

Archaeological geophysical survey of land east of Higham Lane Nuneaton Warwickshire November 2015

Report No. 15/208

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OASIS REPORT

PROJECT DETAILS	Oasis No. molanort1-2	232239		
Project name	Archaeological geophysical survey of land east of Higham Lane, Nuneaton, Warwickshire.			
Short description	MOLA was commissioned to carry out a detailed magnetometer survey on land east of Higham Lane, Nuneaton, Warwickshire. The survey identified no archaeological features but did identify a backfilled pond, a number of field drains and two pipelines.			
Project type	Geophysical survey			
Site status	None			
Previous work	None known			
Current Land use	Arable			
Future work	Unknown			
Monument type/ period	None			
Significant finds	None			
PROJECT LOCATION				
County	Warwickshire			
Site address	Higham Lane, Nuneat	Higham Lane, Nuneaton		
Study area	c 17.5ha			
OS Easting & Northing	SP 3794 9393			
Height OD	c 89m – 98m aOD			
PROJECT CREATORS				
Organisation	MOLA Northampton			
Project brief originator	Anna Stocks, Warwickshire County Council Planning Archaeologist			
Project design originator	MOLA Northampton			
Director/Supervisor	Adam Meadows			
Project Manager	John Walford			
Sponsor or funding body CgMs Consulting Ltd				
PROJECT DATE				
Start date	9 November 2015			
End date	12 November 2015			
ARCHIVES	Location	Content		
Physical	N/A			
Paper	MOLA Northameter	Site survey records		
Digital	MOLA Northampton	Geophysical survey & GIS data		
BIBLIOGRAPHY Journal/monograph, published or forthcoming, or unpublished report		9		
Title	Archaeological geophysical survey of land east of Higham Lane, Nuneaton, Warwickshire, November 2015			
Serial title & volume	MOLA Northampton Reports 15/208			
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ABSTRACT

MOLA was commissioned to carry out a detailed magnetometer survey on land east of Higham Lane, Nuneaton, Warwickshire. The survey identified no archaeological features but did identify a backfilled pond, a number of field drains and two pipelines.

1 INTRODUCTION

MOLA was commissioned by CgMs Consulting to conduct a geophysical survey on c 17.5ha of arable land to the east of Higham Lane, Nuneaton (NGR SP 3794 9393; Fig 1). A detailed magnetometer survey was undertaken on 9-12 November 2015, and covered c 12.4ha of land, the remaining area being unsurveyable due to standing crops.

2 BACKGROUND

2.1 Location and geology

The survey area comprises five arable fields on the northern edge of Nuneaton, between Higham Lane and Nuneaton Fields Farm. It is bounded to the south by residential properties along Milby Drive and lies approximately 200m south of the A5 Watling Street. Most of the fields were lying fallow at the time of the survey but the eastern field was covered by a nearly mature crop of potatoes, making it unsurveyable.

The survey area is positioned on a gentle, south-facing slope at an elevation of c 89-98m aOD and is crossed by Change Brook. Its solid geology is mapped as Mercia Mudstone Group strata, including an outcrop of Gunthorpe member siltstone. The only drift geology is a narrow strip of alluvium alongside the brook (BGS 2015).

2.2 Historical and archaeological background

The Warwickshire Historic Environment Record (HER) has no information about monuments, find-spots or previous archaeological works within the survey area, and lists only a small number of finds discovered in the immediate vicinity. A rough-out of a Palaeolithic stone tool was found at Weddingon Meadows, c 300m to the north-west of the survey area (MWA5958), a medieval coin was found near Hollow Farm, c 200m to the north (MWA5958), and a hoard of coins and jewellery was found near the crossroads of Higham Lane and Watling Street (MWA1653 / MWA5141). The hoard was found in 1607, when a large square stone was removed. It appears to have been of unusual composition, containing c 250 silver coins of Henry III along with items of jewellery and two or three silver denarii of either Hadrian (MWA5141) or Trajan (MAW1653).

