

**Archaeological geophysical survey of land  
west of Warwick Road, Kibworth Harcourt  
Leicestershire  
September 2015**

Accession No: X.A78.2015

Report No: 15/182

Authors: John Walford

Paul Clements

Illustrator: John Walford





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**OASIS REPORT**

PROJECT DETAILS		Oasis No. molanort1-227266	
Project name	Archaeological geophysical survey of land west of Warwick Road, Kibworth Harcourt, Leicestershire		
Short description	MOLA Northampton was commissioned to carry out a detailed magnetometer survey at Warwick Road, Kibworth Harcourt, Leicestershire. The survey detected anomalies representing enclosure ditches and pits of Roman date. Medieval to early post-medieval ridge and furrow was also detected.		
Project type	Geophysical survey		
Site status	None		
Previous work	Desk-based assessment (Crothers 2015)		
Current land use	Arable		
Future work	Trial trench evaluation (Hewitt <i>forthcoming</i> )		
Monument type/ period	Roman enclosure ditches and pits Medieval to early post-medieval ridge and furrow		
Significant finds	None		
PROJECT LOCATION			
County	Leicestershire		
Site address	Warwick Road, Kibworth Harcourt		
Study area	c 8ha		
OS Easting & Northing	SP 672 945		
Height OD	c 112-127m aOD		
PROJECT CREATORS			
Organisation	MOLA Northampton		
Project brief originator	Teresa Hawtin, Leicestershire County Council		
Project design originator	MOLA Northampton		
Director/Supervisor	Adam Meadows		
Project Manager	John Walford		
Sponsor or funding body	Manor Oak Homes		
PROJECT DATE			
Start date	07 September 2015		
End date	09 September 2015		
ARCHIVES	Location	Content	
Physical	N/A		
Paper	MOLA Northampton	Site survey records	
Digital		Geophysical survey & GIS data	
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report		
Title	Archaeological geophysical survey at Warwick Road, Kibworth Harcourt, Leicestershire, September 2015		
Serial title & volume	MOLA Northampton Reports 15/182		
Author(s)	John Walford		
Page numbers	4		
Date	21 October 2015		

# Contents

1	<b>INTRODUCTION</b>	1
2	<b>BACKGROUND</b>	1
	2.1 Topography and geology	
	2.2 Historical and archaeological background	
3	<b>METHODOLOGY</b>	2
4	<b>SURVEY RESULTS</b>	3
5	<b>CONCLUSION</b>	3
	<b>BIBLIOGRAPHY</b>	4

## Figures

Cover	Magnetometer survey results (extract)	
Fig 1	Site location	1:25,000
Fig 2	Magnetometer survey results	1:2500
Fig 3	Magnetometer survey interpretation	1:2500
Fig 4	Unprocessed magnetometer data	1:2500

# Archaeological geophysical survey of land west of Warwick Road, Kibworth Harcourt Leicestershire September 2015

## ABSTRACT

*MOLA Northampton was commissioned to carry out a detailed magnetometer survey at Warwick Road, Kibworth Harcourt, Leicestershire. The survey detected anomalies representing enclosure ditches and pits of Roman date. Medieval to early post-medieval ridge and furrow was also detected.*

## 1 INTRODUCTION

MOLA was commissioned by Manor Oak Homes, to conduct a geophysical survey on c 10ha of land at Warwick Road, Kibworth Harcourt, Leicestershire (NGR SP 672 945; Fig 1). The purpose of the survey was to identify and map any archaeological features which might be affected by a proposed development scheme. The fieldwork was undertaken from 7th to 9th September 2015 and has been allocated accession number X.A78.2015 by Leicestershire Museums Service.

## 2 BACKGROUND

### 2.1 Topography and geology

The survey area comprises a triangular plot of land formed by two arable fields on the western edge of Kibworth Harcourt. It is bounded on the northern side by Wistow Road and the Priory Business Park, on the south-eastern side by Warwick Road, and on the south-western side by a railway cutting (Fig 1). A large part of the eastern field has been affected by recent groundworks, including tree planting and the excavation of a balancing pond, and could not be covered by the survey (Fig 2).

