



**Archaeological geophysical survey at
Main Street, Tingewick
Buckinghamshire
May 2014**

Report No. 14/125

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Illustrator: John Walford



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OASIS REPORT

PROJECT DETAILS		Oasis No. molanort1-181213	
Project name	Archaeological geophysical survey at Main Street, Tingewick, Buckinghamshire		
Short description	MOLA was commissioned to carry out a detailed magnetometer survey of 6ha of land located on the eastern edge of Tingewick, between Main Street and the A421. The survey detected a small group of undated ditches, widespread traces of ridge and furrow and a few other minor archaeological features. Areas of disturbed ground were detected in the south of the site, alongside the A421.		
Project type	Geophysical survey		
Site status	None		
Previous work	None known		
Current Land use	Pasture		
Future work	Unknown		
Monument type/ period	Undated ditches, medieval to early post-medieval ridge and furrow		
Significant finds	None		
PROJECT LOCATION			
County	Buckinghamshire		
Site address	Main Street, Tingewick		
Study area	c 6ha		
OS Easting & Northing	SP 660 327		
Height OD	c 100m - 115m aOD		
PROJECT CREATORS			
Organisation	MOLA Northampton		
Project brief originator	The Environmental Dimension Partnership		
Project design originator	MOLA Northampton		
Director/Supervisor	John Walford		
Project Manager	Mark Holmes		
Sponsor or funding body	The Environmental Dimension Partnership		
PROJECT DATE			
Start date	22 May 2014		
End date	23 May 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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report		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 Main Street, Tingewick, Buckinghamshire, May 2014.		
Serial title & volume	MOLA Northampton Reports 14/125		
Author(s)	John Walford		
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Contents

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

Figures

Cover	Magnetometer survey results	
Fig 1	Site location	1:10,000
Fig 2	Magnetometer survey results	1:2000
Fig 3	Magnetometer survey interpretation	1:2000
Fig 4	Unprocessed magnetometer data	1:2000

Archaeological geophysical survey at Main Street, Tingewick, Buckinghamshire May 2014

ABSTRACT

MOLA was commissioned to carry out a detailed magnetometer survey of 6ha of land located on the eastern edge of Tingewick, between Main Street and the A421. The survey detected a small group of undated ditches, widespread traces of ridge and furrow and a few other minor archaeological features. Areas of disturbed ground were detected in the south of the site, alongside the A421.

1 INTRODUCTION

MOLA was commissioned by The Environmental Dimension Partnership (EDP) to conduct a detailed magnetometer survey of land south of Main Street, Tingewick, Buckinghamshire (NGR SP 660 327; Fig 1). The fieldwork was undertaken on 22nd – 23rd May 2014, and covered c 6ha of pasture land.

2 BACKGROUND

2.1 Topography and geology

The survey area comprises a block of four pasture fields located on the south-eastern edge of Tingewick, between Main Street and the A421 Tingewick Bypass (Fig 1). It lies between 100m and 115m aOD on an irregular north-facing slope. Its geology is mapped as Cornbrash limestone overlain by glacial till, with small amounts of alluvium and head possibly present in the far north of the site (BGS 2014).

At the time of the survey the fields were ungrazed and partially overgrown with clumps of nettles and other tall vegetation. A few small areas, particularly around the field margins, were too densely overgrown to be surveyed.

2.2 Historical and archaeological background

The survey area lies outside the historic core of Tingewick, but encompasses part of the site of a former complex of buildings at the southern end of Gorrell Lane (Fig 1). The buildings are depicted schematically on the 1813 Ordnance Survey draft and more precisely on the first edition Ordnance Survey map of 1881. It is apparent from the latter source that one building stood within the survey area and the others immediately outside it in an area now covered by a small copse. The remainder of the survey area is depicted on the same maps as undeveloped agricultural land.

No archaeological sites or findspots predating the 19th century are recorded within the survey area, but possible medieval house platforms have been identified just outside its south-western corner (Buckinghamshire HER 05872). Other historic environment records refer to a scatter of Roman finds 500m to the east (HER 06263) and a possible enclosure cropmark 700m to the south-east (HER 02273). There are also three separate records relating to post-medieval brick making in the village (HER 021, 04899 & 05336).

