

Land North of Gargrave Road Skipton North Yorkshire

Geophysical Survey

January 2008

Report No. 1756

MAP Archaeological Consultancy Ltd

Land north of Gargrave Road Skipton North Yorkshire

NYCC HER	
SNY	1173]
ENY	3980
CNY	5998
Parish	5065
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Geophysical Survey

Summary

A geophysical (magnetometer) survey covering 3 hectares was carried out on land north of Gragrave Road on the wetern outskirts of Skipton, in advance of the proposed development of the site. Linear anomalies caused by ploughing have been identified in the northern half of the site. No anomalies of archaeological potential have been identified.



Report Information

Client: MAP Archaeological Consultancy Ltd., Showfield Lane,

Malton, North Yorkshire

Report Type: Geophysical survey

Location: Skipton

County: North Yorkshire
Grid Reference: SD 9755 5225

Period(s) of activity

represented: Post-medieval

Report Number: 1756
Project Number: 3209
Site Code: GRS07

Planning Application No.: Pre-determination

Museum Accession No.: -

Date of fieldwork: December 2007
Date of report: January 2008

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1 Introduction and archaeological background

Archaeological Services WYAS was commissioned by Sophie Langford of MAP Archaeological Consultancy Ltd. on behalf of their clients Indigo Planning Ltd. to carry out a geophysical (magnetic) survey on agricultural land north of Gargrave Road, approximately 1 kilometre west of Skipton (see Fig. 1).

The site is centred at National Grid Reference SD 9755 5225 and is bounded by Gargrave Road (the A65) to the south with open agricultural land to the north and west (see Fig. 2). To the east is a tree belt surrounding a pond and a stream. The site covered an area of 3 hectares and at the time of the survey (December 17th 2007) was under permanent pasture with grazing sheep. No problems were encountered during the survey.

Topographically the site sloped from approximately 145m above Ordnance Datum (OD) to the north sloping down towards the road in the south and the stream in the east at about 135m OD. The underlying solid geology comprises Magnesian Limestone overlain by soils classified in the Brickfield 2 association. These soils are described as seasonally waterlogged fine loams.

There are no known archaeological remains within the application area. The 1842 tithe award map for Stirlton with Thorlby shows that the field boundaries have remained unchanged since the map was produced in the mid 19th century. No other archaeological information was available.

2 Methodology and presentation

The general aims of the survey were to obtain information that would contribute to an evaluation of the archaeological significance of the site. This information would then enable further evaluation and/or mitigation measures to be designed in advance of the proposed development.

More specifically the aims of the survey were to:-

- provide information about the nature and possible interpretation of any geophysical anomalies identified by the survey;
- determine the presence or absence of any buried archaeological remains in the site that may be affected by the proposed development.

In order to achieve these aims detailed (recorded) magnetometer survey was carried out over the whole of the site, an area of approximately 3 hectares.

Detailed survey employs the use of a sample trigger to automatically take readings at predetermined points, typically at 0.25m intervals, on traverses 1m apart. These readings are stored in the memory of the instrument and are later downloaded to computer for processing and interpretation. Further details are given in Appendix 1. Detailed survey allows the

visualisation of weaker anomalies that may not have been readily identifiable by magnetic scanning.

A Bartington Grad601 magnetic gradiometer was used during the survey with readings being taken at 0.25m intervals on zig-zag traverses 1m apart within 20m by 20m grids. The readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation using Geoplot 3 software.

The survey methodology, report and any recommendations comply with guidelines outlined by English Heritage (David 1995) and by the IFA (Gaffney, Gater and Ovenden 2002). All figures reproduced from Ordnance Survey mapping are done so with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

A general site location plan, incorporating the 1:50000 Ordnance Survey mapping, is shown in Figure 1. Figure 2 shows the processed magnetometer data superimposed onto an Ordnance Survey map base at a scale of 1:1000. The unprocessed (XY trace plot) data, together with an accompanying interpretation diagram, are presented in Figures 3 and 4, also at a scale of 1:1000.

Technical information on the equipment used, data processing and magnetic survey methodology is given in Appendix 1. Appendix 2 details the survey location information and Appendix 3 describes the composition and location of the site archive.

The figures in this report have been produced following analysis of the data in 'raw' and processed formats and over a range of different display levels. All figures are presented to most suitably display and interpret the data from this site based on the experience and knowledge of Archaeological Services staff.

3 Results and discussion

Several isolated, dipolar anomalies ('iron spikes' – see Appendix 1) that are indicative of ferrous material present either on the ground surface or buried within the topsoil are noted, particularly in the northern half of the site. Although archaeological artefacts may cause these anomalies they are more often caused by modern cultural debris that has been introduced usually as a consequence of manuring, public access or modern infilling. These anomalies are not considered to be archaeologically significant.

Other non-archaeological anomalies include a ferrous dipolar response along the eastern boundary that is caused by a service pipe and an area of magnetic disturbance around the south-eastern corner that is due to electrical supply equipment.

Also prominent in the northern half of the site are numerous parallel, linear trend, anomalies aligned north-north-west/south-south-east parallel with the existing field boundary to the north. These anomalies are caused by ridge and furrow or more recent ploughing.

Two discrete anomalies, identified as small areas of enhanced magnetic response, have also been noted. It is considered much more likely that the observed responses are due to natural geological variation in the soil given the absence of any other potential archaeological anomalies and the lack of any other background information that might support an archaeological interpretation.

4 Conclusions

The magnetometer survey has not identified any anomalies considered likely to be of any archaeological significance with the possible exception of the linear anomalies attributed to former ploughing regimes.

On the basis of the geophysical survey the site is considered to have a low archaeological potential.

The results and subsequent interpretation of data from geophysical surveys should not be treated as an absolute representation of the underlying archaeological and non-archaeological remains. Confirmation of the presence or absence of archaeological remains can only be achieved by direct investigation of sub-surface deposits.