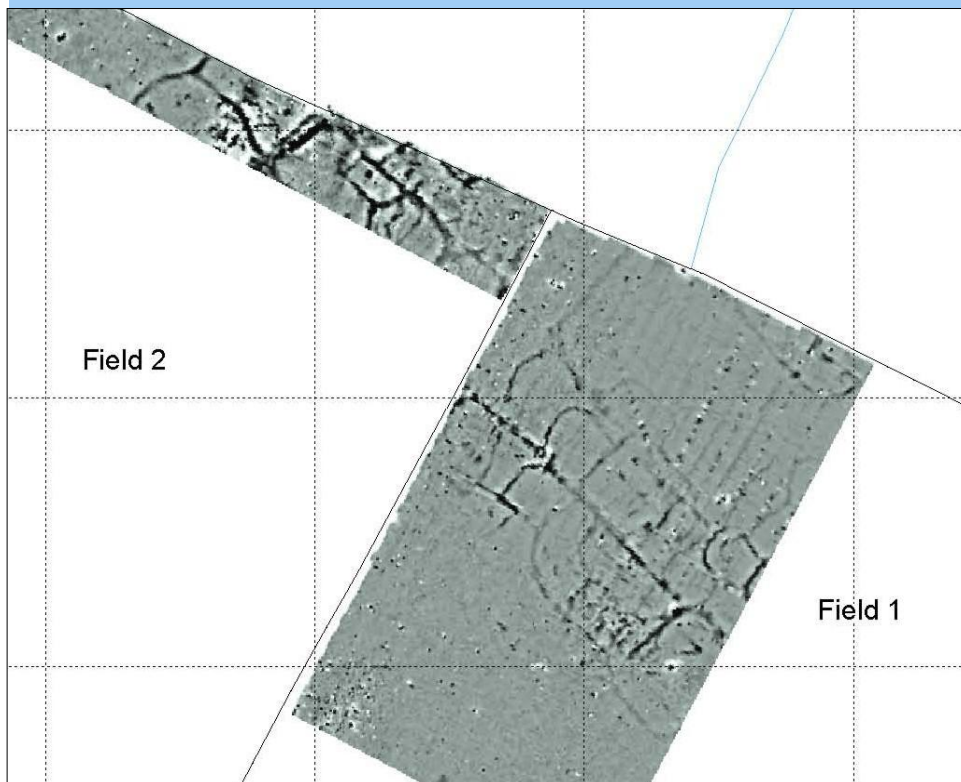




# Northamptonshire Archaeology

## Archaeological Geophysical Survey at Tansor Grange, Northamptonshire September 2011



### Northamptonshire Archaeology

2 Bolton House  
Wootton Hall Park  
Northampton NN4 8BE  
t. 01604 700493 f. 01604 702822  
e. [sparry@northamptonshire.gov.uk](mailto:sparry@northamptonshire.gov.uk)  
w. [www.northantsarchaeology.co.uk](http://www.northantsarchaeology.co.uk)



Northamptonshire  
County Council

John Walford and  
Pat Chapman  
Report 11/198  
September 2011



**STAFF**

Project Manager: Adrian Butler MA BSc AlfA

Fieldwork: John Walford MSc  
Robyn Pelling BSc

Text: John Walford  
Pat Chapman BA CMS AlfA

Illustrations John Walford  
Ian Fisher BSc

**QUALITY CONTROL**

	Print name	Signed	Date
Checked by	Ian Fisher		
Verified by	Ian Meadows		
Approved by	Andy Chapman		