3 METHODOLOGY

The 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). All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists and with the method statement for this project (EH 2008; IfA 2011; MOLA 2014).

An independent system of 30m grids was established within each of the fields to be surveyed. The grids were established 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.

The survey data was processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary. The processed data is presented in this report in the form of grey-tone plots, at a scale of +/- 4nT black/white. The plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay has been produced and is shown in Figure 3. The raw data is presented in Figure 4.

4 SURVEY RESULTS

A group of probable archaeological anomalies have been detected in the south-western arm of the survey area. They are magnetically positive and mostly linear or curvilinear in form, although there are also three small localised anomalies at the western end of the group. It is likely that they represent a set of ditches and pits but, due to their disjointed and incoherent arrangement, it is not possible to interpret their specific functions. Nor is their date apparent, although a medieval to post-medieval origin could be argued on the basis of their proximity to the former buildings on Gorrell Lane and to the house platforms to the west.

Weak parallel linear anomalies have been detected across much of the central and eastern parts of the survey area. They represent residual traces of ridge and furrow cultivation dating from the medieval to early post-medieval period. Two different directions of furrow overlap with each other near the southern edge of the survey area, and this indicates that the field system underwent at least one partial re-organisation during its time of use.

Two other anomalies of possible, but doubtful, archaeological significance have been detected. One, in the north of the survey area, is a positive linear anomaly, aligned south-west to north-east, which could represent either an infilled ditch or a field drain. The other, in the eastern field, is a small positive anomaly, about 5m long, with an intensity that varies from c 5nT to c 70nT. This could perhaps represent a pit containing burnt soil or ceramics, but such a suggestion is tentative and does not rule out the possibility of a recent origin.

Five areas of magnetic disturbance have been detected, each one representing an accumulation of ferrous scrap, brick rubble, or similar types of magnetic debris. The three along the southern edge of the survey area lie adjacent to the cutting of the A421 Tingwick bypass, and possibly represent spreads of spoil or hardcore associated with its

construction. Another area of disturbance, in the north-eastern corner of the survey area, may relate to a small structure (probably an animal pen or shelter) shown on early editions of the Ordnance Survey map. A fifth area, on the eastern edge of the survey area, is of uncertain origin.

A number of amorphous positive anomalies have been detected, with the majority lying in an east to west band across the centre of the survey area. These are likely to represent variations in the magnetism of the underlying geological strata. Small dipolar anomalies have also been detected widely across the survey area, representing a random scatter of ferrous debris within the topsoil.

5 CONCLUSION

The survey has detected a group of probable ditches and pits in the south-western part of the survey area. Whilst the date and function of these is unknown, the most plausible suggestion would be that they are medieval or post-medieval settlement features. If this is correct, they may be associated with the buildings which formerly stood to their east, at the end of Gorrell Lane, or with the possible medieval house platforms which have been recorded to the west, just beyond the end of the survey area.

Away from the south-western part of the survey area, the survey has detected widespread traces of medieval to early post-medieval ridge and furrow cultivation and two minor features of possible archaeological interest. Several small areas of disturbed ground have also been detected, and these possibly relate to the construction of the A421 Tingewick bypass.