The survey area lies on a south-west facing slope between 110m and 130m above Ordinance Datum and has a distinct plateau towards its northern edge. The geology of the area is mapped as Charmouth Mudstone (Lias) overlain by Boulder Clay (BGS 2015).

### 2.2 Historical and archaeological background

The survey area has been the subject of a recent desk-based heritage assessment (Crothers 2015), upon which the following summary is based. This assessment considered all relevant sources, including historic maps and data from Leicestershire Historic Environment Record.

#### ***Iron Age***

Geophysical survey has revealed a probable Iron Age site consisting of a series of enclosures, underlying a Roman villa to the north of the village. The survey also revealed a second possible sub-rectangular Iron Age enclosure immediately to the south-west. These remains are located approximately 800m from the present survey area.

**Roman**

The above-mentioned villa was excavated between 1967 and 1969. Finds included building material, a quern, several hundred sherds of pottery, a brooch and coins. Another Roman site was excavated at The Munt, Hall Close, during 1837 and 1863. Here a stone pavement was found with several Roman artefacts, including pottery, a candlestick and a penannular brooch

**Saxon**

Evidence of Saxon activity comes from the BBC's Kibworth Dig project which revealed Saxo-Norman pottery at 112 Main Street and from the sports field at Hillcrest Avenue.

**Medieval**

The Domesday Survey of 1086 records Kibworth Harcourt as *Chiborne* or *Cliborne*. In 1235-36 Richard de Harcourt held land in Kibworth from the Earl of Warwick. In 1270 Walter de Merton bought a large part of the parish of Kibworth Harcourt from Saer de Harcourt, who had been forced to sell the estate following his support for the Barons' Rebellion. A large part of the parish has remained property of Merton College in Oxford to the present day.

**Previous archaeological works**

A number of archaeological works have been carried out in the wider area, in advance of various proposed developments. A geophysical survey and subsequent trial trench evaluation north of Wistow Road, north-west of the present survey area, identified nothing except medieval ridge and furrow cultivation (Walford and Meadows 2014, Egan 2014). However, another programme of geophysics and trenching on land east of Warwick Road, almost immediately south-east of the present survey area, identified a number of late Iron Age or Roman ditched enclosures arrayed along either side of a trackway (Walford 2015, Clements 2015).

**3 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 across each of the two fields to be surveyed. These 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 Viva RTK GPS. 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 Historic England and by the Chartered Institute for Archaeologists (HE 2015; ClfA 2014).

The survey data was processed using Geoplot 3.00v software. Striping, caused by slight imbalances between the instrument sensors, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed where necessary to compensate for irregularities in survey pace. The processed data is presented in this report as a greyscale plot (range +4nT to -4nT / black to white), rotated and scaled for display against the Ordnance Survey base mapping (Fig 2). An interpretative plot is provided as Figure 3 and a plot of the unprocessed data as Figure 4.



## 4 SURVEY RESULTS

The survey has identified a series of positive linear and curvilinear anomalies concentrated on the high ground at the northern edge of the survey area, to the west of the Priory Business Park. These represent a conglomeration of rectangular and sub-rectangular ditched enclosures extending over an area of c 2ha. Whilst the general form of the enclosures would be consistent with either an Iron Age or Roman date, the results of a recent trial trench excavation indicate that these particular examples can be attributed to the Roman period (Hewitt *pers com*).

To the east of the main enclosure group, the survey has detected an irregular set of small positive anomalies which may represent pits and other cut features. A little further east there are anomalies which appear to represent the south-western part of a free-standing enclosure containing a small cluster of pits. The full extent of this enclosure is unfortunately obscured by magnetic interference from an adjacent steel-framed building.

Two sets of parallel linear anomalies indicate parts of two furlongs of medieval to early post-medieval ridge and furrow cultivation that, together, cover almost the entire survey area. Most of the western field is covered by one furlong, in which the furrows trend north-south, and the remainder of the survey area is covered by another furlong with east-west trending furrows. A weak positive linear anomaly cuts across the southern corner of the survey area, running between the two furlongs, and probably marks the line of a former plough headland or field boundary ditch.

