



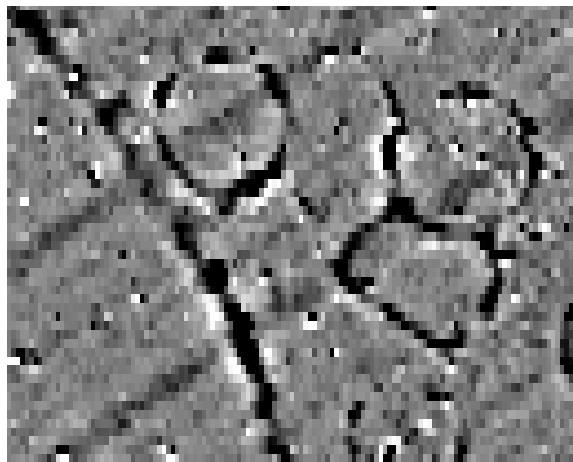
Northamptonshire County Council

Northamptonshire Archaeology

An Archaeological Geophysical Survey
of Land at Manor Farm, Humberstone

Leicester

October 2009



Adrian Butler

November 2009

Report 09/154

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QUALITY CONTROL

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Verified and Approved by	A Chapman	<i>AC</i>	12/11/09

OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey of Land near Humberstone Manor Farm, Leicester.	
Short description	Northamptonshire Archaeology was commissioned to conduct magnetic gradiometer survey across 4ha of pasture located immediately north of Manor Farm, Humberstone, Leicester. The survey detected a group of up to ten Iron Age roundhouses, overlain by medieval ridge and furrow. The Iron Age features form part of a linear settlement previously investigated in 1997-9 and 2001.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	Iron Age settlement, medieval ridge and furrow.	
Significant finds	None	
PROJECT LOCATION		
County	Leicestershire	
Site address	Manor Farm, Thurmaston Lane, Humberstone, Leicester	
Study area	c 4ha	
OS Easting & Northing	SK 6262 0655	
Height OD	c 95-100m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	ULAS	
Project Design originator	NA	
Director/Supervisor	Paul Clements	
Project Manager	Adrian Butler	
Sponsor or funding body	University of Leicester Archaeological Services (ULAS)	
PROJECT DATE		
Start date	22 nd October 2009	
End date	23 rd October 2009	
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Journal/monograph, published or forthcoming, or unpublished client report		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 Manor Farm, Humberstone, Leicester.	
Serial title & volume	Northamptonshire Archaeology Reports 09/154	
Author(s)	Adrian Butler	
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ARCHAEOLOGICAL GEOPHYSICAL SURVEY
AT MANOR FARM, HUMBERSTONE, LEICESTER
OCTOBER 2009

ABSTRACT

Northamptonshire Archaeology was commissioned to conduct magnetic gradiometer survey across 4ha of pasture located immediately north of Manor Farm, Humberstone, Leicester. The survey detected a group of up to ten Iron Age roundhouses with two other structures, bounded to the north by a ditch and overlain by medieval ridge and furrow. The Iron Age features form part of a linear settlement previously investigated in 1997-9 and 2001.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by the University of Leicester Archaeological Services (ULAS) to conduct an archaeological geophysical survey across approximately 4ha of pasture located immediately to the north of Manor Farm, Humberstone (SK 6262 0655; Fig 1). The purpose of the survey was to investigate the archaeological potential of the site prior to the start of proposed development works.

2 TOPOGRAPHY AND GEOLOGY

The survey area occupies a north-westward facing slope at an elevation of c 95 m AOD. It is underlain by boulder clay, beneath which occur Lias deposits of Jurassic age (BGS 2009).

At the time of the fieldwork the land was a grass field in which earthwork ridge and furrow could be seen. A fence crossed the field within the survey area approximately 30m south of, and parallel to the northern boundary. A small corner of the proposed survey area was fenced off and contained grazing horses. This area was thus excluded from the survey.

3 ARCHAEOLOGICAL BACKGROUND

The site is located in an area of archaeological activity, most notably a late Iron Age settlement directly south-east of the development area. The core to this settlement was excavated at the Elms Farm/Tesco site by Oxford Archaeology (OA) in 1997-8 (Fig 1;

Charles *et al* 2000). Unexpectedly, further enclosures and roundhouses were discovered by a ULAS geophysical survey and excavations on the western side of the A47 Link Road, adjacent to the present site (Fig 1; Butler 1999 and J Thomas pers comm). The medieval village of Humberstone lies to the south.

