Archaeological Geophysical Survey of land at Grange Farm, Stockton, Warwickshire

April 2014

Report No. 14/98

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Illustrator: Ian Fisher

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Project Manager: Mark Holmes
Site Code: None
NGR: SP 421 648

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OASIS REPORT

PROJECT DETAILS	Oasis No. molanort1-178406	
Project name	Archaeological Geophysical Survey of land at Grange Farm, Stockton, Warwickshire.	
Short description	MOLA was commissioned by Prospect Archaeology to carry out a detailed magnetometer survey on land at Grange Farm, Stockton, Warwickshire. The survey identified a collection of possible medieval rectilinear plot boundaries.	
Project type	Geophysical survey	
Site status	None	
Previous work	Cultural Heritage Assessment (Prospect Archaeology)	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	None	
Significant finds	None	
PROJECT LOCATION		
County	Warwickshire	
Site address	Grange Farm, Stockton	
Study area	c 1.3ha	
OS Easting & Northing	SP 4398 6373	
Height OD	c 90-95m 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	April 2014	
End date	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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 Grange Farm, Stockton, Warwickshire, April 2014.	
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Author(s)	Garreth Davey	
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Date	7 May 2014	

Contents

Figures

Archaeological Geophysical Survey of land at Grange Farm, Stockton, Warwickshire April 2014

ABSTRACT

MOLA was commissioned by Prospect Archaeology to carry out a detailed magnetometer survey on land at Grange Farm, Stockton, Warwickshire. The survey identified a collection of possible medieval rectilinear plot boundaries.

1 INTRODUCTION

MOLA was commissioned by Prospect Archaeology to conduct a geophysical survey on land at Grange Farm, Stockton, Warwickshire (NGR SP 4398 6373; Fig 1). A detailed magnetometer survey was undertaken in April 2014, and covered a total area of approximately 1.3ha.

2 BACKGROUND

2.1 Location and geology

The survey area comprised a single pasture field at Grange Farm, located on the eastern edge of Stockton. To the north the site is bounded by Napton Road and a local sports club, to the west are residential houses, to the east is a collection of farm buildings and to the south are further fields.

The survey area lies on a very gentle slope from west to east. The underlying bedrock geology has been mapped by the British Geological Survey as Lias group mudstone, siltstone, limestone and sandstone with no overlying superficial deposits. (BGS 2014).

2.2 Historical and archaeological background

The site lies on the eastern edge of the historic medieval settlement of Stockton. Warwickshire historic environments record (HER) records evidence for the presence of prehistoric, Roman and medieval remains in and around the village. Cropmarks 500m to the south have been interpreted as the surviving evidence for a prehistoric enclosure (MWA7253). Romano British and medieval features have also been identified in the village at School Street 300m to the west (EWA9318, MWA13132, EWA9318). Surviving earthworks and linear water features 200m south of the site also present the location of a surviving moat (MWA941).

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 Figure 3. A separate plot of the unprocessed data is presented in Figure 4.

4 SURVEY RESULTS

The survey identified several positive linear anomalies. These are mostly linear features which appear to define a system of rectilinear plots. These are clearer in the southern half of the field where there is evidence for a pair of linear anomalies aligned east southeast to west northwest. Alongside this there appears to be further evidence for a small rectangular plot boundary. In the northern half of the field there is also a possible enclosure, however, this appears much weaker. These could be of a medieval date based upon their alignment in relations to the surrounding buildings and roads. They may represent small holdings such as house plots and garden boundaries.

A strong positive halo is present along the north-eastern edge of the survey area; this is very likely to be caused by the nearby farm buildings. There are also small patches of negative magnetic disturbance which could be small areas of backfilling or due to their location at the field entrances these could be areas of hardcore.

5 CONCLUSION

The survey identified rectilinear anomalies defining rectangular plots which have been interpreted as a system of boundary ditches to medieval plots on the margins of the medieval village, based on the surrounding archaeological evidence and their correlation to existing field boundaries and roads.