To the west of the archaeological features, the survey has detected a discrete positive anomaly with a peak intensity of c 15nT. This was proved by trenching to represent a modern pit with a quantity of brick rubble in its backfill (Hewitt *pers com*). Another modern pit, probably containing scrap metal, seems likely to be represented by a concentrated patch of intense 'magnetic noise' at the north-eastern end of the survey area.

Two short, intense linear anomalies with alternating polarities have been detected, one in the eastern field and one at the western end of the western field. Each represents a modern pipe. Other large and intense magnetic anomalies are halos from the metal fence alongside the railway line, the steel-framed sheds on the Priory Business Park and a metal gate opening onto Wistow Road.

## 5 CONCLUSION

The survey has detected an irregular conglomeration of sub-rectangular ditched enclosures which form part of a settlement of Roman date. These remains occupy the highest part of the survey area, alongside its northern boundary, and extend across an area of approximately 2ha. Other features, including medieval to early post-medieval ridge and furrow and modern pipelines, have also been detected by the survey.

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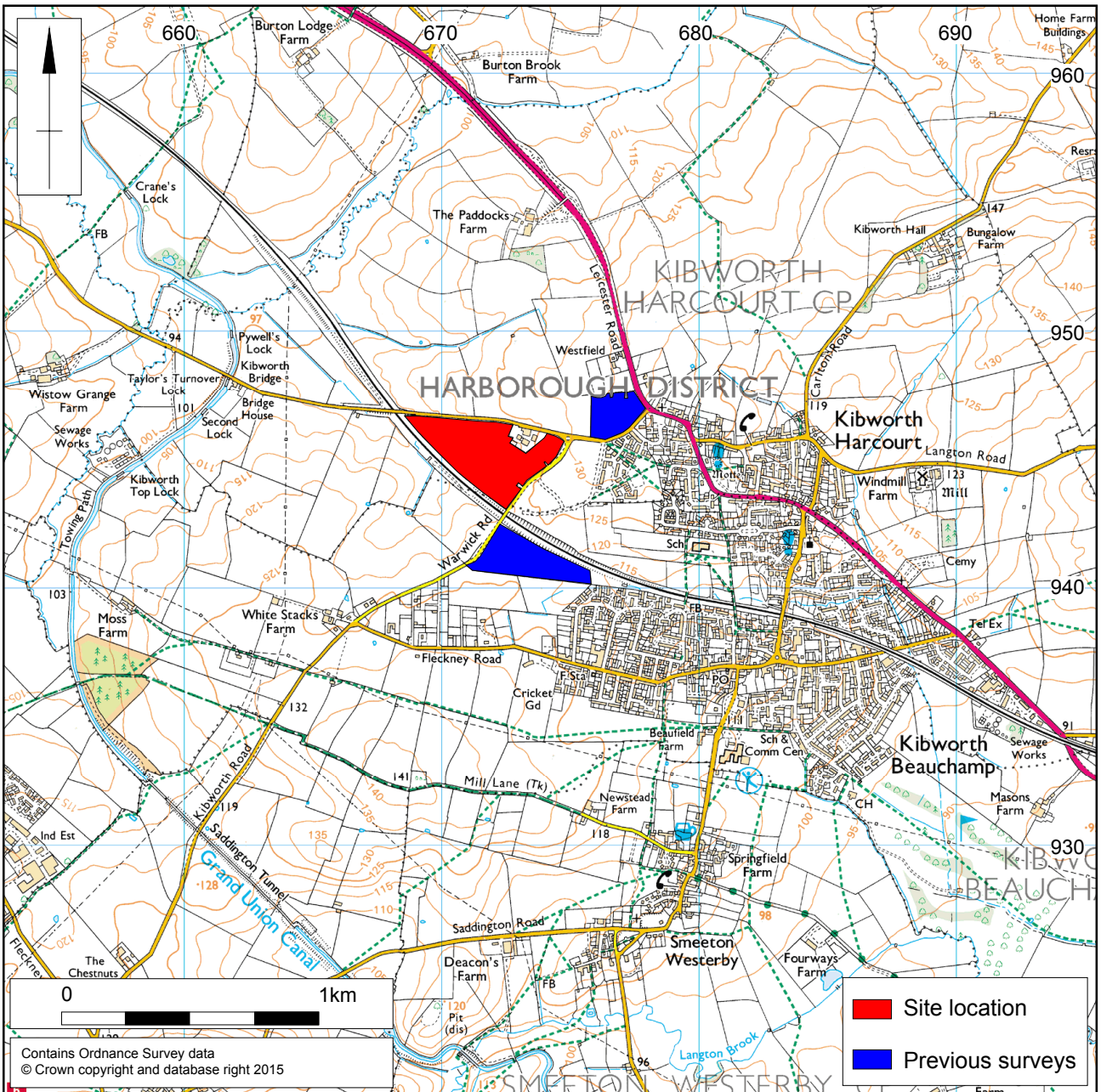
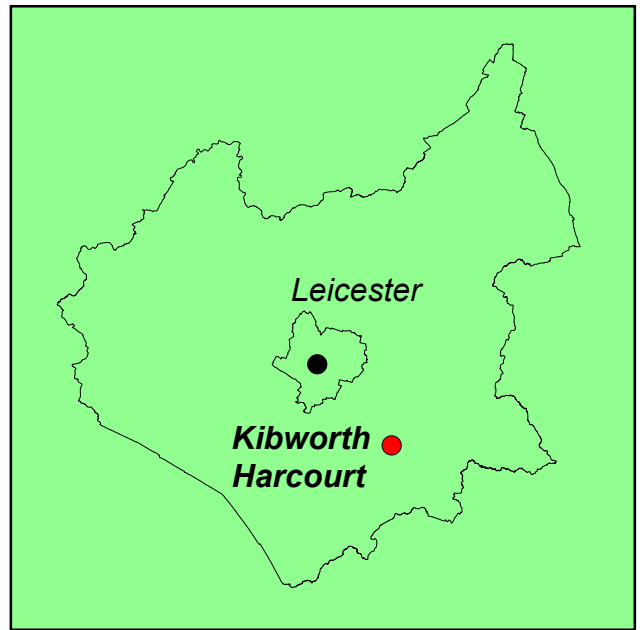
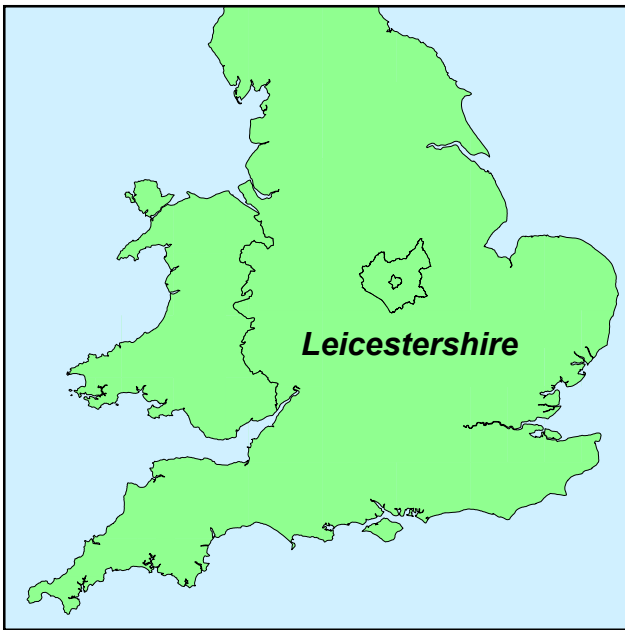
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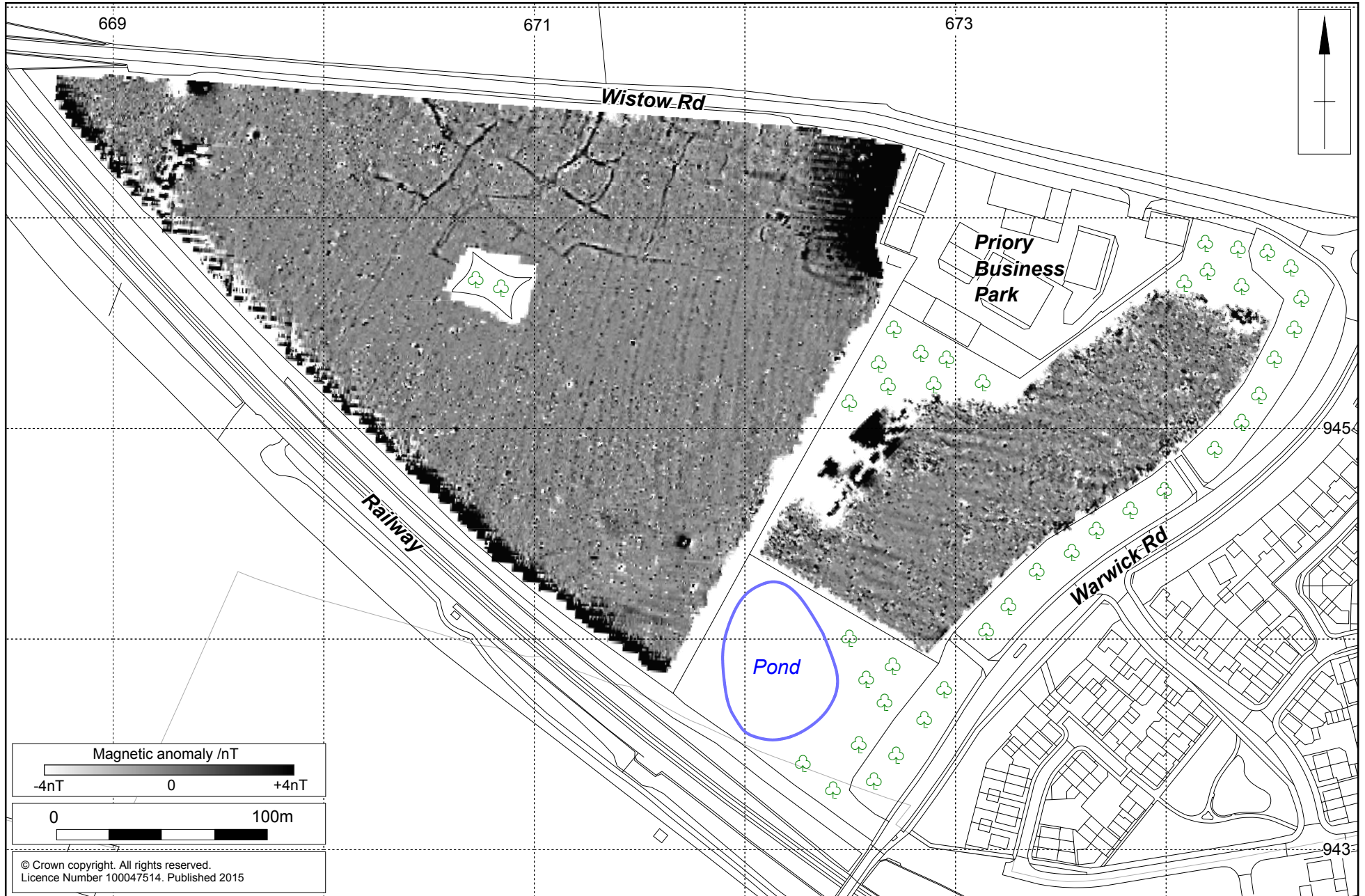
Walford, J, 2015 *Archaeological geophysical survey of land east of Warwick Road, Kibworth Harcourt, Leicestershire*, MOLA Northampton report, **15/34**

