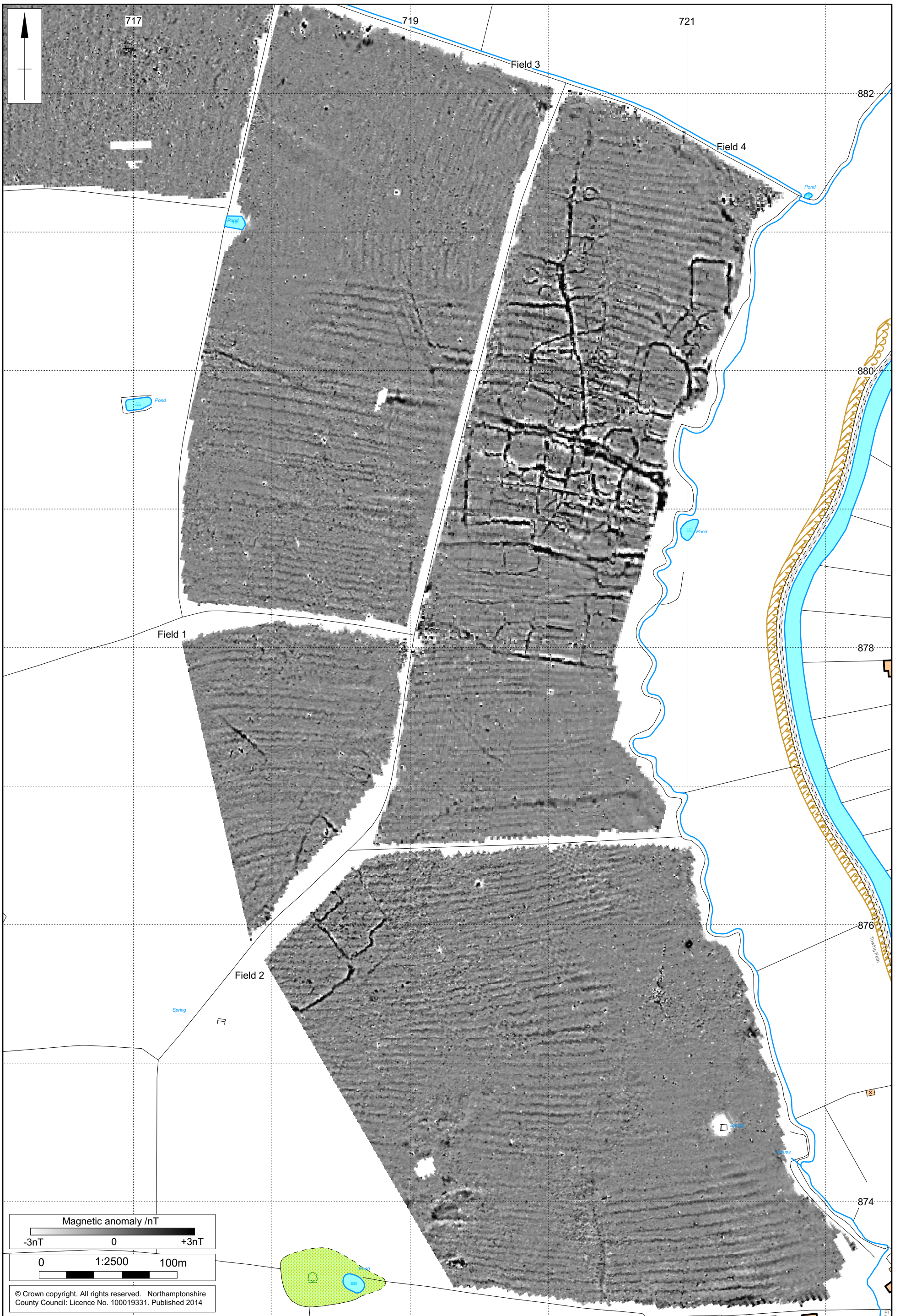
Magnetic anomaly /nT  
-3nT 0 +3nT  
0 1:2500 100m  
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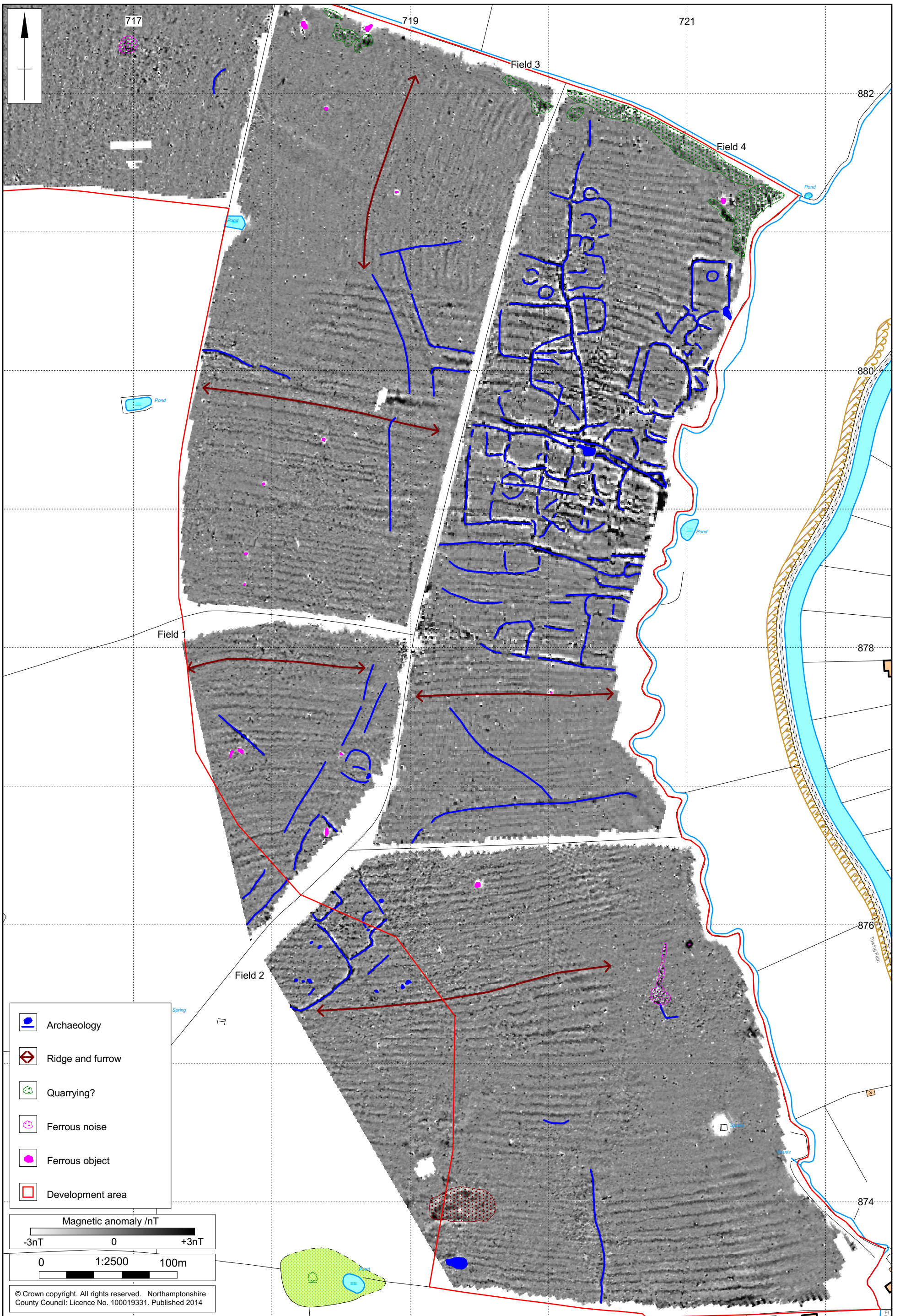
Scale 1:2500 (A3)



Geophysical Survey Interpretation Fields 1, 3, 4 & 5 Fig 3

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MOLA  
Bolton House  
Wootton Hall Park  
Northampton  
NN4 8BN  
01604 700 493  
[www.mola.org.uk](http://www.mola.org.uk)  
[sparry@mola.org.uk](mailto:sparry@mola.org.uk)