BIBLIOGRAPHY

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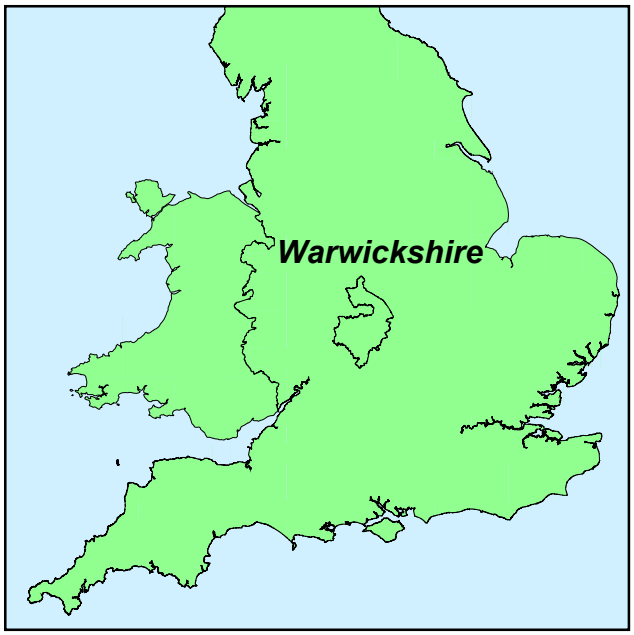
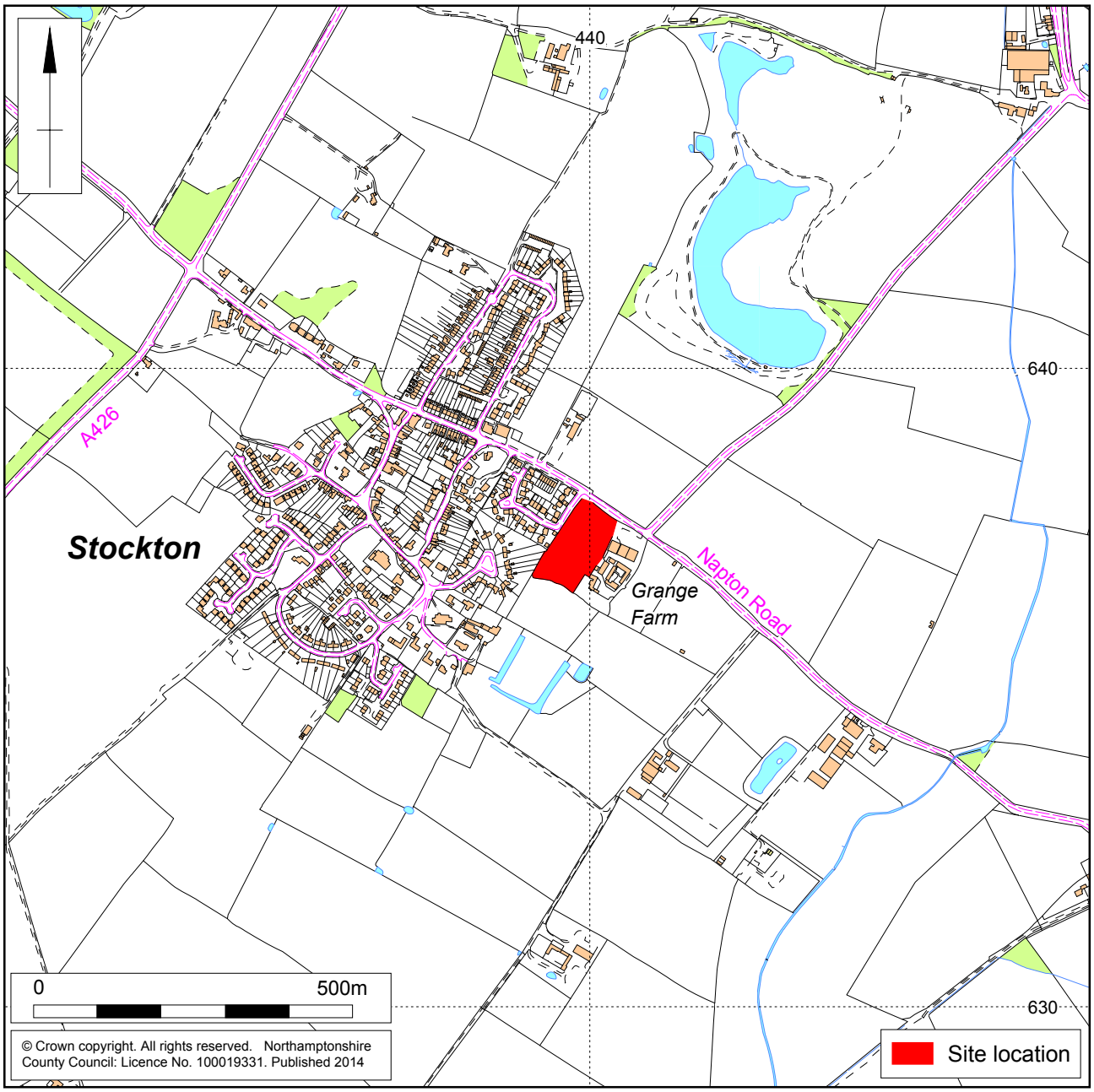
Websites

