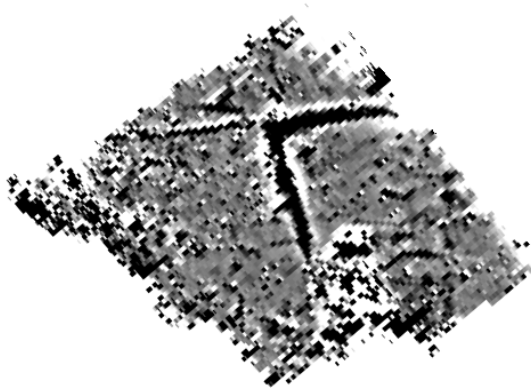




Northamptonshire Archaeology

Archaeological Geophysical Survey on land at
Grays Lane, Paulerspury, Northamptonshire
November 2013



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Report 13/242

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QUALITY CONTROL

	Print name	Signed	Date
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Approved by	Andy Chapman		

OASIS REPORT FORM

PROJECT DETAILS		OASIS No. 165900	
Project title	Archaeological Geophysical Survey on land at Grays Lane, Paulerspury, Northamptonshire		
Short description	Northamptonshire Archaeology was commissioned by Wilbraham Associates to conduct an archaeological geophysical survey on land at Grays Lane, Paulerspury. A magnetometer survey was undertaken over an area of 0.59ha. The survey identified an undated square enclosure and linear ditch.		
Project type	Geophysical survey		
Previous work	Unknown		
Current land use	Pasture		
Future work	Unknown		
Monument type and period			
Significant finds	None		
PROJECT LOCATION			
County	Northamptonshire		
Site address	Grays Lane, Paulerspury		
Easting Northing	SP 7257 4556		
Area (sq m/ha)	0.59ha		
Height aOD	125m aOD		
PROJECT CREATORS			
Organisation	Northamptonshire Archaeology (NA)		
Project brief originator	NCC		
Project Design originator	NA		
Director/Supervisor	James Ladocha (NA)		
Project Manager	Mark Holmes (NA)		
Sponsor or funding body	Wilbraham Associates		
PROJECT DATE			
Start date	18/11/2013		
End date	18/11/2013		
ARCHIVES	Location (Accession nos.)	Contents	
Physical		N/A	
Paper		Site survey records	
Digital		Survey data	
BIBLIOGRAPHY			
Title	Archaeological Geophysical Survey on land at Grays Lane, Paulerspury, Northamptonshire, November 2013		
Serial title & volume	Northamptonshire Archaeology Report 13/242		
Author(s)	Garreth Davey		
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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF THE LAND AT
GRAYS LANE, PAULERSPURY, NORTHAMPTONSHIRE.
NOVEMBER 2013**

Abstract

Northamptonshire Archaeology was commissioned by Wilbraham Associates to conduct an archaeological geophysical survey on land at Grays Lane, Paulerspury. A magnetometer survey was undertaken over an area of 0.59ha. The survey identified an undated square enclosure and linear ditch.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by Wilbraham Associates, on behalf of their clients, to carry out a geophysical survey on land at Grays Lane, Paulerspury (NGR SP 7257 4556). The fieldwork consisted of an area magnetic gradiometer survey in a single field of 0.59ha. This was conducted on the 18th November 2013 and conformed to a specification prepared by Northamptonshire Archaeology (NA 2013) as a condition of a planning application for development of the land.

2 BACKGROUND

2.1 Location and geology

The survey area comprised a single field of 0.59ha, located south of Grays Lane on the eastern edge of the village of Paulerspury. The field is bounded on all sides by hedgerows. To the south and east are further agricultural fields and to the north and west are residential properties.

The site is located on a high point of the area at c125m aOD. It is uneven and undulating with a hollow to the south of the site. The primary bedrock geology of the area has been mapped as Blisworth Limestone formation with overlying deposits of Diamicton till (BGS 2012).

