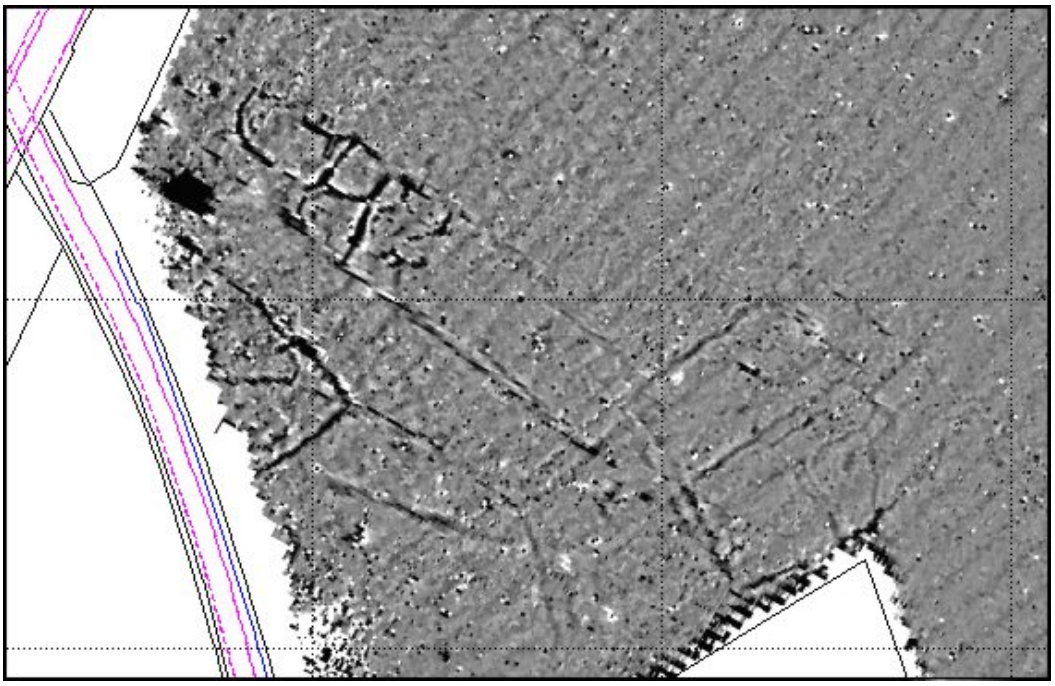

Archaeological geophysical survey of land adjacent to Wootton Road, Abingdon Oxfordshire October 2015

Report No: 15/193

Authors: Olly Dindol
John Walford

Illustrator: Olly Dindol

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Archaeological geophysical survey of land adjacent to Wootton Road, Abingdon Oxfordshire October 2015

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Quality control and sign off**:**

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1	06/11/2015	Pat Chapman	Ian Fisher	Andy Chapman	Client approval

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***OASIS* REPORT**

PROJECT DETAILS	molanort1-229476	
Project name	Archaeological geophysical survey of land adjacent to Wootton Road, Abingdon, Oxfordshire	
Short description	MOLA was commissioned to carry out a detailed magnetometer survey of land adjacent to Wootton Road, Abingdon, Oxfordshire. The survey detected a number of enclosures of possible Roman or earlier date, located in the south-western half of the survey area. Other features, including medieval to early post-medieval ridge and furrow and a modern pipeline, were also detected.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Arable	
Future work	Unknown	
Monument type/ period	Roman/Iron Age enclosures	
Significant finds	None	
PROJECT LOCATION		
County	Oxfordshire	
Site address	Wootton Road, Abingdon, Oxfordshire	
Study area	*c* 9.5ha	
OS Easting & Northing	SU 492 988	
Height OD	*c* 64m aOD	
PROJECT CREATORS		
Organisation	MOLA Northampton	
Project brief originator	Environmental Dimension Partnership	
Project design originator	MOLA Northampton	
Director/Supervisor	Olly Dindol	
Project Manager	John Walford	
Sponsor or funding body	Environmental Dimension Partnership	
PROJECT DATE		
Start date	12 October 2015	
End date	14 October 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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 of land adjacent to Wootton Road, Abingdon, Oxfordshire, October 2015	
Serial title & volume	MOLA Northampton report 15/193	
Author(s)	Olly Dindol and John Walford	
Page numbers	4	
Date	6 November 2015	