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

MOLA
7 May 2014



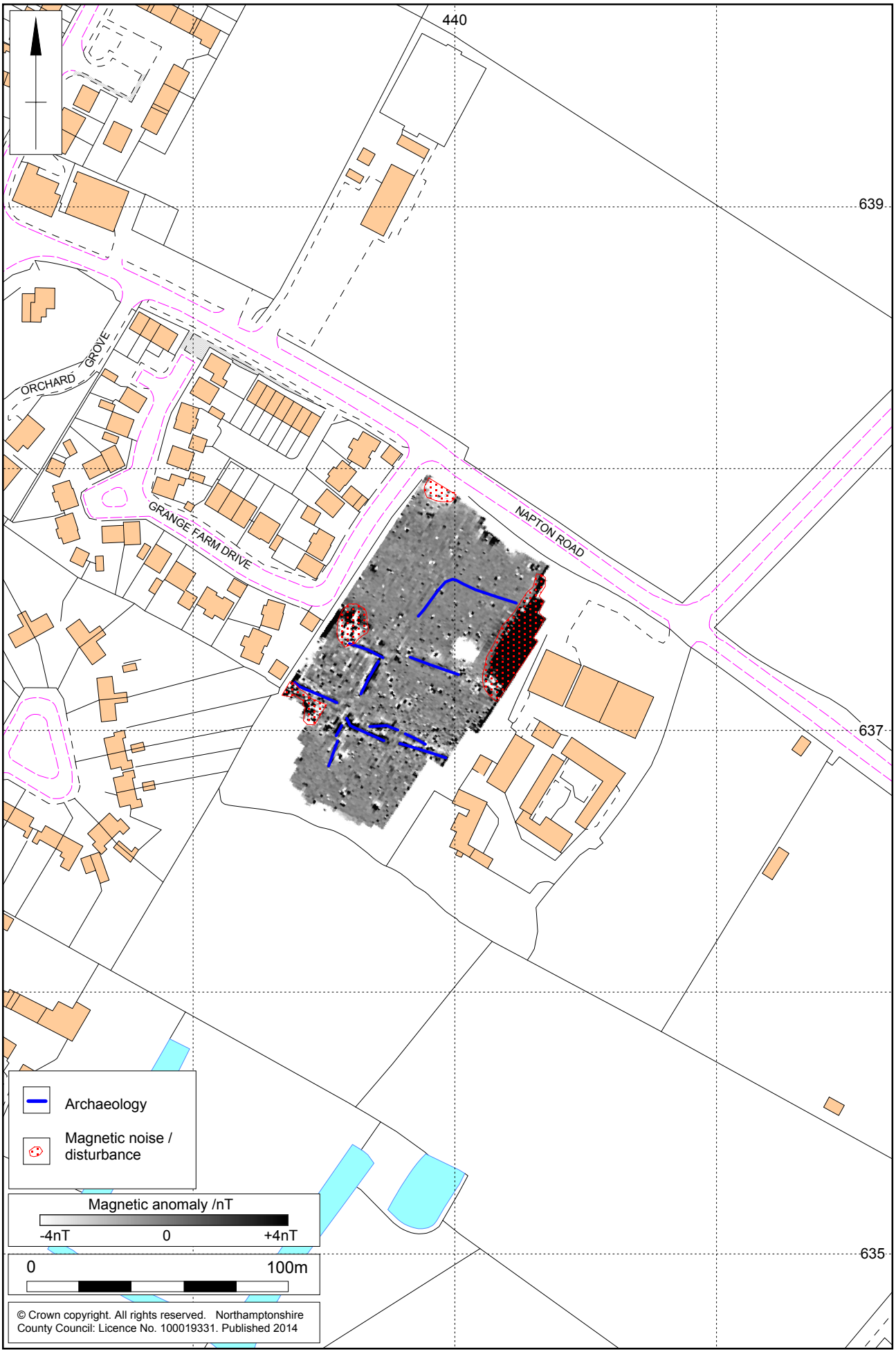


Scale 1:10,000

Site location Fig 1

Scale 1:2000 (A4)

Magnetometer survey results Fig 2



Scale 1:2000 (A4)

Magnetometer survey interpretation Fig 3

Scale 1:2000 (A4)

Unprocessed magnetometer data Fig 4

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