BIBLIOGRAPHY

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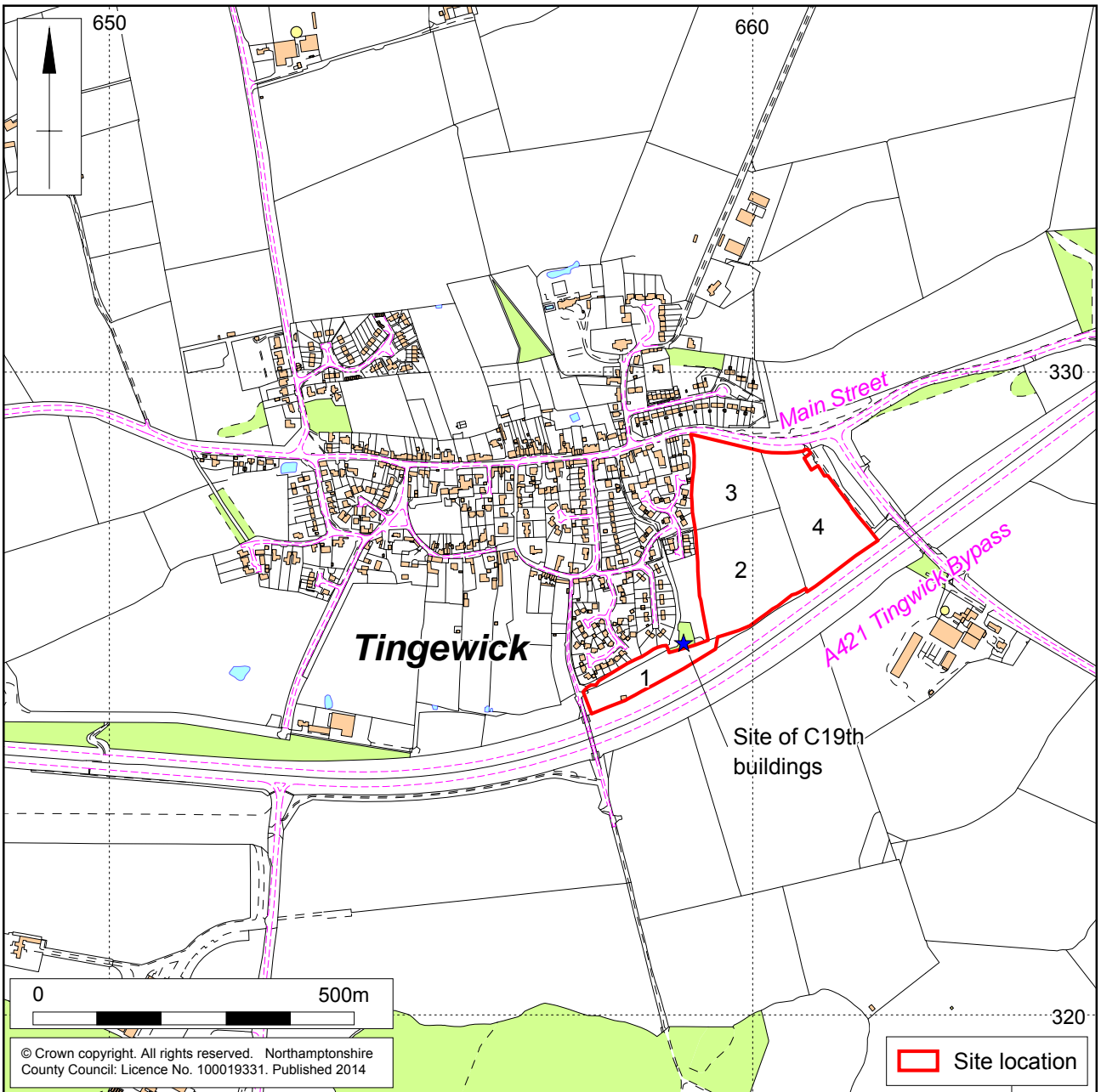
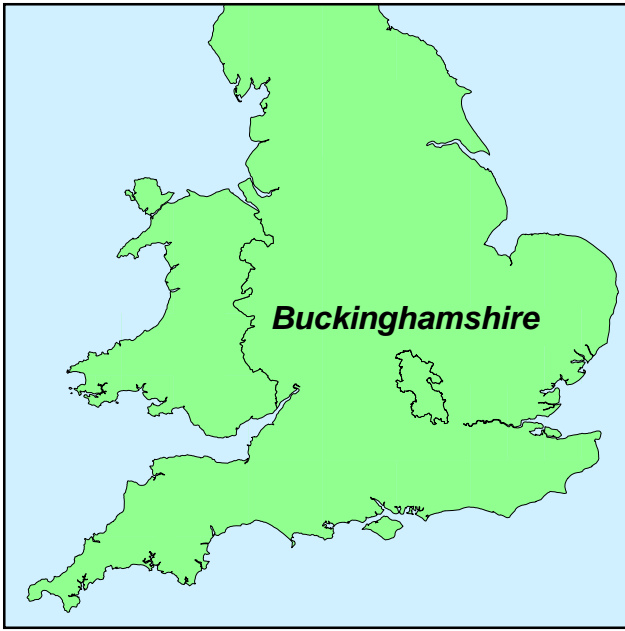
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MOLA 2014 *Land south of Main Street, Tingewick, Buckinghamshire: Method statement for magnetometer survey*, MOLA Northampton