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ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND ADJACENT TO WOOTTON ROAD, ABINGDON, OXFORDSHIRE

OCTOBER 2015

ABSTRACT

MOLA was commissioned to carry out a detailed magnetometer survey of land adjacent to Wootton Road, Abingdon, Oxfordshire. The survey detected a number of enclosures of possible Roman or earlier date, located in the south-western half of the survey area. Other features, including medieval to early post-medieval ridge and furrow and a modern pipeline, were also detected.

1 INTRODUCTION

MOLA was commissioned by the Environmental Dimension Partnership (EDP), on behalf of Catesby Property Group, to carry out a detailed magnetometer survey of *c* 9.5ha of land adjoining Wootton Road, Abingdon, Oxfordshire (NGR SU 492 988; Fig 1). The purpose of the survey was to identify and map any archaeological remains which may be affected by a proposed development scheme. The fieldwork was undertaken from 12th to 14th October 2015.

2 TOPOGRAPHY AND GEOLOGY

The area of survey comprises a single arable field *c* 9.5ha in size on the north side of Abingdon. The field is bounded to the west by Wootton Road, to the south by Dunsmore Road, to the north by the A34 and to the east by Tilsley Park sports ground. The field slopes slightly towards the south with an elevation of *c* 64m aOD.

The geology of the area is predominately Kimmeridge Clay, with the western edge of the survey area situated along a boundary between the Kimmeridge Clay and Stanford Formation Limestone. The overlying superficial geology comprises Summertown-Radley gravels and sands, although these are restricted to the southern portion of the survey area (BGS 2015).

3 ARCHAEOLOGICAL BACKGROUND

The Oxfordshire Historic Record (HER) notes the discovery of a medieval pottery scatter and a single Roman pot sherd during the monitoring of a pipeline excavation along the eastern boundary of the survey area (HER No.15680). The only other archaeology recorded within a 500m radius of the area is a prehistoric cremation found further north on the same pipeline route (HER No.15681), but there are many sites of archaeological interest in the wider Abingdon area, particularly around the town centre and the lower terraces of the River Thames.

The earliest notable archaeological monument in the Abingdon area is the Neolithic causewayed enclosure located to the south of the Radley Road. This lies at one end of the Barrow Hills monument complex which also includes an oval barrow and a linear arrangement of early Bronze Age barrows lying *c* 2km to the south west of the survey

area (Barclay and Halpin 1998). There are also many Iron Age and Roman sites around the town, including the Ashville Trading Estate settlement (Parrington 1978) and the Barton Court villa (Miles 1984), and the town centre itself is known to lie directly over the site of a late Iron Age oppidum that saw continued occupation into the Roman period (Brady *et al* 2007). Direct continuity into the early Saxon period is not clearly attested, but Abingdon is known to have been a monastic centre from the middle Saxon period, and its large Benedictine abbey was a major feature of the town until its dissolution in the 1530s.

The survey area is located *c* 1.5km to the north of the historic town centre, and would have lain within the medieval and early post-medieval open field system. The nearest known areas of historic settlement are the hamlet of Northcourt and the village of Shippon, each lying *c* 1km distant from 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 network of 30m grid squares was established across the field 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 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 Institute for Archaeologists (HE 2015; CIfA 2014).

The survey data were largely processed using Geoplot 3.00v software. Most of the striping was removed using the 'Zero Mean Traverse' function but some areas had to be de-striped separately, using a spreadsheet based routine, in order to preserve linear anomalies lying parallel to the traverse direction. 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 +6nT to -6nT (black / white) (Fig 2). An interpretative overlay is presented in Figure 3, and Figure 4 presents the unprocessed survey data.

5 SURVEY RESULTS

The survey has detected a series of linear and curvilinear positive magnetic anomalies concentrated in the south-western part of the survey area. These represent a conglomeration of sub-rectangular ditched enclosures and associated features extending over an area of *c* 2.5ha. The general form of the enclosures would be consistent with an Iron Age or Roman date and their overlapping arrangement suggests that multiple phases of archaeological remains are present.

