Archaeological Geophysical Survey at Spring Lane, Radford Semele, Warwickshire February 2014

Report No. 14/51

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Site Code: None
NGR: SP 341 641

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OASIS REPORT FORM

PROJECT DETAILS	OASIS No: molanort1-172722	
Project name	Archaeological geophysical survey at Spring Lane, Radford Semele, Warwickshire	
Short description	MOLA was commissioned to carry out a detailed magnetometer survey on a proposed development site at Spring Lane, Radford Semele, Warwickshire. Some possible ditches of unknown date were detected, as were some marginal traces of ridge and furrow.	
Project type	Geophysical survey	
Site status	None	
Previous work	None known	
Current Land use	Arable	
Future work	Unknown	
Monument type/ period	Medieval ridge and furrow, undated ditch	
Significant finds		
PROJECT LOCATION		
County	Warwickshire	
Site address	Spring Lane, Radford Semele	
Study area	*c* 3.3ha	
OS grid reference	SP 342 642	
Height OD	*c* 71m aOD	
PROJECT CREATORS		
Organisation	MOLA Northampton	
Project brief originator	Prospect Archaeology	
Project Design originator	MOLA	
Director/Supervisor	Ian Fisher	
Project Manager	Adam Yates	
Sponsor or funding body	Prospect Archaeology	
PROJECT DATE		
Start date	18 February 2014	
End date	28 February 2014	
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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 Spring Lane, Radford Semele, Warwickshire, February 2014	
Serial title & volume	MOLA Northampton Reports 14/51	
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ARCHAEOLOGICAL GEOPHYSICAL SURVEY AT SPRING LANE, RADFORD SEMELE, WARWICKSHIRE FEBRUARY 2014

ABSTRACT

MOLA was commissioned to carry out a detailed magnetometer survey on a proposed development site at Spring Lane, Radford Semele, Warwickshire. Some possible ditches of unknown date were detected, as were some marginal traces of ridge and furrow.

1 INTRODUCTION

MOLA was commissioned by Prospect Archaeology to conduct a magnetometer survey on a proposed development site at Spring Lane, Radford Semele, Warwickshire (SP 342 642; Fig 1). The aim of the survey was to determine whether the site contained any significant archaeological remains. The fieldwork was carried out on the 18 February 2014 and comprised a magnetometer survey of *c* 3.3ha of land.

2 TOPOGRAPHY AND GEOLOGY

The proposed development area comprises the northern half of an arable field located on the south-western edge of Radford Semele. It is lies at the end of Spring Lane, immediately south of the housing on the Hamilton Road cul-de-sac. In the south of the field, just outside the survey area, there is a small thicket.

The development area stands at an elevation of *c* 71m aOD and is relatively flat, dipping only slightly to the south. The geology of the area has been mapped as Mercia Mudstone overlain by a Ice Age fluvial deposit, the Wolston sand and gravel (BGS 2014).

3 ARCHAEOLOGICAL BACKGROUND

The proposed development area contains no previously recorded archaeological features and lies at some distance from the historic core of Radford Semele. The heavily renovated medieval church of St Nicholas stands approximately 600m to the north of the area (Pevsner, Wedgewood, 1966) and the possible site of a shrunken medieval village lies just south of the church. The latter site was partially excavated in 1969 after the discovery of a concentration of medieval pottery (EH Monument No. 335637). Earlier finds include a Palaeolithic handaxe found not far from the churchyard to the north side of the village (Monument No. 1053597).

Further afield, within a kilometre south of Radford Semele, though still within its parish, a Roman villa was excavated in 1974 (EH Monument No. 335629). Though not entirely local, this does indicate that there was a Roman presence in this 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 grid of contiguous 30m squares was established across the field to be surveyed. The grid was set out with a tape measure and optical square and was 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. Destaggering of the data was performed where necessary.

The processed data is presented in this report in the form of a greyscale plots at a range of +4nT (black) to -4nT (white). This has been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping in Figure 2, and is shown with an interpretative overlay in Figure 3. A plot of the unprocessed survey data is presented in Figure 4.

5 SURVEY RESULTS

The survey has detected four linear and curvilinear positive anomalies which may represent archaeologically significant ditches. One lies on its own, close to the eastern edge of the field, but the other three are more centrally located and appear to form a coherent group.

The eastern anomaly is short and tightly curving. It perhaps represents part of a ring ditch or the corner of an enclosure, but there is too little evidence for either suggestion to be offered with confidence

The three central anomalies form a loosely defined chain which stretches southwards across the field and then turns towards the south-west. Each anomaly is essentially linear in form, although the northern one has a hooked southern terminal which is particularly distinct in the unprocessed survey data (Fig 4). The most likely interpretation would be that all three represent parts of a single ditched boundary, with the hooked terminal perhaps representing part of a small appended feature.