2.2 Historical and archaeological background

Whilst the survey area itself has had no previous archaeological investigation, a desk based assessment (CgMs 2010) and a geophysical survey (Walker 2010) have been conducted on the field to the east.

These assessments have shown very little evidence for any prehistoric activity and only a single Mesolithic tool has been found in the village. A number of Iron Age and Roman settlements, however, are known within the parish. Two of the Roman sites have included stone buildings, and a Roman coin was found circa 250m from the site. Geophysical survey by Northamptonshire Archaeology identified enclosures with internal pits and ditch on land to the north-west at Tews End Lane 9 (Clements 2013). The area also lies close to the major Roman road, Watling Street and is only 4.5km from the Roman town of Towcester (*Lactodorum*).

Medieval plot boundaries were found during trial trenching exercise undertaken by Northamptonshire Archaeology on land at Grays Lane to the north (Walker 2010b).

Evidence from the magnetometer survey carried out to the east has identified a number of possible linear features which may project into the proposed area of investigation (Walker 2010.) These features have so far had no further investigation.

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).

An independent system of 30m grids was established within the field 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 tape measured distances from the field corners. The gradiometers were carried at a brisk but steady walking 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 and with the agreed method statement for this project (EH 2008; IfA 2011; NA 2013).

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 available in Figure 4.

4 SURVEY RESULTS

Within the survey area is a strong, positive magnetic L-shaped anomaly, measuring at least 50m north to south and at least 40m east to west. This appears to form the north-western corner of a possible enclosure that extends eastwards outside of the surveyed area. Extending westwards from the north-western corner of the enclosure is a positive linear anomaly, measuring 50m long.

In the southern part of the survey area is an area of strong magnetic disturbance which could represent an area of a backfilled hollow, which is visible as an earthwork depression.

There is also an area of magnetic disturbance in the western corner of the field which was noted to be an area of grassed-over hardcore surface.

5 CONCLUSION

The survey identified the north-western corner of a clearly defined D-shaped enclosure and a ditch. The opposing north-eastern corner of the enclosure was recorded in a magnetometer survey of the adjacent field (Walker 2010). The enclosure encompasses an area measuring at least 0.25ha, two opposing terminals form an entrance in its north-eastern corner. It is probable that the enclosure and ditch are prehistoric or Roman in date. The infilled hollow in the southern part of the site disturbs the signals from the enclosure ditch. Historic maps show that there was a pond at this location until at least 1958.