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 site was divided up into 30m x 30m grid squares, which formed the basic unit of survey. These were set out manually by tape measure and optical square and tie-in measurements were taken to the field edges. The gradiometers 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, 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 a greyscale plot (scale +3nT to -3nT 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 most distinct aspect to the survey results is the band of penannular positive magnetic anomalies orientated approximately east to west across the field. These anomalies are likely to represent Iron Age roundhouses, some of which have been detected in their entirety, others less enhanced and yet others only partially.

Two of the structures are of notably different shape. On the eastern boundary a lozenge-shaped feature was detected, whilst towards the western side a sub-rectangular feature appears attached to a circular structure with an extremity from its break towards the east. These features suggest other uses than habitation.

The roundhouse group was bounded to the north by a sinuous east to west ditch anomaly. It is reasonable to assume that this reflects the same boundary ditch that was identified by ULAS to the east and OA further south-east, dating initially to the Bronze Age and continuing through the Iron Age (Butler 1999, 3; J Thomas *pers comm*; & Charles *et al* 2000). A curving positive anomaly to the north of the ditch on the eastern side of the field may represent part of a roundhouse outside the main settlement focus.

Linear parallel magnetic anomalies, orientated east-west in the south and north-south in the northern half of the field reflect the relict medieval ridge and furrow cultivation scheme, much of which is visible on the surface. Linear chains of dipolar anomalies orientated north-south on the western half of the field probably indicate ceramic field drains laid into the former furrows.

An intense magnetic dipole, situated north-east of the boundary ditch, reflected a ferrous feature such as a service cover. A group of tiny positive and dipolar magnetic anomalies detected adjacent to the eastern boundary to the south of the archaeological features was likely to indicate a spread of thermoremanent debris, ie fired objects such as brick and tile. In the south of the area a linear positive-negative chain of magnetic anomalies was detected, representing a probable ferrous pipeline orientated south-west to north-east.

6 CONCLUSION

Magnetic survey at Manor Farm revealed at least six distinct roundhouses with evidence of at least four more. In addition, two possible non-habitation structures in the form of a lozenge-shaped feature and a rectangular feature attached to an apparent roundhouse with distinctive entrance were identified. All the features were contained within a band approximately 50m south of an east to west boundary ditch and, as a group, continue a linear settlement from the area directly adjacent to the east and ultimately 300m further east (Butler 1999; J Thomas pers comm; and Charles *et al* 2000). Although undoubtedly occupied successively, the evidence as a whole points to continued settlement in the Iron Age over an area up to 700m long.

