



Northamptonshire Archaeology

Archaeological Geophysical Survey of land to the north of Weddington Nuneaton, Warwickshire February 2010



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Northamptonshire
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Report 10/51
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QUALITY CONTROL

	Print name	Signature	Date
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OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey on land to the North of Weddington, Nuneaton, Warwickshire	
Short description	Northamptonshire Archaeology was commissioned by CgMs Consulting to conduct an archaeological geophysical survey of 13.7ha of land to the immediate north of Weddington, near Nuneaton, Warwickshire. This site lay adjacent to the parish church of St James and encompassed an area of suspected medieval settlement. The survey identified a few anomalies of possible archaeological interest, including a pit, a house platform, a possible lime-kiln and ridge and furrow cultivation patterns.	
Project type	Geophysical survey	
Site status	None	
Previous work	DBA (JSAC 2001), Trial Trenching (Scott 1997)	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	Medieval ridge and furrow cultivation, Possible lime kiln, possible ditch, possible pit	
Significant finds	None	
PROJECT LOCATION		
County	Warwickshire	
Site address	Land to the North of Weddington, Nuneaton	
Study area	13.7ha	
OS Easting & Northing	SP 360 937	
Height OD	c 80m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	CgMs Consulting	
Project Design originator	Rob Bourn (CgMs)	
Director/Supervisor	John Walford	
Project Manager	Adrian Butler	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date	08 February 2010	
End date	19 March 2010	
ARCHIVES	Location	Content
Physical	N/A	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
BIBLIOGRAPHY		
	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological Geophysical Survey on land to the North of Weddington, Nuneaton, Warwickshire	
Serial title & volume	Northamptonshire Archaeology Reports 10/51	
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Contents

1	INTRODUCTION	1
2	TOPOGRAPHY AND GEOLOGY	1
3	ARCHAEOLOGICAL BACKGROUND	1
4	METHODOLOGY	2
5	SURVEY RESULTS	2
6	CONCLUSION	4
	BIBLIOGRAPHY	5

Figures

Cover

Fig 1 Site Location, 1:20,000

Fig 2 Magnetometer Survey Results, 1:2500

Fig 3 Magnetometer Survey Interpretation, 1:2500

**ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND TO
THE NORTH OF WEDDINGTON, NUNEATON
WARWICKSHIRE
FEBRUARY 2010**

ABSTRACT

Northamptonshire Archaeology was commissioned by CgMs Consulting to conduct an archaeological geophysical survey of 13.7ha of land to the immediate north of Weddington, near Nuneaton, Warwickshire. This site lay adjacent to the parish church of St James and encompassed an area of suspected medieval settlement. The survey identified a few anomalies of possible archaeological interest, including a pit, a house platform, a possible lime-kiln and ridge and furrow cultivation patterns.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by CgMs Consulting on behalf of Hallam Land Management Ltd to conduct an archaeological geophysical survey of 13.7ha of land located immediately to the north of Weddington, near Nuneaton, Warwickshire ahead of proposed residential development (NGR SP 360 937; Fig 1). The geophysical survey was undertaken during February 2010. The site adjoined the parish church of St James and encompassed the suspected site of a deserted medieval village.

2 TOPOGRAPHY AND GEOLOGY

The survey area is located to the north of the village of Weddington, which itself lies on the north of Nuneaton. The survey area is broadly rectangular in shape. It is bounded to the north-west by a disused railway embankment, to the north-east by the A444 and to the south-east by Weddington itself. The remaining boundary is a somewhat arbitrary line passing close to the River Anker. The area is divided into six pasture fields of varying size, several of which retain ridge and furrow earthworks.

The survey area occupies a largely flat section of river terrace at a height of c 80m AOD. There are slight topographic variations across the site, with a general downwards trend towards the Anker. The geology comprises a gravel drift overlying Triassic sediments.

3 ARCHAEOLOGICAL BACKGROUND

The survey area has been the subject of a desk-based assessment (JSAC 2001) and a limited amount of trial trenching (Scott 1997, cited in JSAC 2001). The latter was prompted by the proposed development of a church hall, and was restricted to a small area to the east of the church.

An early Bronze Age axe has been found within the survey area, but there is no other evidence for prehistoric or Roman activity within its boundaries. However, a probable Roman kiln site has been discovered approximately 300m to the south-east (JSAC 2001).

The area lies immediately adjacent to the parish church of St James. This contains a Norman font and retains a medieval side-chapel, although the majority of the structure is brick-built and 18th to 19th century in date (VCH 1947). Documentary evidence shows that the medieval village of Weddington, which would presumably have lain around the church, was largely cleared in the late fifteenth and early sixteenth century. One probable house platform survives within the survey area, which also contains some ridge and furrow earthworks (JSAC 2001).