In the southern half of the survey area the data shows a narrow band of linear magnetic anomalies, all following parallel north - south alignments. These represent the remains of plough-levelled ridge and furrow dating from the medieval or post medieval period. Although the anomalies have a very restricted extent, this is unlikely to reflect the full extent of the furrows themselves. More probably it reflects the outcrop of some specific geological stratum which has a particularly strong magnetic contrast with the ploughsoil filling the furrows.

As well as archaeological anomalies, the survey has detected anomalies which can be attributed to modern causes. There are magnetic halos on the northern and eastern edges of the field, probably due to adjacent fences (although the halo at the eastern edge could also suggest an underground pipe lying a little further to the east). There is

also a narrow strip of magnetically disturbed data at the far north-west of the field, and this probably represents an accumulation of building debris or rubbish deriving from the adjacent housing.

6 CONCLUSION

The survey has identified some possible ditches, but the dates and archaeological significance of these cannot be confidently determined. Slight traces of medieval to early post-medieval ridge and furrow, levelled by modern ploughing, have also been detected.

BIBLIOGRAPHY

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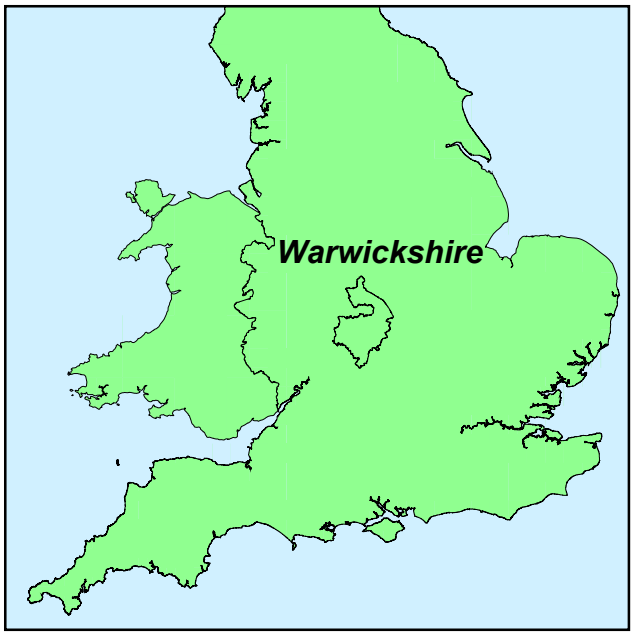
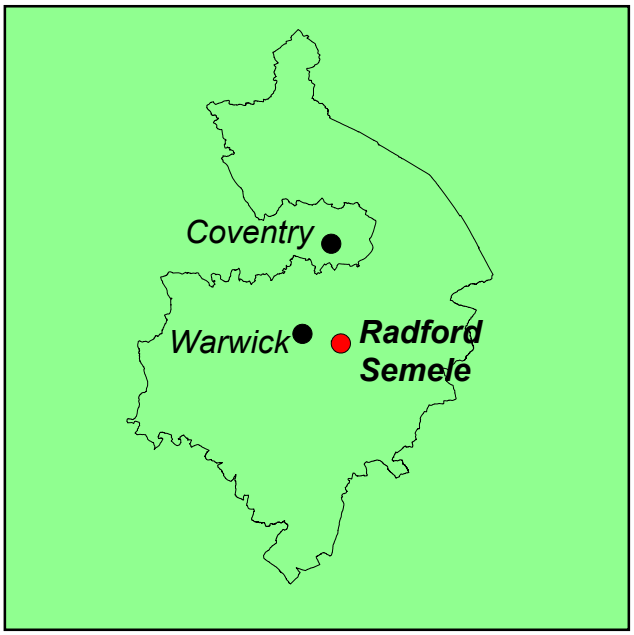
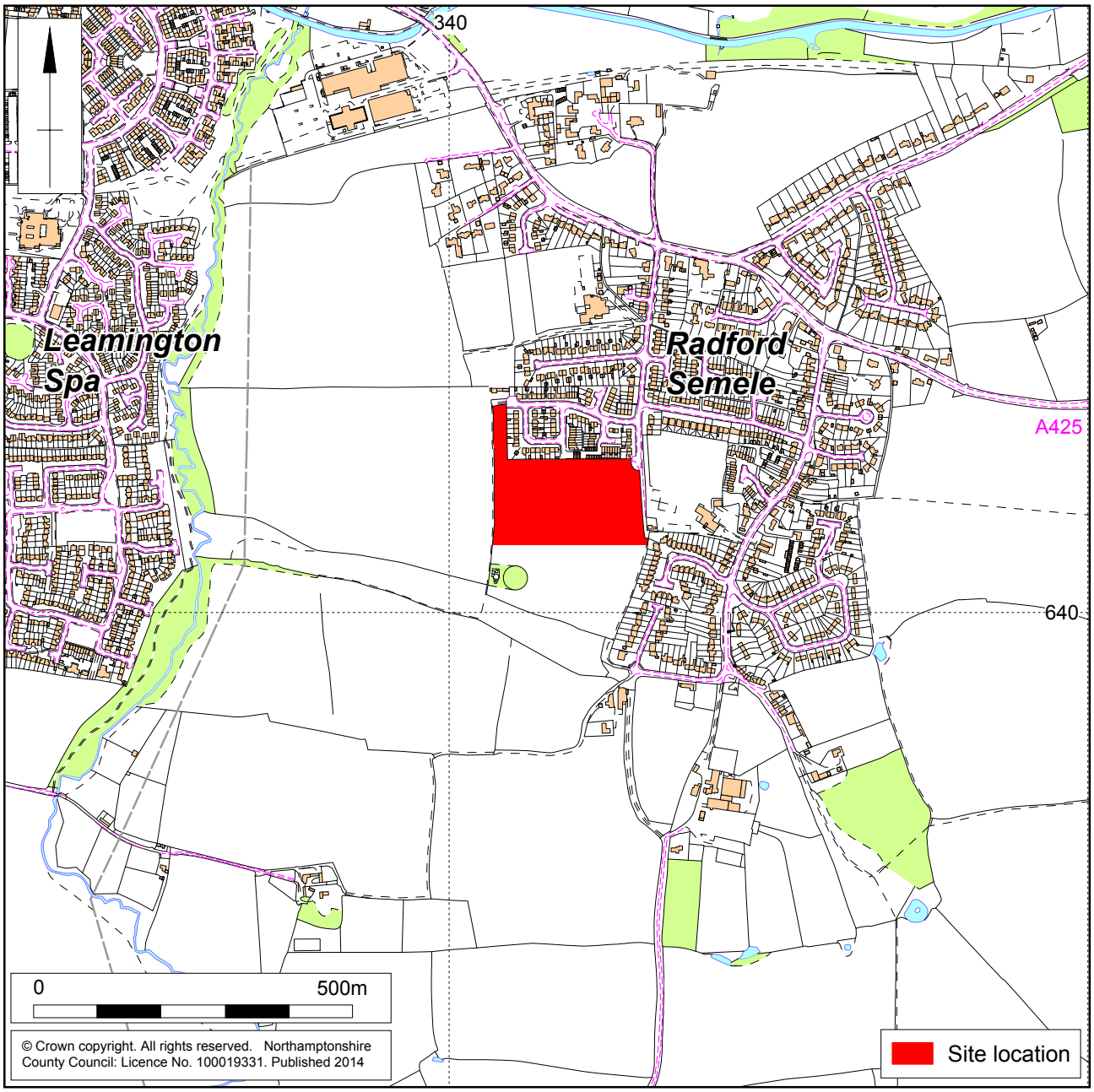
MOLA
28 February 2014