The survey area partially surrounds the former site of Whitehouse Farm, which is depicted on historic Ordnance Survey maps dating from between 1888 and 1975. The site of this farm is now an overgrown patch of ground at the southern boundary of the survey area, and was not surveyed.

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 within 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 Historic England and by the Chartered Institute for Archaeologists (HE 2015; ClfA 2014).

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). These have 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. Separate plots of the unprocessed data are presented in Figure 4.

4 SURVEY RESULTS

The survey has identified no anomalies of obvious archaeological interest. Almost every anomaly can be confidently attributed to a specific modern cause, the one exception being an unusual, Y-shaped negative anomaly in the southern part of the survey area. This shape of this is suggestive of a field drain, but its strongly negative polarity is not the typical response of a modern ceramic drain and might be more consistent with a stone-lined drain or concrete pipe, perhaps with a substantial void at its centre.

In the next field to the west, the survey has detected a pronounced, magnetically alternating linear anomaly which runs along the western boundary in a north-north-east orientation before turning at a 90 degree angle to east-south-east. The strength and character of the anomaly is typical of a metal pipe and its position would suggest that it formerly served Whitehouse Farm. In the field to the north there are two much weaker linear anomalies with similarly alternating polarities which are likely to represent field drains or small pipes.

A large patch of intense magnetic noise, fringed by a broad negative halo, marks the site of a former pond in the north-eastern field. The pond is depicted on historic Ordinance Survey maps up to the 1977 edition, and has evidently been infilled with spoil that contains much ferrous scrap and other magnetic debris. Much smaller patches of magnetic noise elsewhere in the data are likely to represent small deposits of hardcore and other modern debris. Likewise, the various individual dipolar anomalies that occur throughout the data set will represent minor pieces of ferrous debris scattered in the ploughsoil.

5 CONCLUSION

The survey has detected no obvious archaeological features but has detected a recently backfilled pond and a number of drains and pipes. One of the drains is represented by an unusual negative anomaly, and may be a substantial stone-built feature rather than a typical modern field drain.

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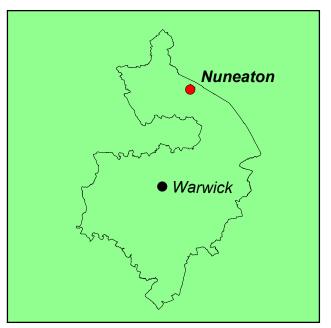
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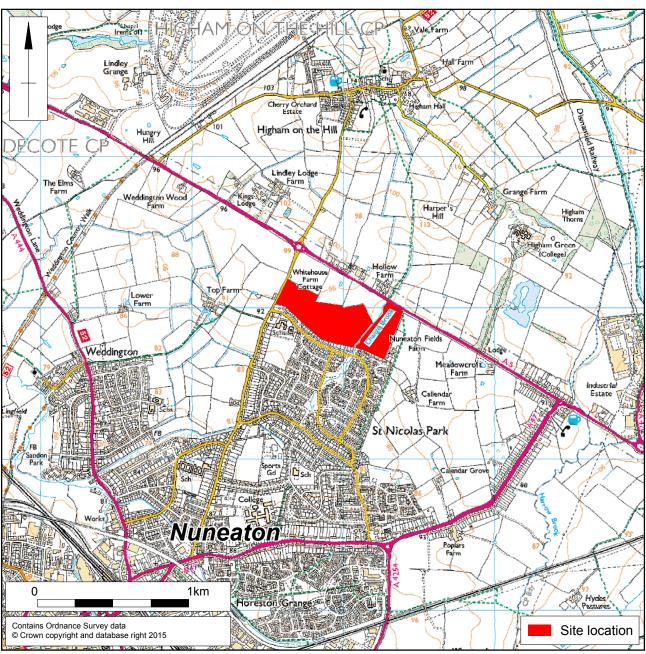
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Scale 1:25,000 Site location Fig 1