4 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).

The basic unit of survey was the 30m grid square. A separate network of grids was established in each field, by means of tape measure and optical square, and was tied in by measurement to the field boundaries. The instruments 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 grid.

All fieldwork complied with the guidelines issued by English Heritage and by the Institute for Archaeology (EH 2008; Gaffney, Gater and Ovendon 2002).

The data was processed using Geoplot 3.00u software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function (ZMT). Destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of greyscale plots (scale +4nT to -4nT black ~ white). These have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative plot has been produced and is shown overlain onto the data (Fig 3).

5 SURVEY RESULTS

Field 1

Within this field, the only anomalies of archaeological relevance are the north-east to south-west trending parallel lines which relate to the surviving ridge and furrow earthworks. The distribution of small dipolar anomalies indicate ferrous debris of a generally small and insignificant nature. Extensive negative magnetic halos along the field margins relate to modern wire fences.

Field 2

This field contains a low rectangular earthwork, believed to be a house platform (JSAC 2001), which is partially apparent in the geophysical data. A single localised positive anomaly within the platform area might be consistent with a highly magnetised pit or weakly magnetised kiln.

No ridge and furrow is apparent in this data. This is not because it is absent, but because the ridges were aligned with the survey traverse direction and were unavoidably removed by the de-striping procedure.

Near the south-western corner of the survey area there is an ill-defined sinuous anomaly. This coincides with a slight step between the levels of the river terrace and floodplain.

As in field 1, there is a scatter of dipolar ferrous anomalies across this field and a strong, negatively magnetic halo from the adjacent fence.

Field 3

Parallel linear anomalies, representing ridge and furrow, are apparent in the north-western part of this field. They appear to be absent from the remaining area because the ridge direction changes, causing the same difficulty which has been described for field 2.

Near the centre of the field there is an area of weak magnetic noise concentrated in a rectangular area of about 35 x 70m. This might suggest a concentration of ceramic material or similarly magnetic debris. The edges of this are, in places, quite sharp, suggesting that some form of physical boundary constrained the extent of the spread.

A linear anomaly, largely defined by a chain of ferrous dipoles, crosses the field perpendicularly. This coincides with a line of trees which are apparently the vestiges of a former field boundary. Near the northern end of this feature is the start of a very weak linear anomaly which runs down to the southern corner of the field. As this links two modern gateways it seems probable that this is a modern footpath which has, by some unknown mechanism, become slightly magnetised.

A strongly positive linear anomaly runs close to the south-western boundary of this field. This coincides with a footpath, and suggests the presence of a layer of magnetic hardcore (perhaps brick or igneous rock) underneath the grass. More modern disturbance occurs around a small stock pen against the opposite boundary. Scattered and isolated ferrous dipoles also occur.

Field 4

A large and elongated positive anomaly is located close to the centre of this field. It is moderately magnetic but lacks the extreme magnetism characteristic of ferrous objects. It cannot be interpreted with complete confidence but, by analogy with some recently investigated features at Barrow-upon-Soar (Ladocha and Butler 2010), it is suggested to represent a lime-kiln or similar industrial feature.

There is a short linear anomaly, composed of alternating positive and negative elements, in the north east of this field. This type of anomaly is typically associated with field drains.

It is of note that the data from this field is generally 'noisy', with many small disturbances to the magnetic background. This does not seem to be a natural phenomenon, as it is quite closely confined to this field and the adjacent field 5. More probably it reflects a modification of the soil, perhaps by the incorporation of slag or fired clay. When, and for what purpose, such a modification occurred can only be a matter of speculation.

Field 5

The south-western half of this field contains a series of parallel linear anomalies indicative of ridge and furrow. There is a slight suggestion that field drains may run along some of the furrows, but the data is inconclusive on this point.

As in field 4 (and for presumably similar reasons) the magnetic background in field 5

exhibits extensive disturbance. This is especially so towards the boundary with the A444, where the noise is sufficient to have masked weak underlying anomalies.

Field 6

The only likely archaeological anomaly in this field appears to represent a short and isolated length of ditch lying towards the southern corner. The date and function of this putative feature are obscure.

The eastern part of this field contains an extensive complex of weak linear anomalies with variable polarity. These are typical of field drains, and the interpretation is confirmed by the obvious configuration of feeders and headers. The extent of the system is probable greater than mapped, as many of the anomalies are on the limit of visibility.

A large area of intense magnetic noise coincides with a small belt of mature trees projecting into the field. This strongly suggests an area of dumping, rich in ferrous scrap or (less probably) highly temperature industrial debris.

Small ferrous dipoles occur across the field and there are several ferrous halos around the edge. A particularly extensive halo derives from the steel frame of an adjacent glasshouse.