TANSOR GRANGE, NORTHAMPTONSHIRE

**OASIS REPORT FORM**

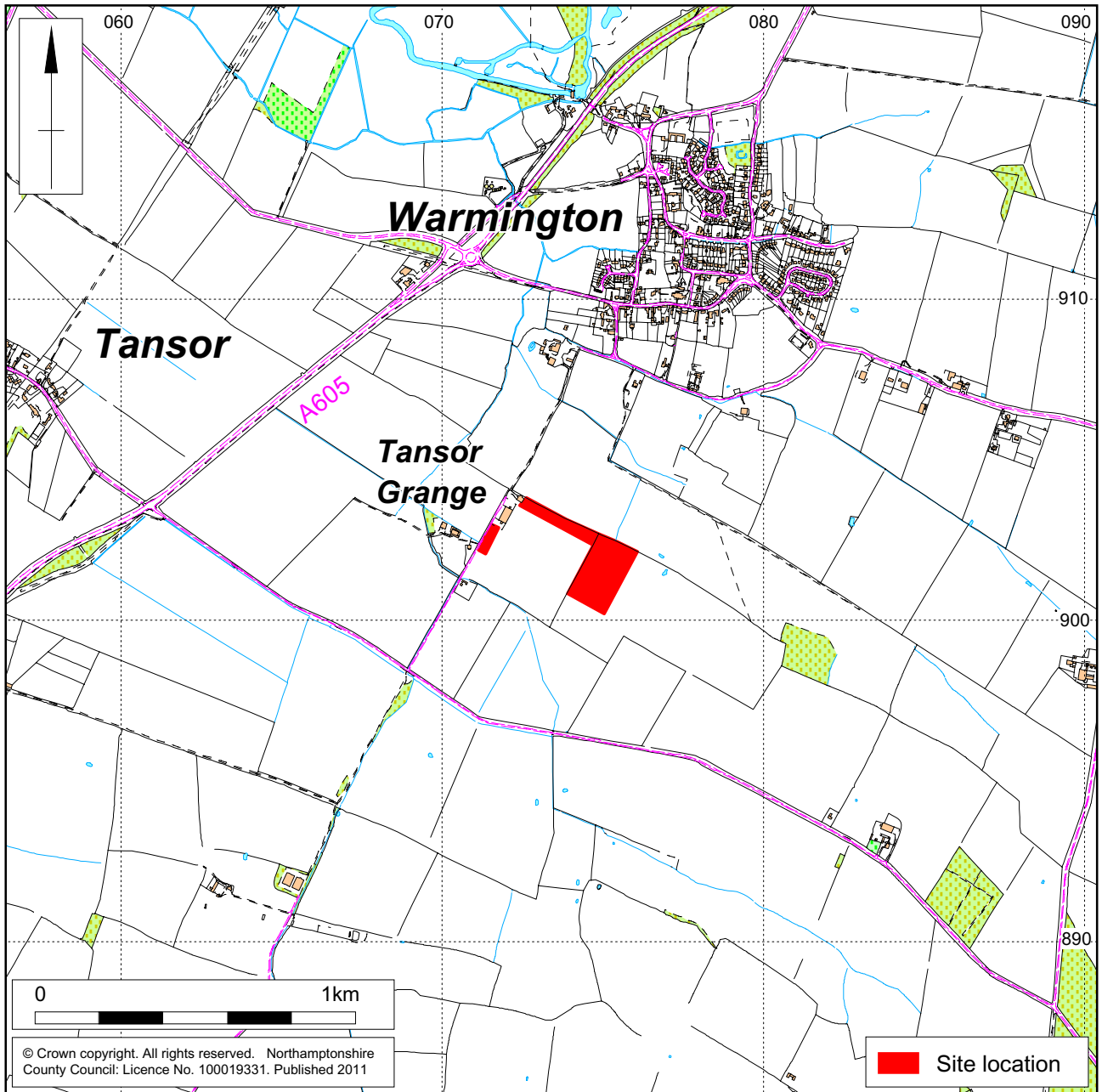
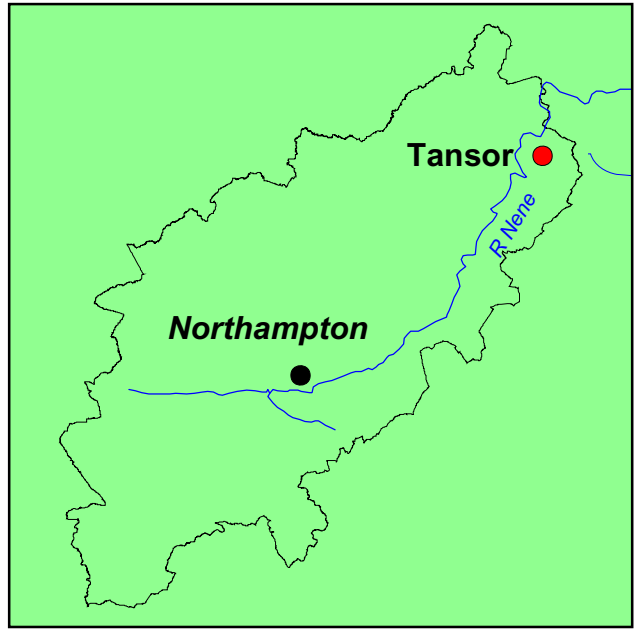
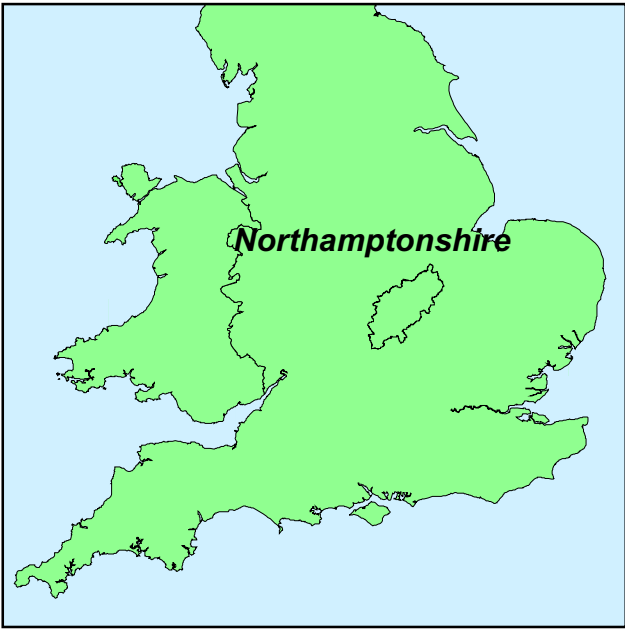
PROJECT DETAILS		
Project name	Archaeological Geophysical Survey at Tansor Grange, Northamptonshire	
Short description	Northamptonshire Archaeology was commissioned to carry out magnetometer survey in advance of the construction of a wind turbine and access road at Tansor Grange, Northamptonshire. Two blocks of land, with a total area of c 3.8ha, were subject to detailed magnetometer survey. This work revealed a substantial complex of enclosures of probable Iron Age or Romano-British date associated with a boundary ditch also seen as a cropmark.	
Project type	Geophysical survey	
Site status	None	
Previous work	Unknown	
Current Land use	Arable	
Future work	Unknown	
Monument type/ period	Iron Age or Romano-British enclosures.	
Significant finds		
PROJECT LOCATION		
County	Northamptonshire	
Site address	Tansor Grange	
Study area	c 3.8ha	
OS Easting & Northing	TL 074 904	
Height OD	c 27 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Liz Mordue, Northamptonshire County Council	
Project Design originator	NA	
Director/Supervisor	John Walford	
Project Manager	Adrian Butler	
Sponsor or funding body	David Jackson Architectural Services Ltd	
PROJECT DATE		
Start date	14 September 2011	
End date	30 September 2011	
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 at Tansor Grange, Northamptonshire	
Serial title & volume	Northamptonshire Archaeology Reports 11/198	
Author(s)	John Walford	
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# Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>TOPOGRAPHY AND GEOLOGY</b>	<b>1</b>
<b>3</b>	<b>ARCHAEOLOGICAL BACKGROUND</b>	<b>2</b>
<b>4</b>	<b>METHODOLOGY</b>	<b>2</b>
<b>5</b>	<b>SURVEY RESULTS</b>	<b>3</b>
	5.1 Field 1	3
	5.2 Field 2	4
<b>6</b>	<b>CONCLUSION</b>	<b>5</b>
	<b>BIBLIOGRAPHY</b>	<b>6</b>