The detected remains lie in two distinct groups to either side of a clear strip of ground that may represent the line of a former trackway, aligned north-west to south-east. Those remains lying to the north-east can be further divided into a western cluster of

small D-shaped and irregular enclosures and a larger set of rectilinear enclosures extending to their south-east. This distinction is based not only on morphological grounds, but also on the greater magnetic intensity of the anomalies relating to the northern enclosures.

The intensity of the D-shaped enclosure anomalies shows that their ditches contain more magnetic debris than the rectilinear enclosures to the south east, and this suggests that the two sets of enclosures had differences in function or intensity of use. Ditches with greater magnetic enhancement are likely to contain more magnetic debris (eg ceramics, burnt soil, slag) relating to domestic or industrial activity, whereas less enhanced ditches may define paddocks, yards, or lightly occupied areas. The difference in size and shape between the two sets of enclosures also suggests a difference in function and perhaps a difference in date as well.

In amongst the eastern enclosures there are small positive anomalies of various forms. These cannot be interpreted in precise detail, but their general appearance suggests the presence of pits and small gullies or other linear features.

The magnetic anomalies to the south-west of the putative trackway appear to represent parts of two intersecting enclosures, both of which continue westwards beyond the limit of the survey area. An L-shaped anomaly defines part of a rectilinear enclosure, within which a number of pits can be identified, and a long curvilinear anomaly may define part of a large, sub-circular enclosure with a projected diameter substantially in excess of 100m. The latter feature would be unusual as an element of an Iron Age or Roman settlement and may relate to a separate, perhaps earlier, phase of activity. One other linear anomaly occurs in the same general area and probably represents a ditch of indeterminate date and purpose.

Other, less significant, archaeological remains are indicated by the series of weakly positive linear anomalies which follow parallel curving alignments trending broadly north-east to south-west across the whole survey area. The overall shape and layout of these anomalies is characteristic of the remnant furrows of medieval to early post-medieval ridge and furrow cultivation.

Weak and nebulous magnetic patterning can be discerned across the northern and south-eastern parts of the survey area. These anomalies are not characteristic of archaeological features, and more probable causes are natural mineralogical variations or small-scale periglacial features in the surface of the underlying geology.

The survey also detected two diffuse lines of weak dipolar and monopolar anomalies, one aligned south-east to north-west situated to the east the other aligned south-west to north-east located in the south. These anomalies probably represent old field boundaries or field drains.

A broad and intensely positive linear anomaly, flanked by negative halos, indicates the course of a modern pipeline running along the north-eastern edge of the survey area. Other anomalies of modern origin include the magnetic halos from the metal fences along the south-eastern edge of the survey area, and also a strong positive anomaly arising from a vehicle that was parked in the western corner of the area during part of the survey.

Small dipolar magnetic anomalies occur widely across the survey area, indicating isolated pieces of scrap metal within the ploughsoil. A greater concentration of such anomalies forms an area of ‘magnetic noise’ against the western field boundary, and

this may represent a modern deposit - perhaps hardcore laid in a former gateway or rubbish used to level out a hollow in the field.

6 CONCLUSION

The survey has detected a group of enclosure ditches and associated features which are concentrated towards the south-western part of the survey area and cover *c* 2.5ha of land. The overall appearance of the remains is typical of Roman or possibly late Iron Age settlement, and the variety of enclosure types, together with their intercutting arrangement, suggests that this settlement may have seen several phases of development. The survey has also detected medieval to early post-medieval ridge and furrow and a modern pipeline.