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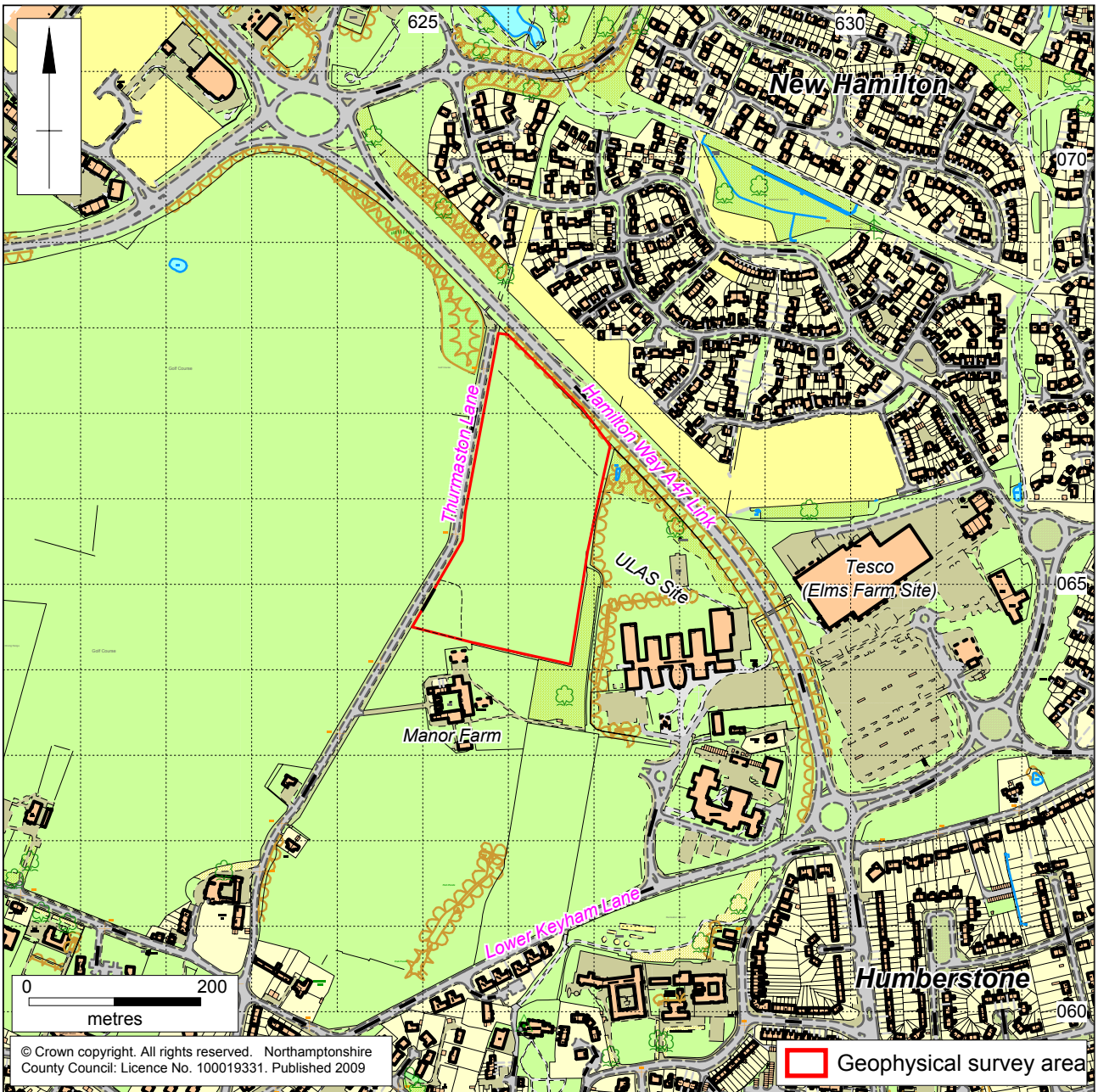
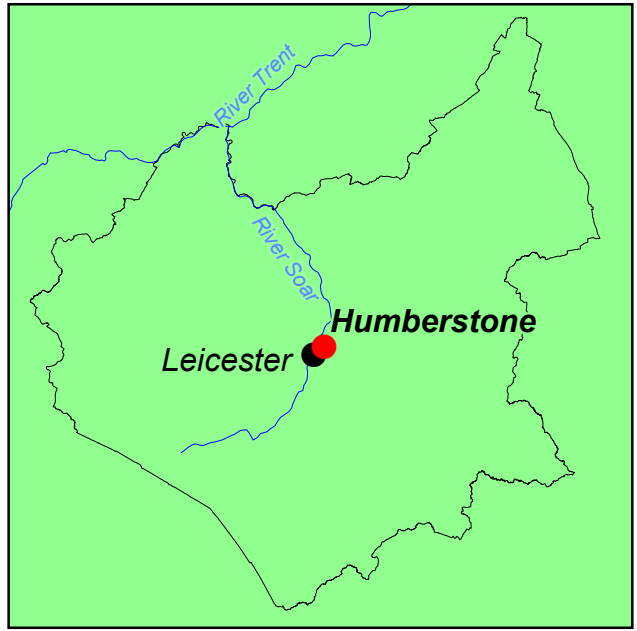
