

Archaeological Geophysical Survey of land at Stockton Road, Long Itchington, Warwickshire

April 2014

Report No. 14/97

Author: Garreth Davey

Illustrators: John Walford



Archaeological Geophysical Survey of land at Stockton Road, Long Itchington, Warwickshire

April 2014

Report No. 14/97

Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	06/05/2014	Pat Chapman	John Walford	Andy Chapman	Client approval

Author: Garreth Davey

Illustrator: John Walford

© MOLA (Museum of London Archaeology) 2014

MOLA
Bolton House
Wootton Hall Park
Northampton
NN4 8BN
01604 700 493
www.mola.org.uk
sparry@mola.org.uk

STAFF

Project Manager: Mark Holmes BA Ma MIfA

Fieldwork: Ian Fisher BSc
Garreth Davey BA
Adam Meadows BSc

Text: Garreth Davey

Illustrations: John Walford BSc MSc

OASIS REPORT

PROJECT DETAILS		Oasis No. molanort1-178357	
Project name	Archaeological Geophysical Survey of land at Stockton Road, Long Itchington, Warwickshire.		
Short description	MOLA was commissioned by Prospect Archaeology to carry out a detailed magnetometer survey on land south of Stockton Road, Long Itchington, Warwickshire. The survey detected little apart from ridge and furrow and modern ground disturbance.		
Project type	Geophysical survey		
Site status	None		
Previous work	Cultural Heritage Assessment (Prospect Archaeology)		
Current Land use	Arable		
Future work	Unknown		
Monument type/ period	Medieval to early post-medieval ridge and furrow		
Significant finds	None		
PROJECT LOCATION			
County	Warwickshire		
Site address	Stockton Road, Long Itchington		
Study area	c 3.5ha		
OS Easting & Northing	SP 421 648		
Height OD	c 77-85m AOD		
PROJECT CREATORS			
Organisation	MOLA		
Project brief originator	Prospect Archaeology		
Project design originator	MOLA		
Director/Supervisor	Ian Fisher		
Project Manager	Mark Holmes		
Sponsor or funding body	Prospect Archaeology		
PROJECT DATE			
Start date	10 April 2014		
End date	10 April 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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report		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 of land at Stockton Road, Long Itchington, Warwickshire, April 2014.		
Serial title & volume	MOLA Northampton Reports 14/97		
Author(s)	Garreth Davey		
Page numbers	3		
Date	7 May 2014		

Contents

1	INTRODUCTION	1
2	BACKGROUND	1
2.1	Location and geology	1
2.2	Historical and archaeological background	1
3	METHODOLOGY	2
4	SURVEY RESULTS	2
5	CONCLUSION	2
	BIBLIOGRAPHY	3

Figures

Cover	Magnetometer survey results	
Fig 1	Site location	1:15000
Fig 2	Magnetometer survey results	1:2000
Fig 3	Magnetometer survey interpretation	1:2000
Fig 4	Unprocessed magnetometer data	1:2000

Archaeological Geophysical Survey of land at Stockton Road, Long Itchington, Warwickshire April 2014

ABSTRACT

MOLA was commissioned by Prospect Archaeology to carry out a detailed magnetometer survey on land south of Stockton Road, Long Itchington, Warwickshire. The survey detected little apart from ridge and furrow and modern ground disturbance.

1 INTRODUCTION

MOLA was commissioned by Prospect Archaeology to conduct a geophysical survey on land to the south of Stockton Road, Long Itchington, Warwickshire (NGR SP 421 648; Fig 1). A detailed magnetometer survey was undertaken on 10 April 2014, and covered a total area of approximately 3.5ha.

2 BACKGROUND

2.1 Location and geology

The survey area comprised a single arable field located on the eastern edge of Long Itchington, to the south of Stockton Road. To the west the area is bounded by residential properties and to the east by a track. The southern boundary is formed by the Grand Union Canal. In the north-west corner there is a balancing pond that has been constructed with the new holdings in the area.

The survey area lies between 77m and 85m aOD and slopes down from north-east to south-west. Its underlying geology consists of Penarth group argillaceous rock and limestone with no superficial deposits recorded (BGS 2014).

2.2 Historical and archaeological background

The archaeological potential of the survey area has been examined as part of a Cultural Heritage Assessment (Prospect Archaeology 2014). The site and its immediate surrounding area contain no previously recorded archaeological remains.

