

## Archaeological geophysical survey of land at Hall Farm, Hannington Lane, Walgrave Northamptonshire October 2014

Report No. 14/231

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### OASIS REPORT

PROJECT DETAILS	Oasis No. molanort1-1	96186	
Project name	Archaeological geophysical survey of land at Hall Farm, Hannington Lane, Walgrave, Northamptonshire. (Previously referred to as Walgrave Road, Hannington)		
Short description	MOLA was commissioned by CgMs Consulting to carry out a detailed magnetometer survey on land at Hall Farm, Hannington Lane, Walgrave, Northamptonshire. The survey identified medieval or early post-medieval ridge and furrow cultivation and a single linear feature of unknown origin but little else of archaeological significance.		
Project type	Geophysical survey		
Site status	None		
Previous work	None		
Current Land use	Arable		
Future work	Unknown		
Monument type/ period	Medieval to early post-medieval ridge and furrow		
Significant finds	None		
PROJECT LOCATION			
County	Northamptonshire		
Site address	Hall Farm, Hannington Lane, Walgrave		
Study area	c 18ha		
OS Easting & Northing	SP 817 718		
Height OD	c 125 – 134m aOD		
PROJECT CREATORS			
Organisation	MOLA Northampton		
Project brief originator			
Project design originator	MOLA Northampton		
Director/Supervisor	Olly Dindol		
Project Manager	John Walford		
Sponsor or funding body	CgMs Consulting		
PROJECT DATE	40. O station 004.4		
Start date	13 October 2014		
End date ARCHIVES	19 October 2014	Content	
	Location	Content	
Physical Paper	N/A MOLA Northampton	Site survey records	
Digital		Site survey records Geophysical survey & GIS data	
BIBLIOGRAPHY	lournal/monograph p	ublished or forthcoming, or unpublished client	
	report	donated of formeorning, of unpublished client	
Title Archaeological geophysical survey of land at Hall Farm		vsical survey of land at Hall Farm. Hannington	
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#### ABSTRACT

MOLA was commissioned by CgMs Consulting to carry out a detailed magnetometer survey on land at Hall Farm, Hannington Lane, Walgrave, Northamptonshire. The survey identified medieval or early post-medieval ridge and furrow cultivation and a single linear feature of unknown origin but little else of archaeological significance.

#### 1 INTRODUCTION

MOLA was commissioned by CgMs Consulting to conduct a geophysical survey on 18ha of arable land to the east of Hall Farm, Hannington Lane, Walgrave, Northamptonshire (NGR SP 817 718; Fig 1). A detailed magnetometer survey was undertaken on the 13 October 2014, following consultation with the Northamptonshire County Council Archaeological Planning Advisor.

The project was recorded under the Northamptonshire Historic Environment Record (HER) as event number ENN107718. The site was initially referred to as Walgrave Road, Hannington and may be referred to as such in previous documentation.

#### 2 BACKGROUND

#### 2.1 Location and geology

The development area comprises c 18ha of land located immediately north-east of the village of Hannington, centred on NGR SP 817 718 (Fig 1). It is currently divided into 2 fields, an L-shaped field to the west and a rectangular shaped field to the east. The survey area is surrounded on all sides by a mixture of pasture and arable fields.

The survey area lies at a height of between 125m – 134m aOD and slopes eastwards. The bedrock geology of the area as recorded by the British Geological Survey comprises of Northampton Sand Formations, which consists of Ooidal Ironstone. The superficial geology overlying the ironstone is Oadby Member soils, which consists of deposits of sands, gravels and Pre-Devensian laminated clays (BGS 2014).

#### 2.2 Historical and archaeological background

The Northamptonshire HER indicates no archaeology within the survey area. Potential archaeology identified by the HER in the surrounding area is sparse, with the survey area lying 600m to the north-east of the historic core of Hannington, which is home to the 13th-century Church of St Peter and St Paul (HER 87 SW 3). Furthermore 350m to the south of the site lies a number of fields where potential archaeology, including a double ring ditch and enclosures of a ditched trackway (HER 87 SW 2), were identified via cropmarks from aerial photographs.

#### 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 fields 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 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 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 (Figs 2 & 4) and is shown with an interpretative overlay in Figures 3 and 5. Separate plots of the unprocessed data are presented in Figures 6 and 7.

#### 4 SURVEY RESULTS

The only archaeological features detected are represented by a series of positive parallel linear anomalies and one other weakly positive linear anomaly. The parallel linear anomalies are aligned from north-west to south-east, the overall shape and layout of these anomalies is characteristic of medieval to early post-medieval ridge and furrow cultivation.

The other linear anomaly lies in the western field, and is exceptionally weak. It runs west from a corner of the modern field boundary, and then turns towards the north-west. It could possibly represent a ditch, but it could also represent a relatively modern field drain.

In both fields linear bands of dipolar anomalies can be observed running across site from south to north. These are old field boundaries and can be identified in older Ordnance Survey maps, having been removed only in the last twenty years. Moreover, in the easternmost corner of the eastern field, a pair of parallel evenly spaced linear bands of dipolar anomalies can be seen running west to east. Each band has a weakly alternating polarity, which is characteristic of modern field drains.