MOLA
12 June 2014



Scale 1:10,000

Site Location Fig 1



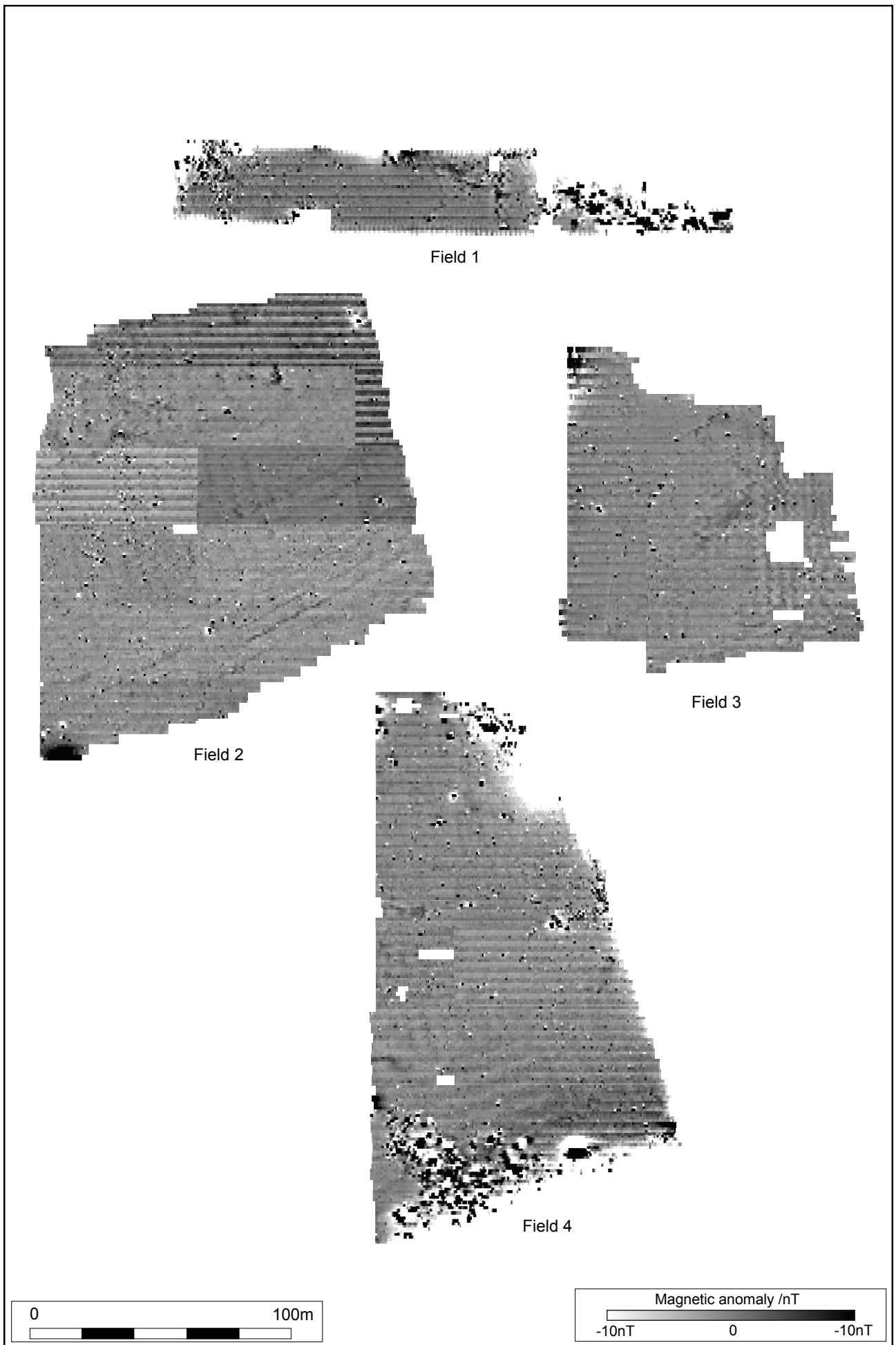
Scale 1:2000

Magnetometer survey results Fig 2



Scale 1:2000

Magnetometer survey interpretation Fig 3



1:2000

Unprocessed magnetometer data Fig 4

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