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Scale 1:25,000

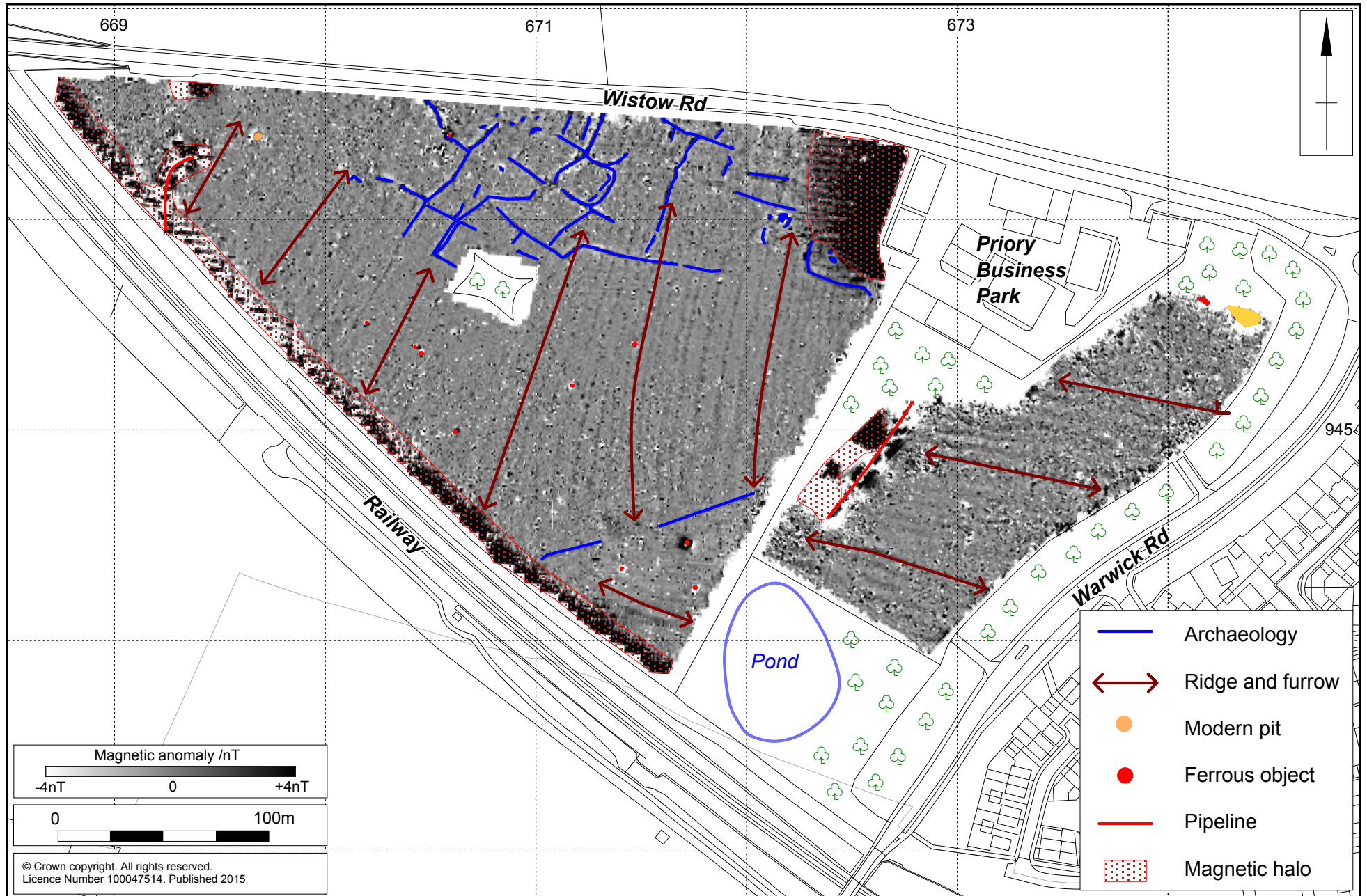
Site location Fig 1



Scale 1:2500

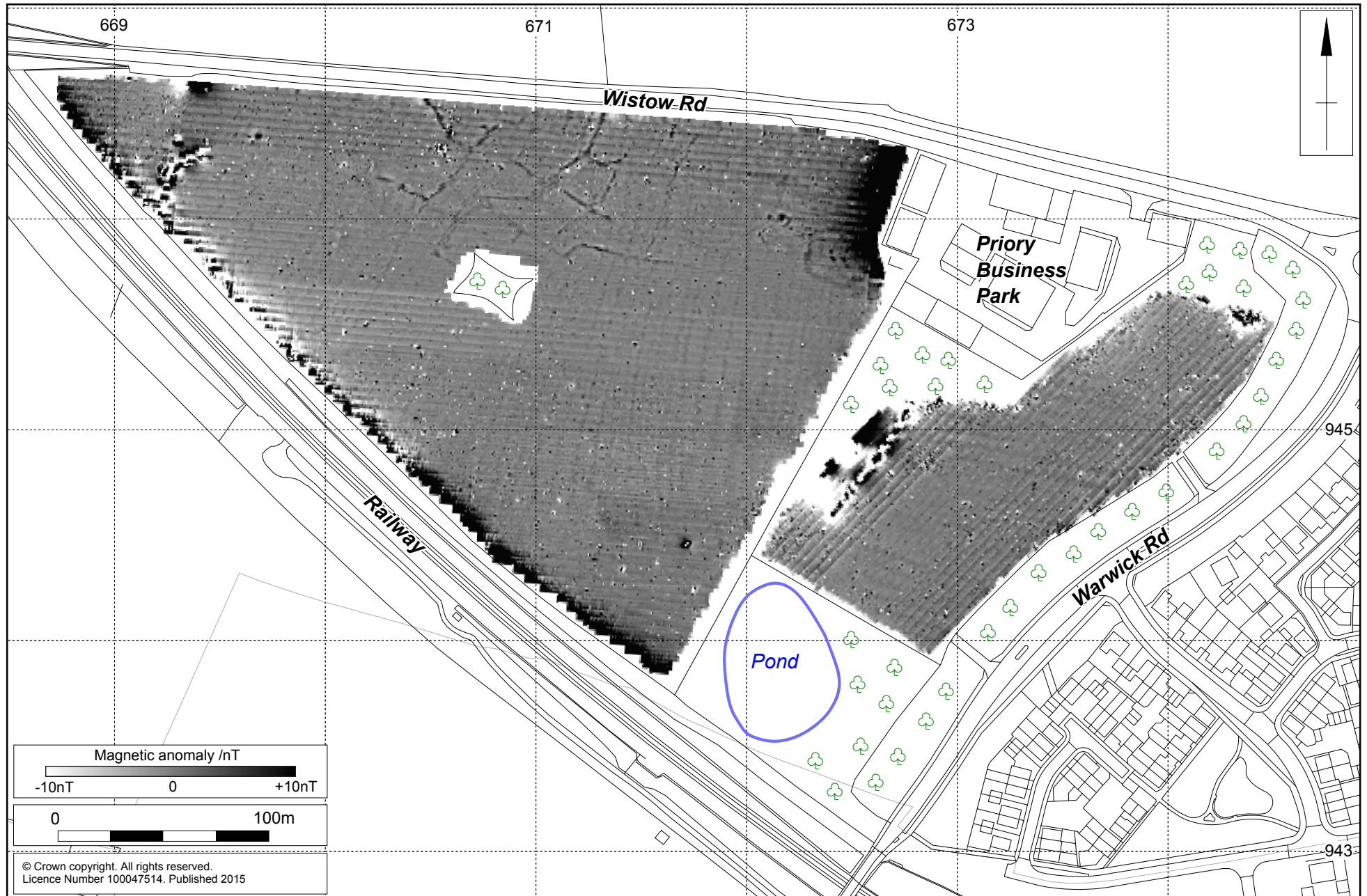
Magnetometer survey results Fig 2





Scale 1:2500

Magnetometer survey interpretation Fig 3



Scale 1:2500

Unprocessed magnetometer data Fig 4



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