Random scatters of ferrous objects were also identified across the two fields, as well as large areas of magnetic noise along the field edges. The ferrous objects are probably the result of modern rubbish, whilst the magnetic noise is the result of the accumulations of modern debris, such as brick rubble or scrap metal in the upper soil layers.

#### 5 CONCLUSION

The only archaeological features detected by the survey consisted of medieval ridge and furrow cultivation which, due to heavy ploughing is no longer visible on the surface, and a small linear feature of unknown origin. Hence it can be inferred that the proposed development area may be of little archaeological interest. However, given the recognised limitations of magnetometer survey (EH 2008:14), the presence of a few minor or ephemeral archaeological features cannot be absolutely ruled out.

#### BIBLIOGRAPHY

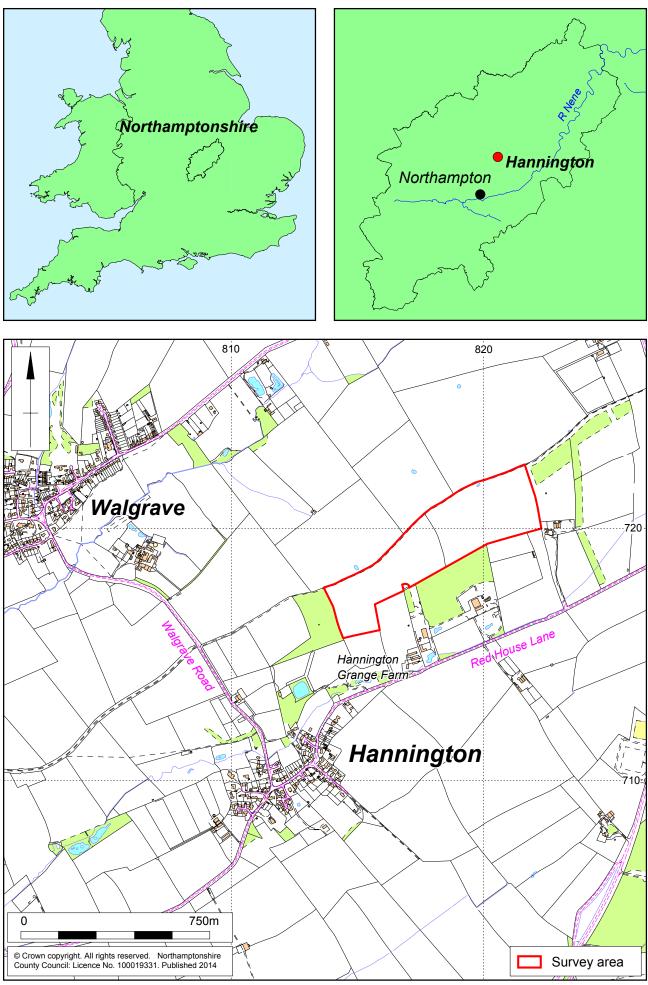
BGS 2014 *Geoindex*, <u>http://www.bgs.ac.uk/geoindex/home.html</u>, British Geological Survey, consulted 15 September 2014