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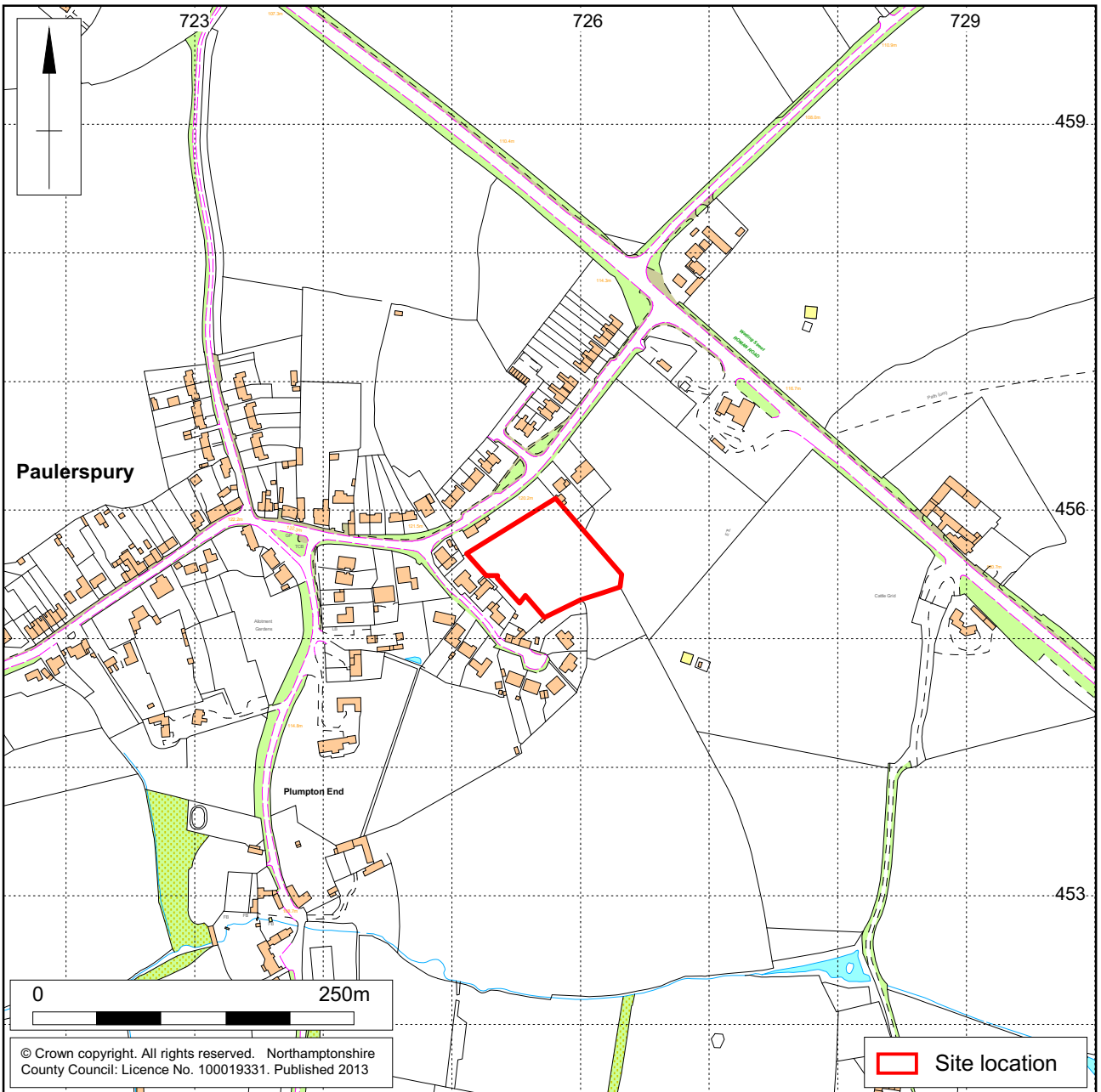
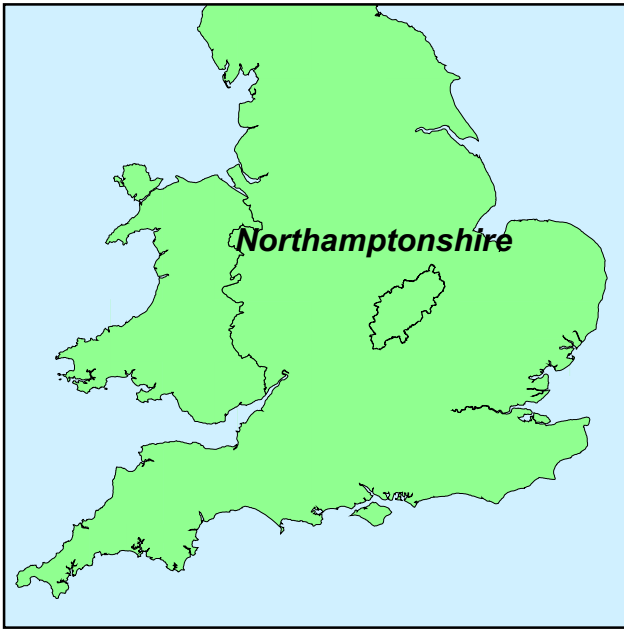
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