6 CONCLUSION

The results demonstrate that the survey area has at least a limited degree of archaeological potential. Several features have been identified, only some of which were previously known from earthworks. Specifically, these include a possible house-platform, a possible lime-kiln, a section of ditch and a probable pit or small kiln.

The apparent absence of medieval settlement remains (the 'house platform' excepted) should be regarded with care. Magnetometry is known to produce variable, and often poor, results over deserted medieval villages (Gaffney and Gater 2003, 165) especially where the house remains are ephemeral post-holes or beam slots. Even small gullies and stone footings can be difficult to locate by this technique, except on the most favourable sites. Thus the presence of such features has not been conclusively disproved by this survey.

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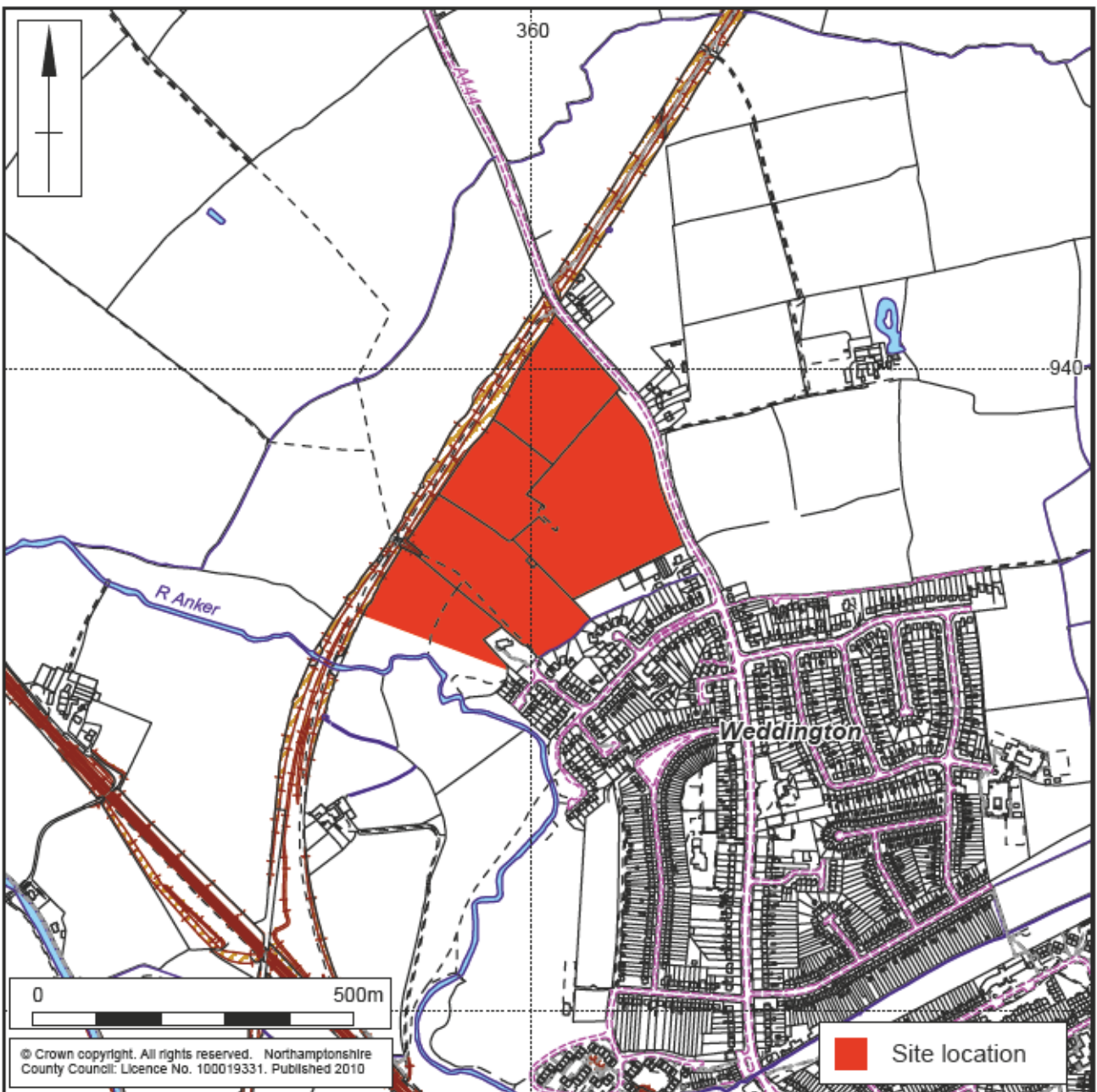
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VCH 1947 *A History of the County of Warwick*, **4**, Victoria County History



1:10,000

Site Location Fig 1







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