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

EH 2008 Geophysical Survey in Archaeological Field Evaluation, English Heritage

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

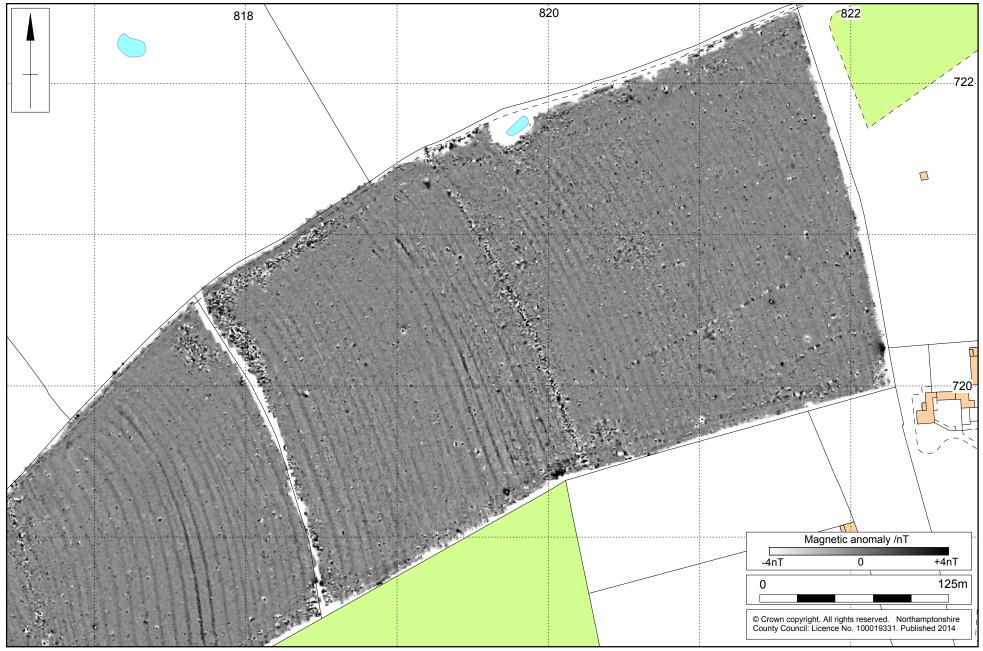
MOLA 9 December 2014



Scale 1:15,000

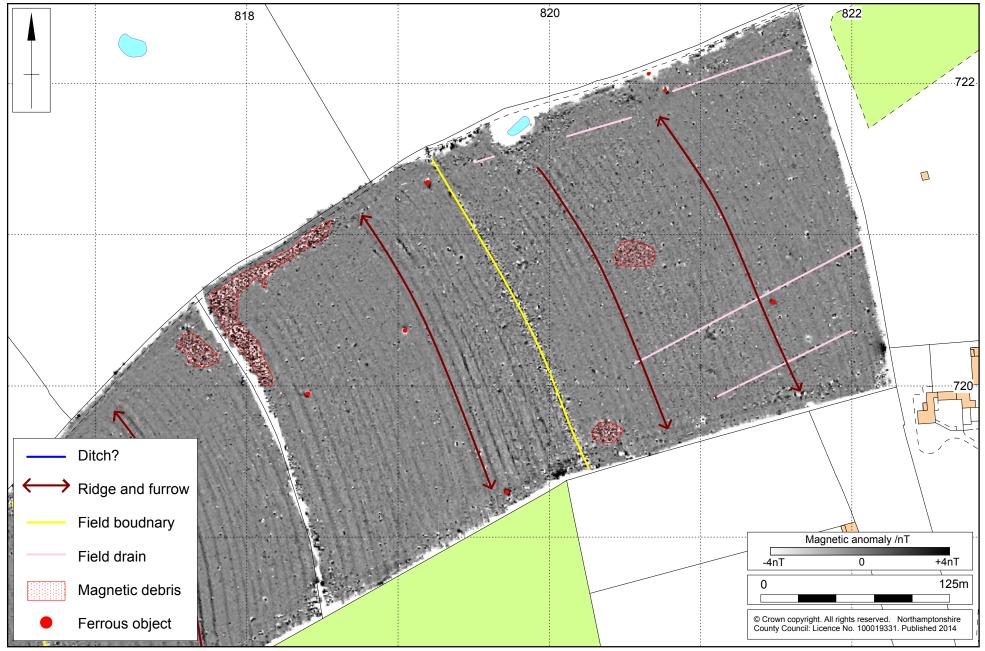






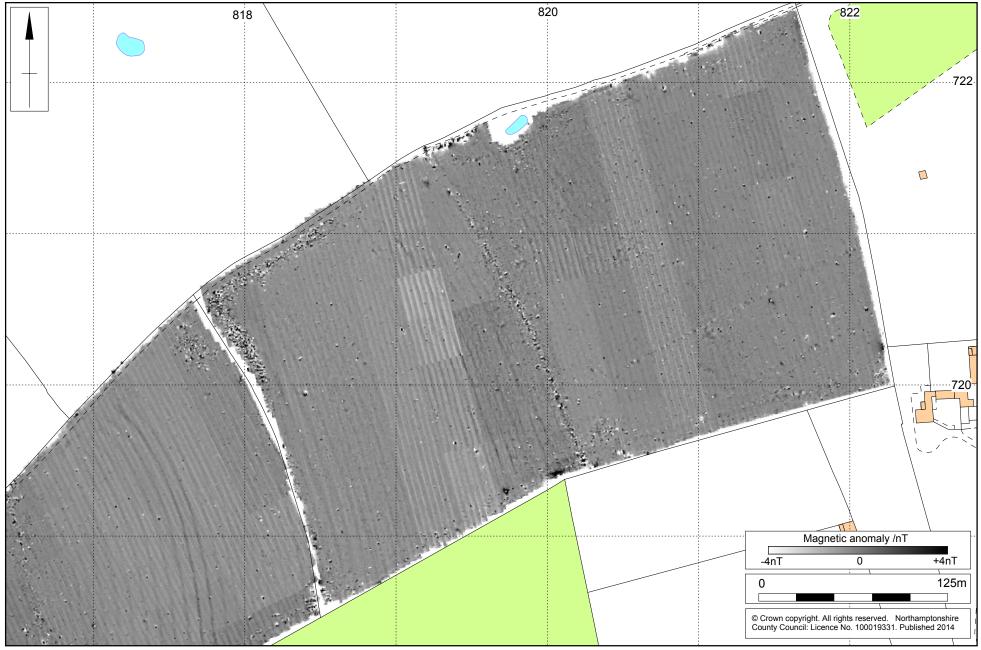


Magnetometer survey results (East) Fig 4











Unprocessed magnetometer data (East) Fig 7







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