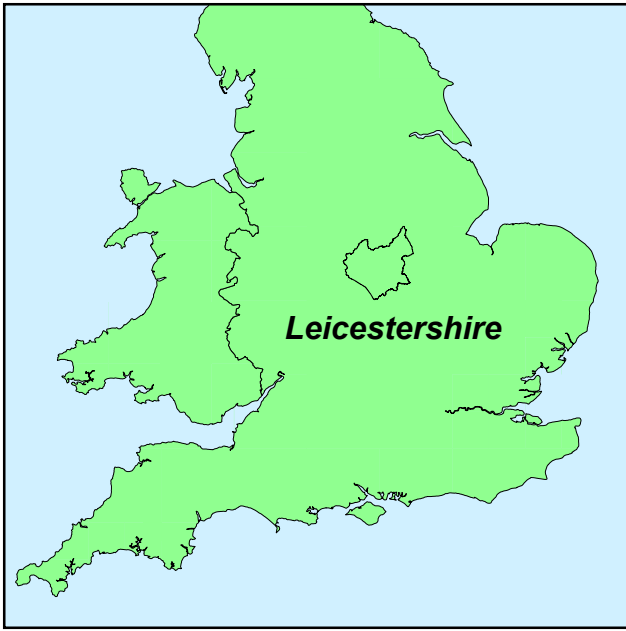
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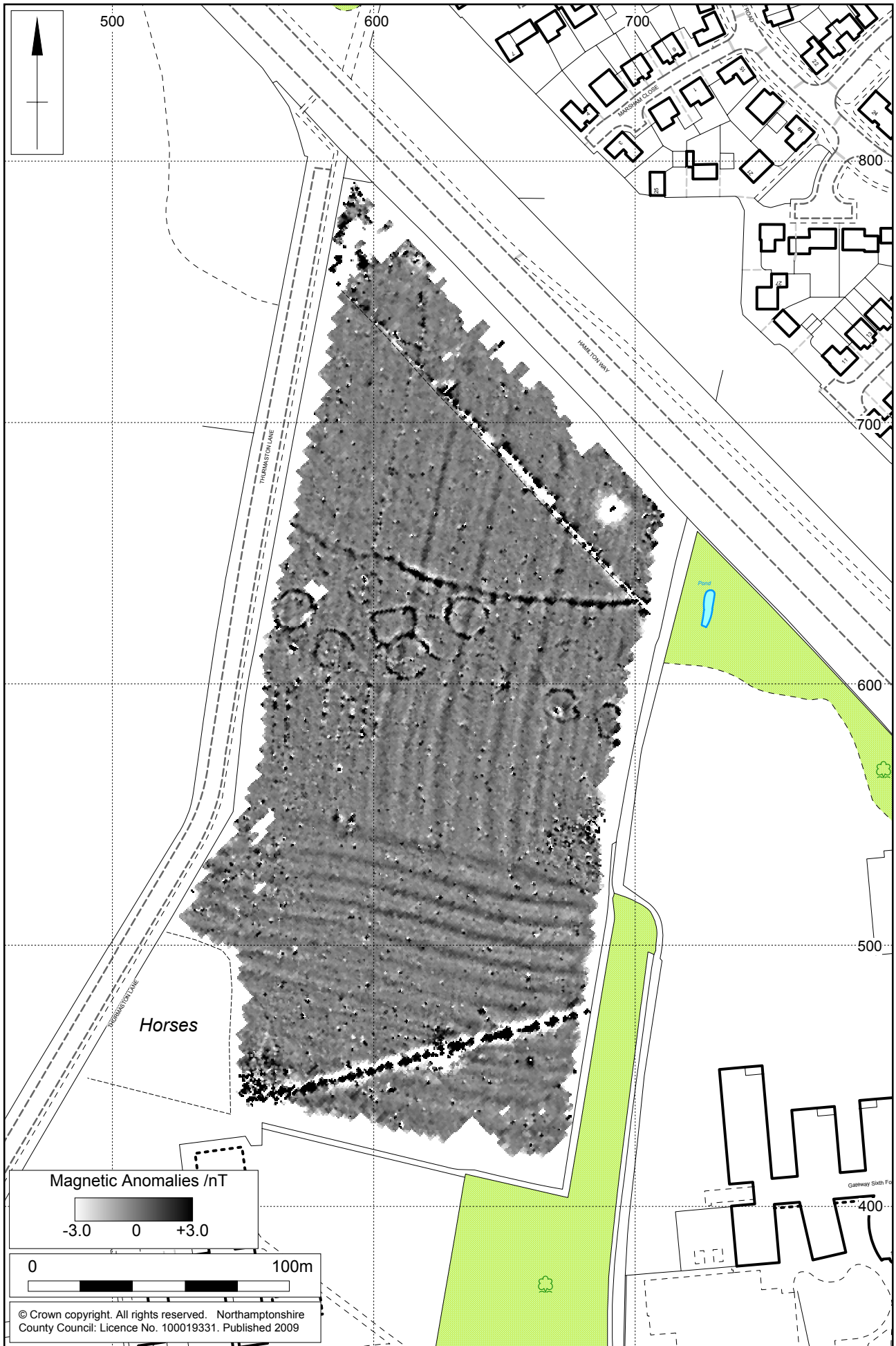