## Figures

Fig 1	Site location	1:20,000
Fig 2	Magnetometer survey results	1:2,500
Fig 3	Magnetometer survey interpretation	1:2,500
Fig 4	Magnetometer survey results and nearby cropmarks	1:10,000
Fig 5	Unprocessed magnetometer data	1:2,500



Scale 1:20,000

Site location Fig 1

**ARCHAEOLOGICAL GEOPHYSICAL SURVEY AT  
TANSOR GRANGE, NORTHAMPTONSHIRE  
SEPTEMBER 2011**

Abstract

*Northamptonshire Archaeology was commissioned by David Jackson Architectural Services Ltd to carry out a magnetometer survey in advance of the construction of a wind turbine and access road at Tansor Grange, Northamptonshire. Two blocks of land, with a total area of c 3.8ha, were subject to detailed magnetometer survey. This work revealed a substantial complex of enclosures of probable Iron Age or Romano-British date associated with a boundary ditch also seen as a cropmark.*

**1 INTRODUCTION**

Northamptonshire Archaeology (NA) was commissioned by David Jackson Architectural Services Ltd, on behalf of the Ashton Estate, to conduct an archaeological geophysical survey in advance of a proposal to construct a wind turbine development and access road (planning application EN11/00993/FUL) to the east of Tansor Grange, Tansor, Northamptonshire (NGR TL 074 904, Fig 1). As this area has a considerable potential for archaeological remains, the Assistant Archaeological Advisor to Northamptonshire County Council has advised that an appropriate scheme of archaeological investigation should be undertaken.

**2 TOPOGRAPHY AND GEOLOGY**

The survey area straddles two adjacent fields, lying immediately to the east of Tansor Grange, in the parish of Tansor, Northamptonshire. It consists of a strip of land around the western and northern edges of the first field along the proposed course of the access road, and a block of land in the north-western corner of the second field around the proposed turbine location (Fig 1).

In topographical terms, the survey area occupies part of a wide and gently undulating shelf of land, at an elevation of 25-30m AOD. To the west, it overlooks the floodplain and lower terraces of the River Nene, and to the east it is overlooked by a scarp of high ground.

The geology of the site comprises Kellaway sands and clay, partially overlain by Quaternary terrace deposits (BGS 2011). The deposits support fine loamy and clayey soils of the Moreton and Oxpasture associations (SSEW 1983)

### 3 ARCHAEOLOGICAL BACKGROUND

To the east and south-east is an area of cropmarks indicating prehistoric activity, including a probable burial site (Fig 4).

Two of a group of three circular barrows, c 1.5km to the west, were excavated in advance of road improvement on the A605 in 1995 (Chapman 1996-97). One barrow had originated as a Neolithic mortuary enclosure, with the encircling ditch and barrow later reused in the late Neolithic/early Bronze Age. It was later a focus for Saxon burials.

To the west and south is an extensive area of cropmarks indicating prehistoric and Romano-British settlement. Pottery dating to the late Roman period was found during fieldwalking in the 1960s towards the southern end of the complex. This area of cropmarks is bounded by the road from Warmington past Tansor Grange, which is on the line of the Roman road from Water Newton to Thrapston. Pottery indicating Roman activity was collected during fieldwalking to the north of the application area in 1978.

Within the cropmark complex west of the Grange is the site of a probable medieval or post-medieval moat. The second mound of the Tansor group, c 1.5km to the west, was a medieval windmill mound for a post-mill (Chapman 1996-97).