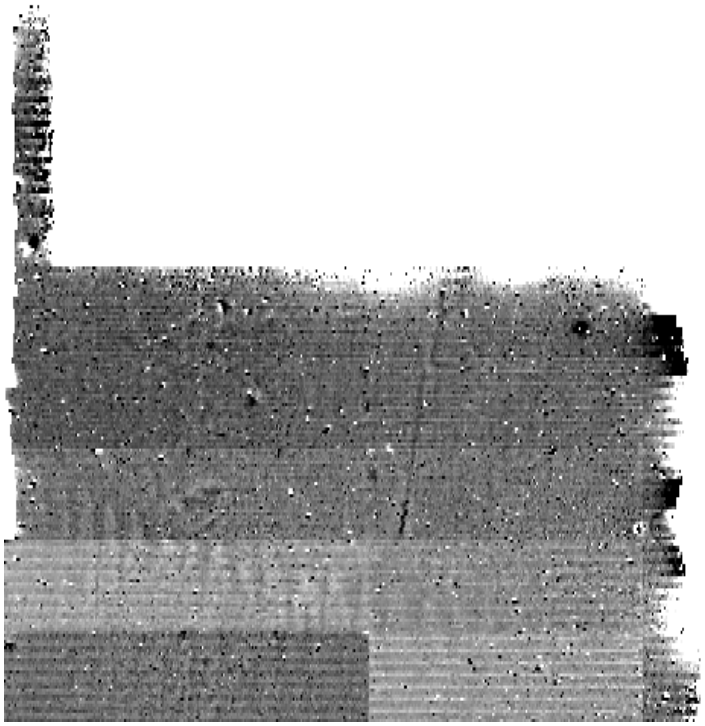


Scale 1:10,000

Site location Fig 1

1:2500 (A4) Magnetometer survey results Fig 2

1:2500 (A4) Magnetometer survey interpretation Fig 3



0 125m

Magnetic anomaly /nT
-4nT 0 -4nT

1:2500

Unprocessed magnetometer data Fig 4

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