Long Itchington itself has been recorded as a village since the 13th century, though evidence for settlement has existed here since a charter was granted by Æthelred in 997. The boundaries were further defined in 1001 and appear to have remained the same since. Excavations here have found evidence for 12th-13th Century timber buildings as well as other evidence of medieval occupation.

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).

A network of 30m grid squares was established in 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 Viva 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 was processed using Geoplot 3.00v software. The striping was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed where necessary. The processed data is presented in this report in the form of a greyscale plot 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 (Fig 2) and are shown with an interpretative overlay in Fig 3. A separate plot of the unprocessed data is presented in Fig 4.

4 SURVEY RESULTS

The survey has detected faint linear anomalies, running from north to south, which represent remnants of medieval to early-post medieval ridge and furrow. No other anomalies of any archaeological relevance have been detected.

In the south-western part of the survey area are two large and intense magnetic anomalies which relate to the presence of two manhole covers. Associated with these is a band of magnetic disturbance which runs from north-west to south-east between the manholes and nearby balancing pond, and probably indicates the line of a pipe trench. A much narrower, negative linear anomaly runs along the southern edge of the site from east to west; this could also represent a service trench, perhaps for a cable or a smaller plastic pipe.

The south-eastern corner of the site is magnetically disturbed, with a concentration of very strong magnetic anomalies. These may indicate an area of disturbed ground, such as a backfilled quarry pit or a spread of construction debris, possibly associated with the adjacent track and nearby canal bridge.

5 CONCLUSION

The geophysical survey has identified weak traces of ridge and furrow cultivation but has not detected any other archaeological remains. There are a few magnetic anomalies caused by possible ferrous objects and the modern pipeline, and general disturbance anomalies that are common on agricultural land.

BIBLIOGRAPHY

Bartington, G, and Chapman, C, 2003 A high-stability fluxgate magnetic gradiometer for shallow geophysical survey applications, *Archaeological Prospection*, **11**, 19-34

EH 2006 *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide*, English Heritage

EH 2008 *Geophysical Survey in Archaeological Field Evaluation*, English Heritage