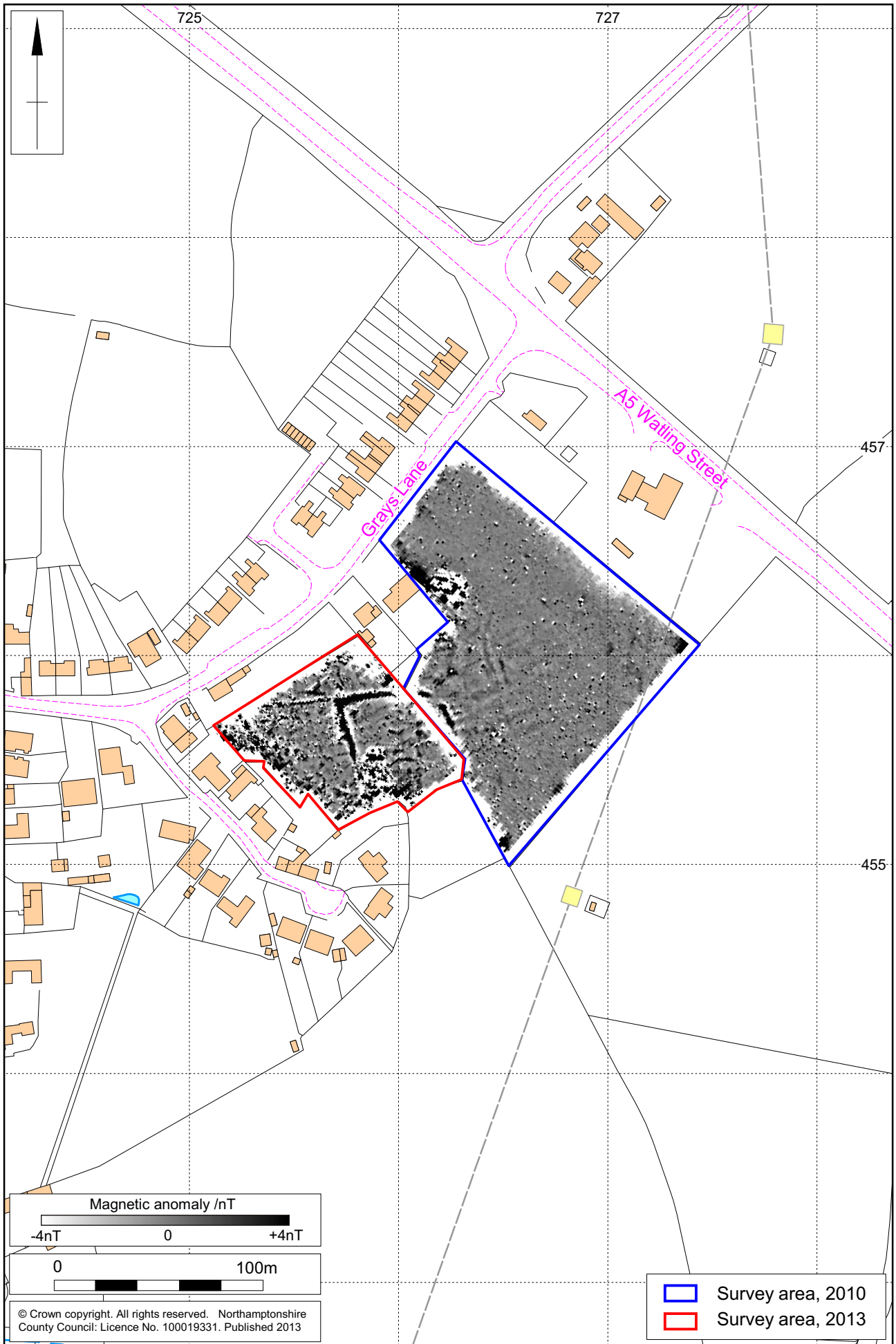
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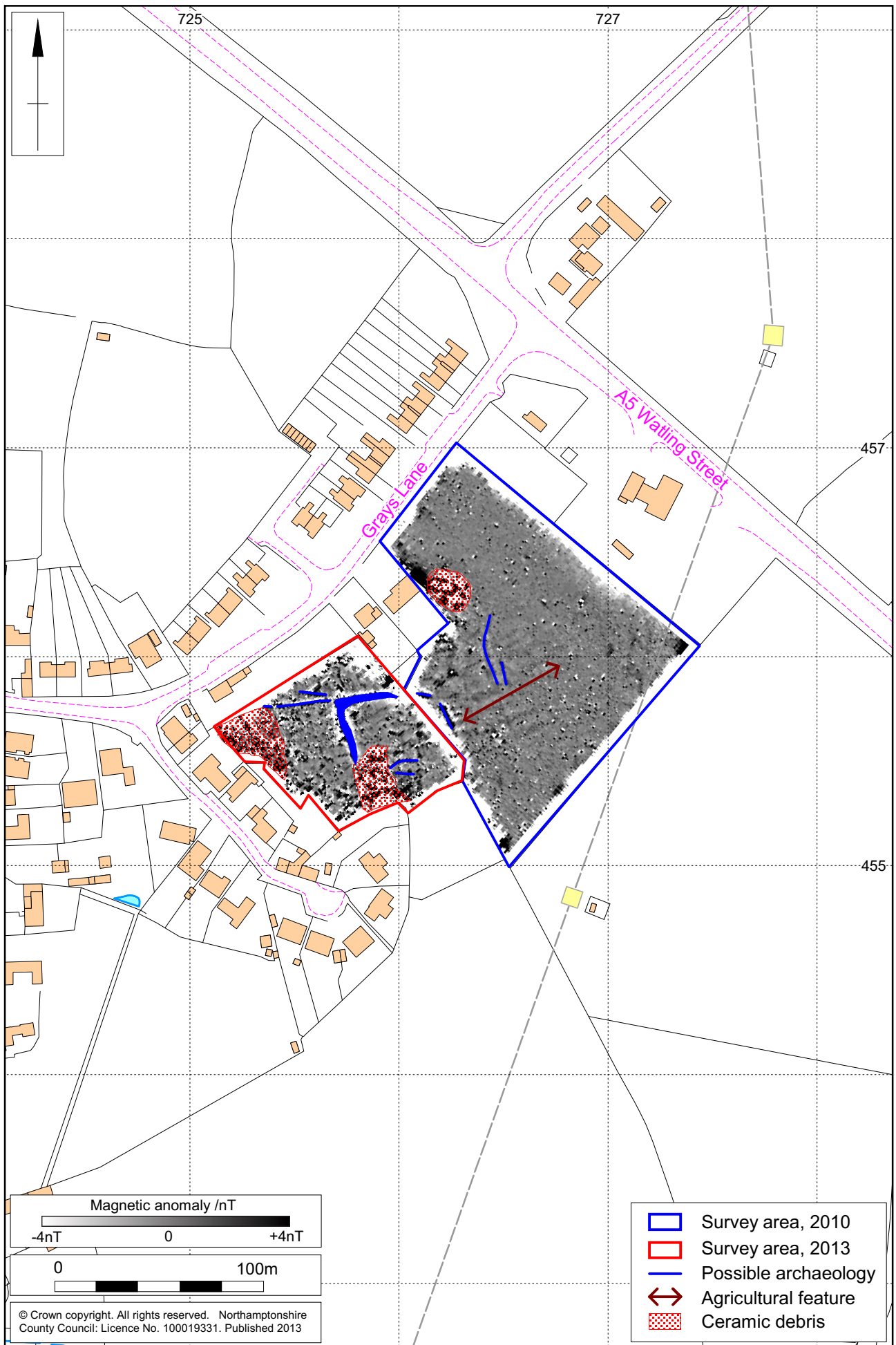
BGS 2013 <http://www.bgs.ac.uk/geindex/home.html> British Geological Survey website



Scale 1:5000

Site location Fig 1





1:2500

Magnetometer survey interpretation Fig 3



Raw geophysical data Fig 4



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