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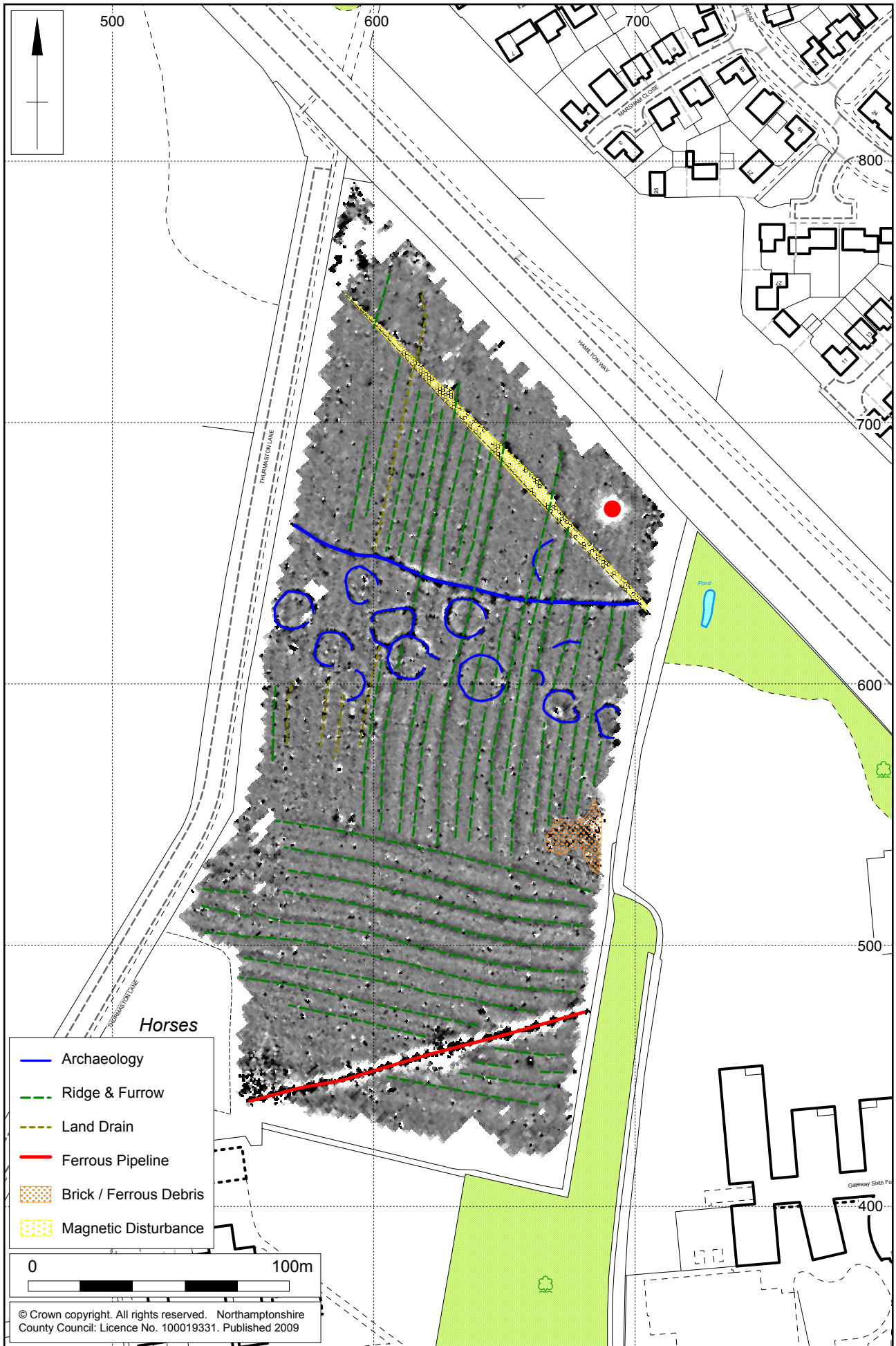
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Scale 1:2000