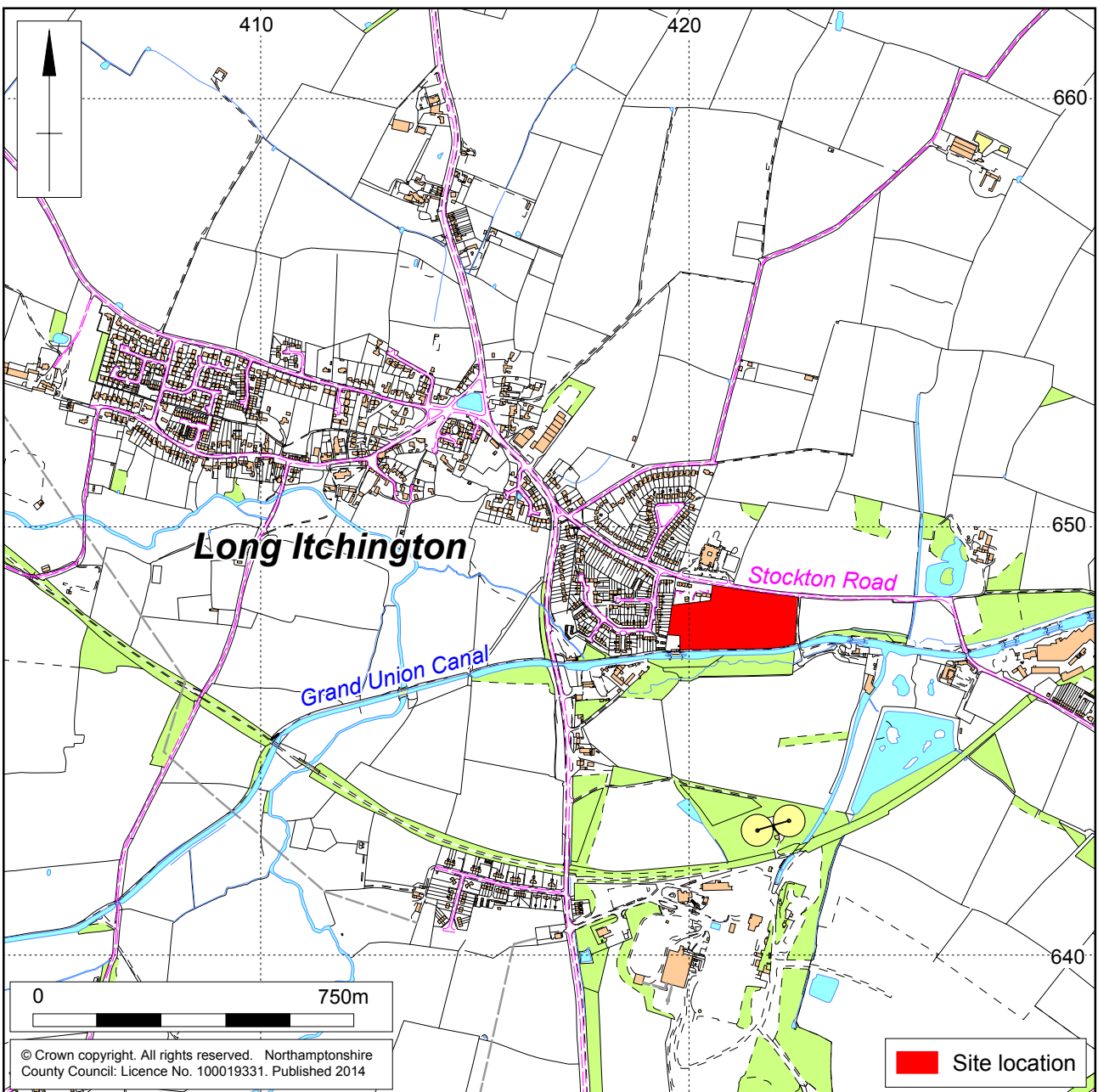
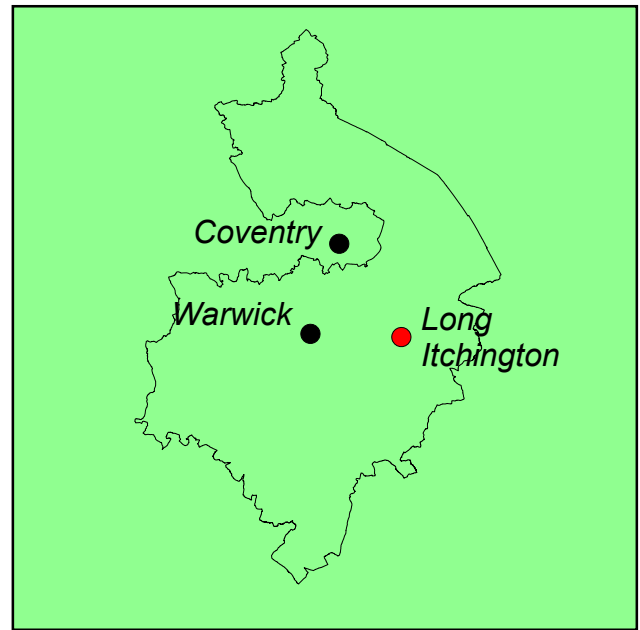
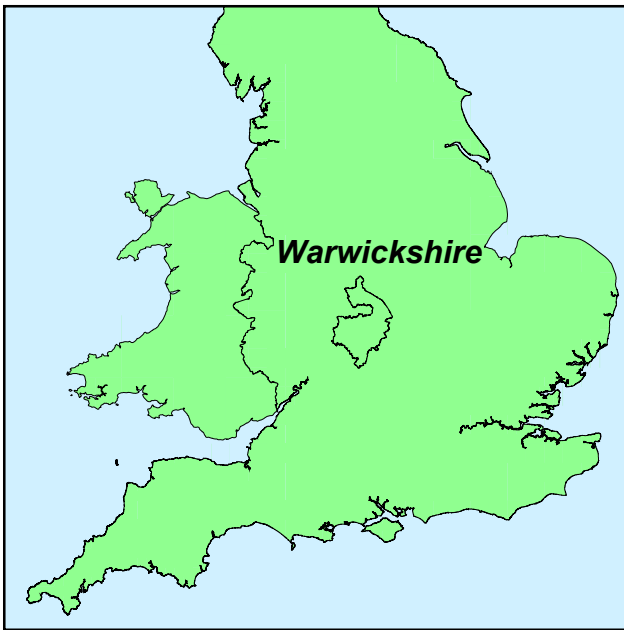
IfA 2011 *Standard and Guidance for Archaeological Geophysical Survey*, Institute for Archaeologists

IfA 2010 *Code of Conduct*, Institute for Archaeologists

Prospect Archaeology 2014 *Land to the south of Stockton Rd, Long Itchington, Warwks, Cultural heritage assessment*, Prospect Archaeology Ltd