### 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).

Each survey area was manually divided into 30m grid squares by means of a tape measure and optical square, and the grids were tied in to the Ordnance Survey national grid with a 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 grid.

All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; IfA forthcoming).

The survey data was processed using Geoplot 3.00u 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 is presented in this report in the form of grey-tone plots, at scales appropriate to the dataset (+/- 4nT black/white, or otherwise as stated). The grey-tone plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay is shown in Figure 3, and a plot of the raw (unprocessed) data is given in Figure 5.

## 5 SURVEY RESULTS

### 5.1 Field 1

Survey of this area revealed a group of positive linear and curvilinear magnetic anomalies, concentrated across the centre third of the field (Figs 2 & 3). A probable boundary ditch, aligned north-west to south-east, runs across the middle of Field 1. To the east it meets an L-shaped anomaly. At this point there is an intense anomaly that could represent a possible kiln or hearth. The linear ditch also appears as a cropmark and extends for at least another 100m to the south-east (Fig 4).

North and south of the boundary ditch are a series of linear and curvilinear ditches, not all connected, forming irregular partial enclosures. There are two large pits in the west of the field to the south of the boundary ditch, three more in the centre and north of the ditch and indications of further pits along the line of the ditch.

A short length of ditch alongside the eastern limit of the survey may be connected with the circular cropmark immediately adjacent to the east (Fig 4). A ditch connected to the enclosures and aligned south-west to north-east extends beyond the northern field boundary.

In the north-eastern corner of the survey area a slightly curving ditch connects to a short length of ditch aligned east to west, and the end of another ditch, aligned north-east to south-west. These all extend beyond the north and east boundaries of the survey area.

Remnant furrows of the medieval ridge and furrow cultivation system run north-east to south-west in the northern half of the field, with post-medieval/modern field drains running in the same direction.

There are two large areas of magnetic debris, in the south-west corner and slightly south of centre and a ferrous object.

There are no archaeological features in the southern third of the field.

### 5.2 Field 2

The survey of the strip along the northern boundary of the field shows a further series of enclosures, on the same north-west to south-east alignment as those in Field 1 (Figs 2 & 3). The northern side of a rectangular enclosure c125m long has various internal divisions and short lengths of ditch extending northwards. A further ditch system runs westwards for c 50m to a ditch that appears to form the western limit of settlement, all extending beyond the area of the survey to the south and the field boundary to the north.

A large area of magnetic debris occurs just west of centre in this strip. There is a ferrous object in the north-west corner and another possible hearth or kiln to the west of the ditch complex.

The only archaeological feature in the small strip alongside the western field boundary appears to be a pit. However, a lot of this area is masked by ferrous halos around telegraph poles and fence lines.



## 6 CONCLUSION

The survey has located a substantial complex of regular and irregular ditched enclosures set to either side of a linear boundary. They are likely to represent settlement of Iron Age and/or Romano-British date. The linear boundary in Field 1 has also been recorded as a cropmark. A feature at the easternmost end of the survey may be the western edge of a large circular feature also seen as a cropmark.

The survey is in proximity to prehistoric features, a Roman road and an area of extensive cropmarks indicating prehistoric and Romano-British settlement to the west and north, suggesting that the features revealed are part of this larger area of activity.