Manor Farm Survey Results Fig 2



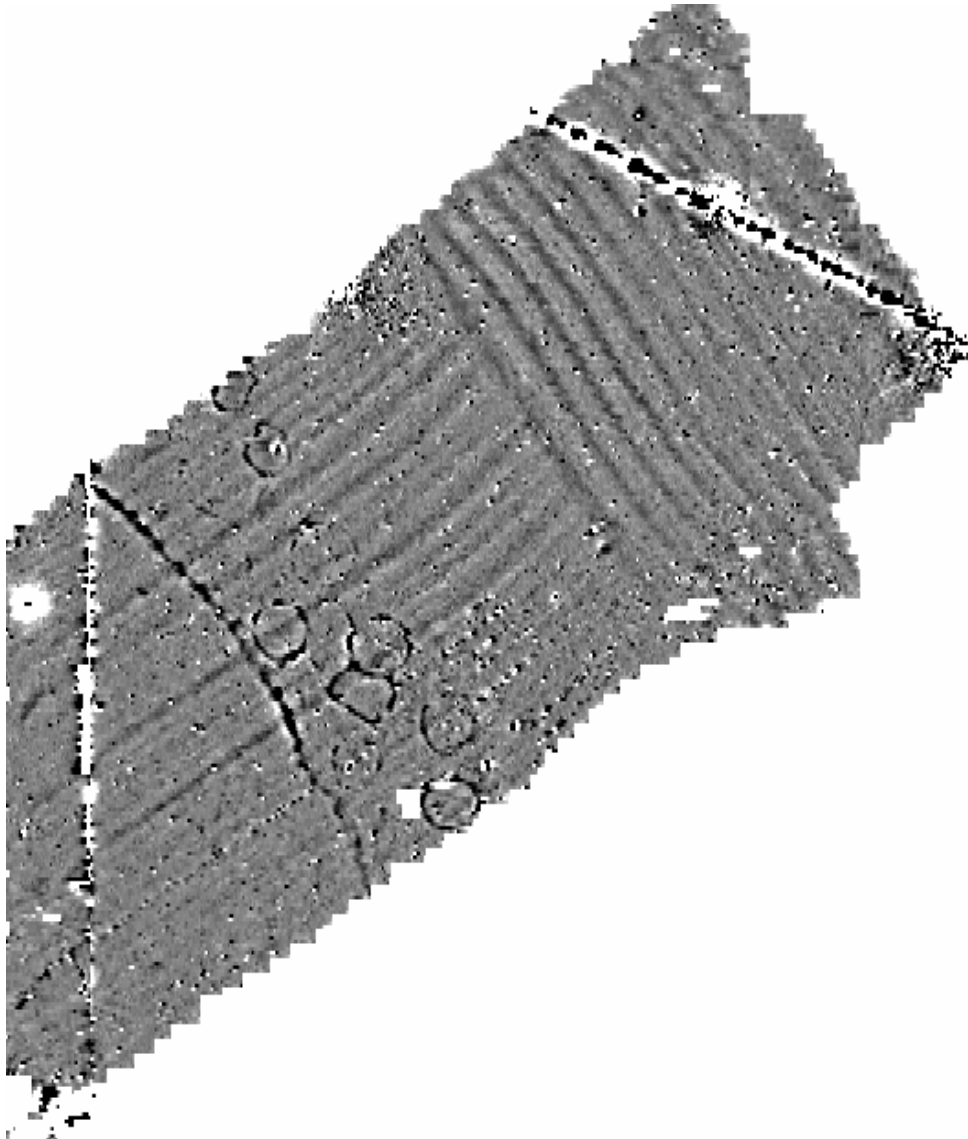
Scale 1:2000

Manor Farm Survey Interpretation Fig 3



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