Websites

BGS 2014 <http://www.bgs.ac.uk/geoindex/home.html> British Geological Survey website



Scale 1:15,000

Site location Fig 1



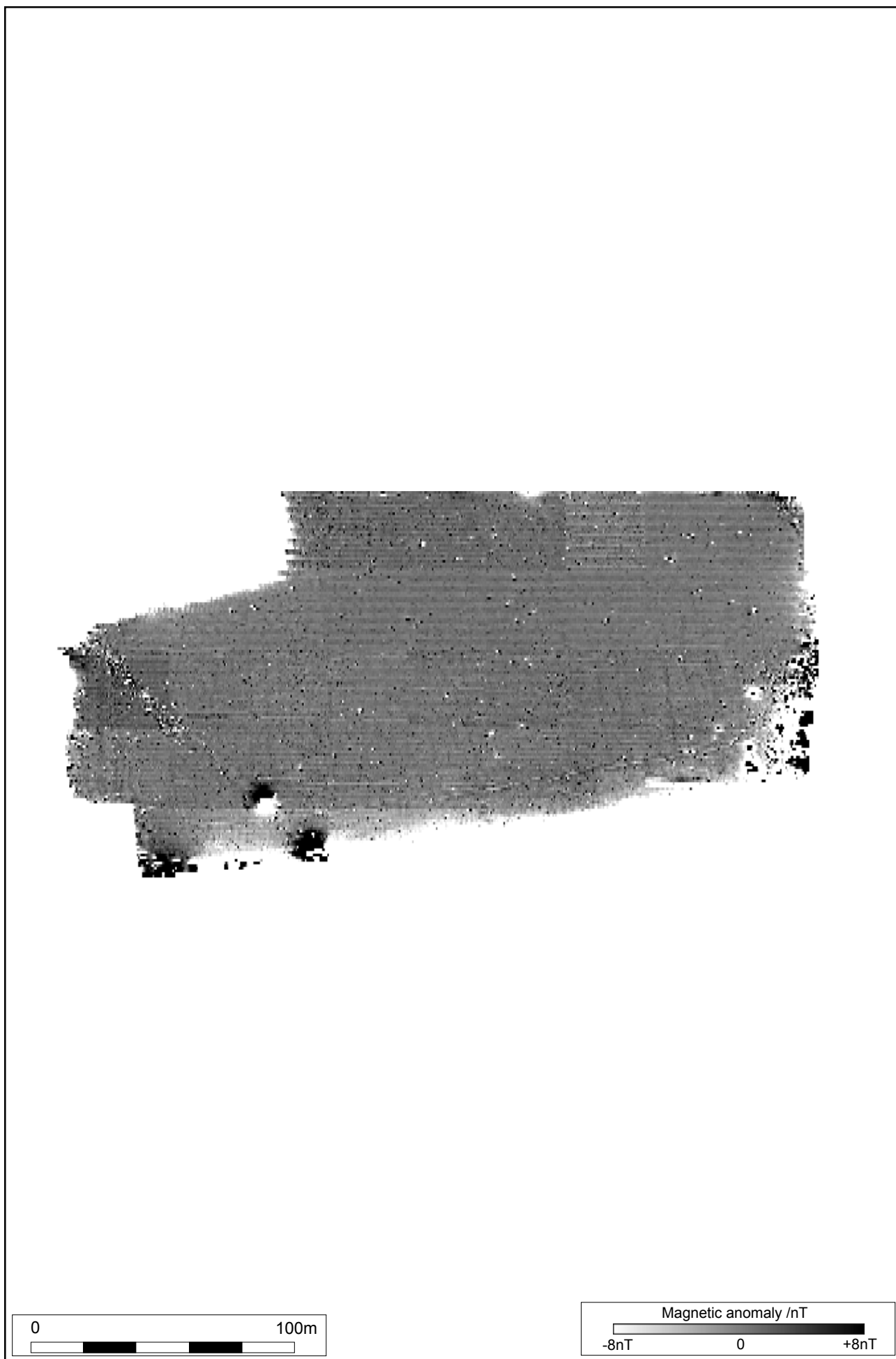
Scale 1:2000

Magnetometer survey results Fig 2



Scale 1:2000

Magnetometer survey interpretation Fig 3



1:2000

Unprocessed magnetometer data Fig 4

MOLA



MOLA
Bolton House
Wootton Hall Park
Northampton
NN4 8BN
01604 700 493
www.mola.org.uk
business@mola.org.uk