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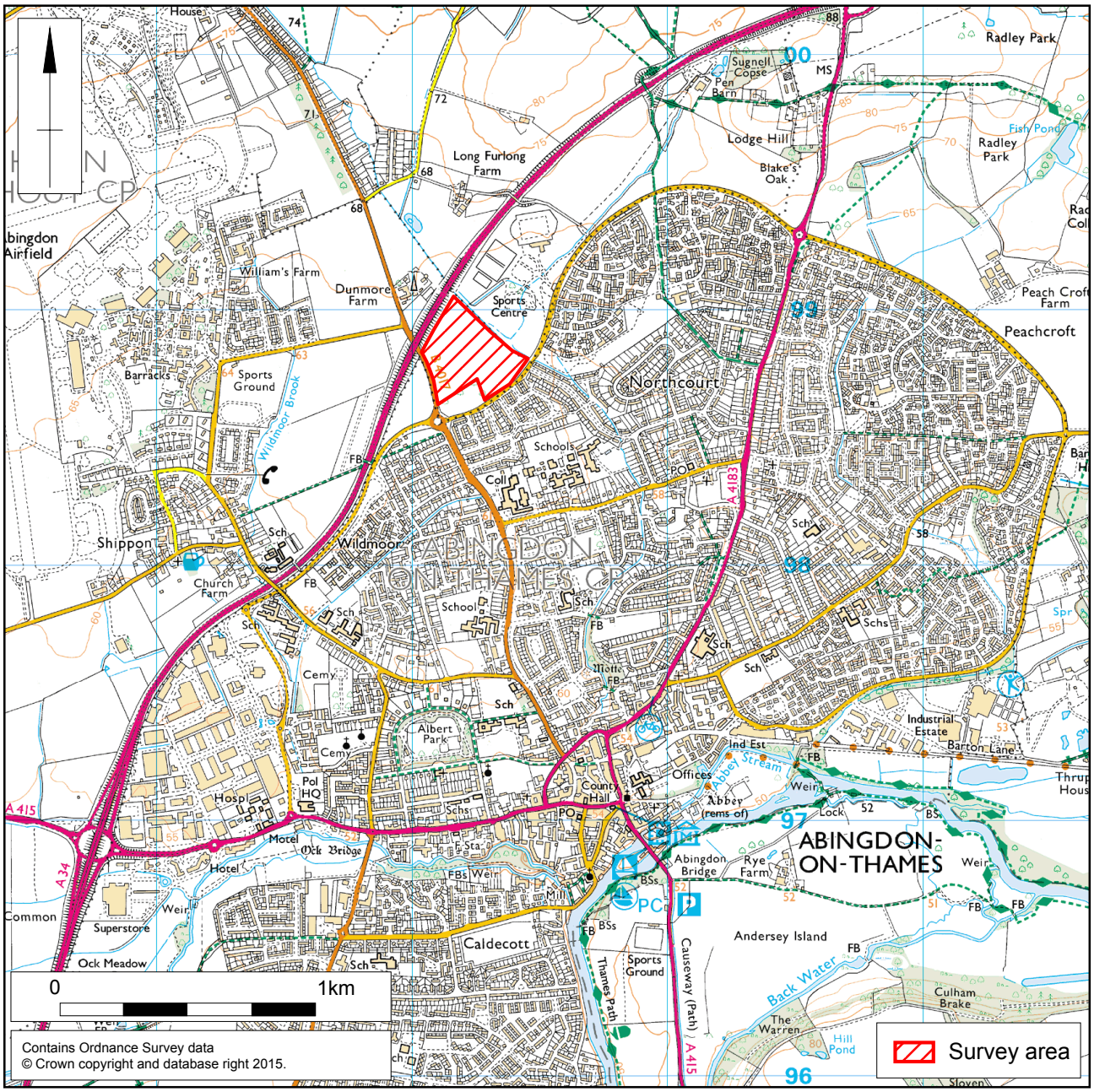
MOLA
9 November 2015



Scale 1:25,000

Site location Fig 1

1:2000

Magnetometer survey results Fig 2

490

492

494

990

988

Archaeology

Ridge and furrow

Field drain

Pipeline

Ferrous debris / halo

Ferrous object

Geology

Magnetic anomaly /nT

-6nT 0 +6nT

0 100m

1:2000

Magnetometer survey interpretation Fig 3

490

492

494

990

988

986

Magnetic anomaly /nT

-6nT 0 +6nT

0 100m

1:2000

Unprocessed magnetometer data Fig 4

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