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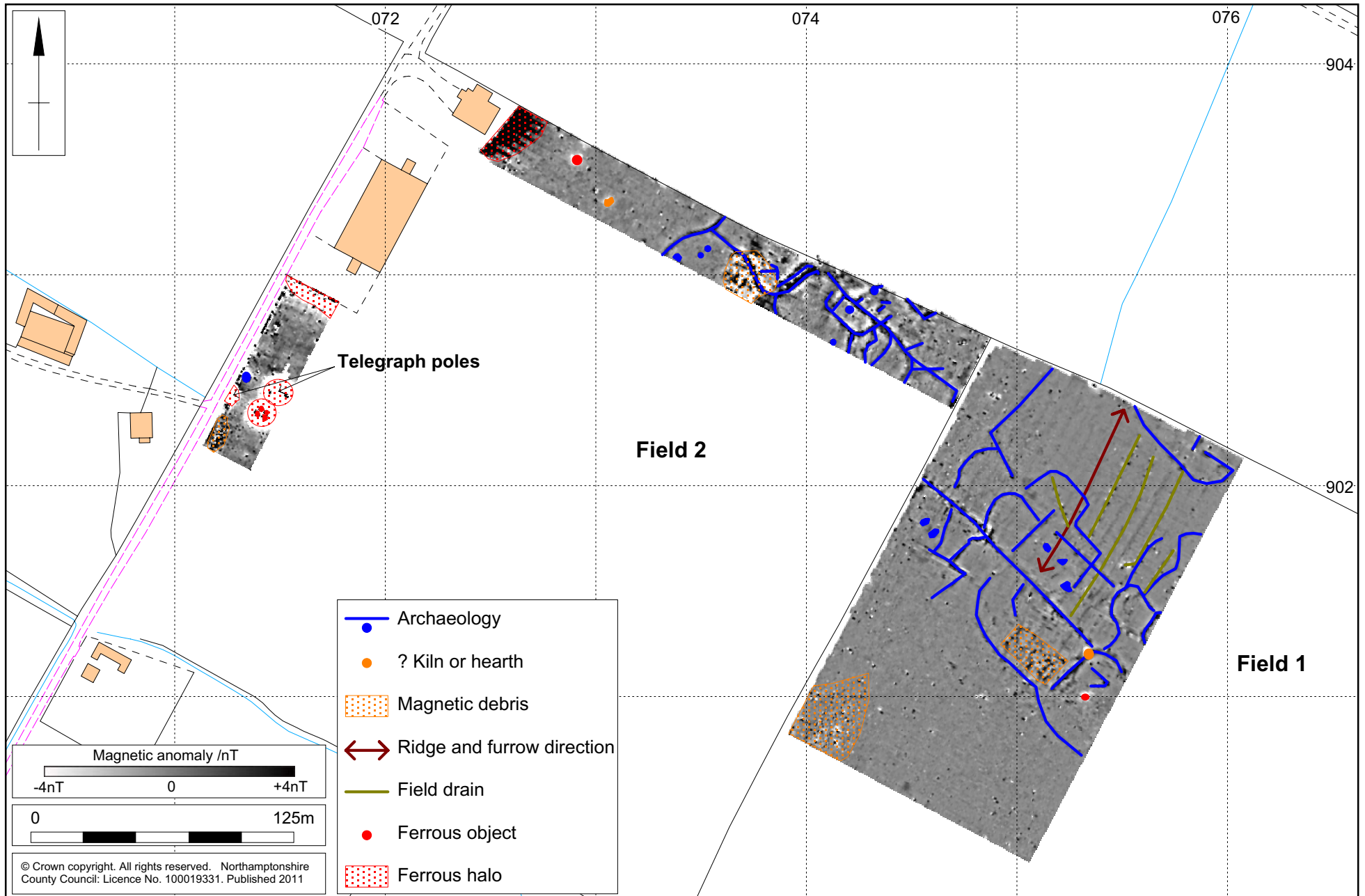
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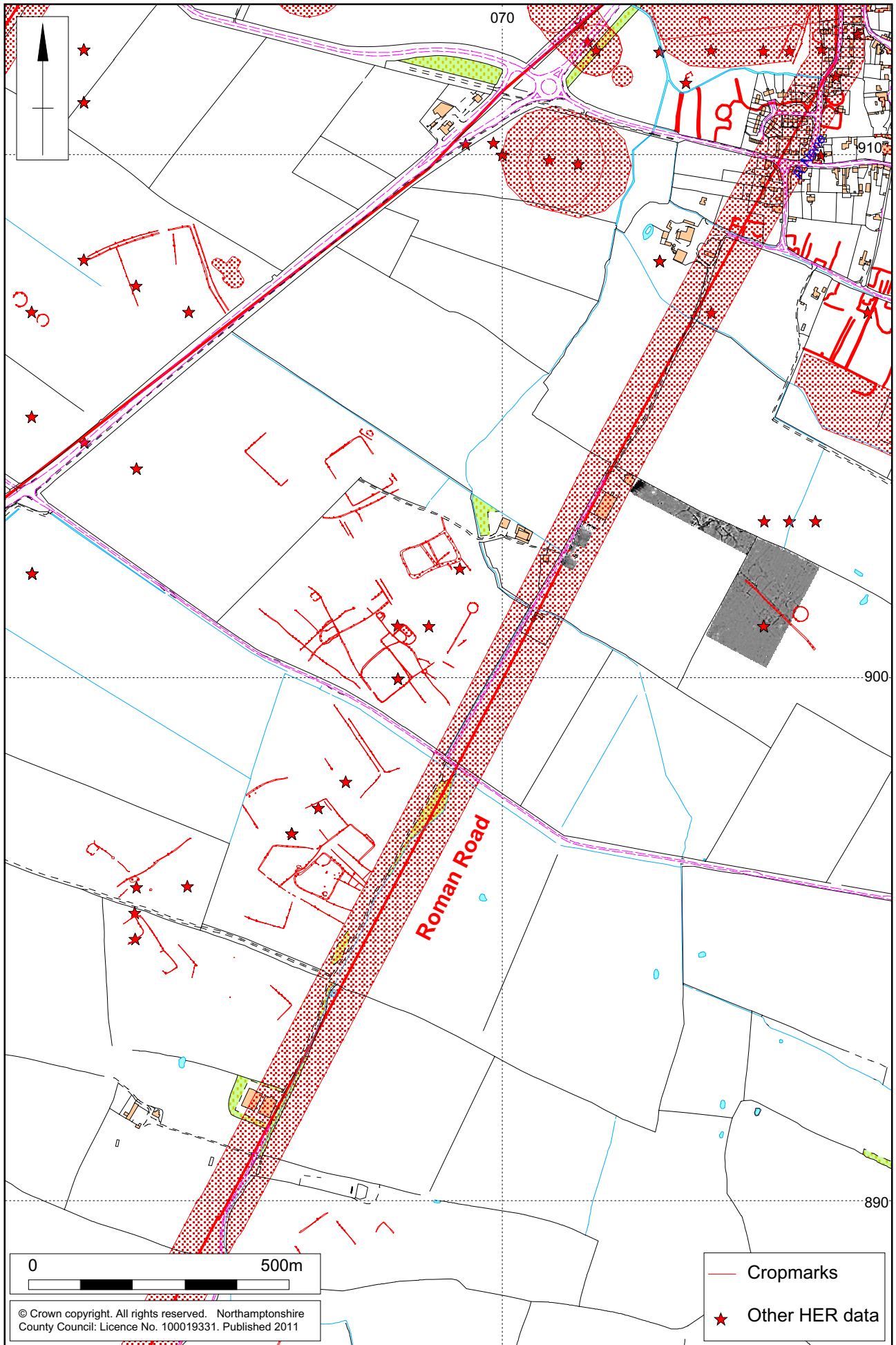
Scale 1:2500

Magnetometer survey results Fig 2



Scale 1:2500

Magnetometer survey interpretation Fig 3



Scale 1:10,000

Magnetometer survey results and nearby cropmarks Fig 4



Scale 1:2500

Magnetometer survey results Raw Data Fig 5



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2 Bolton House  
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t. 01604 700493 f. 01604 702822

e. [sparry@northamptonshire.gov.uk](mailto:sparry@northamptonshire.gov.uk)

w. [www.northantsarchaeology.co.uk](http://www.northantsarchaeology.co.uk)



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