

HPHS/01



# LAND NORTH OF HILBRAE PETS HOTEL

## Geophysical Survey

commissioned by The Environmental Dimension Partnership Ltd

TWC/2014/1116

July 2015



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project info

**HA JOB NO.** HPHS/01  
**NGR** SJ 62828 22359  
**PARISH** Ercall Magna  
**LOCAL AUTHORITY** Telford and Wrekin  
**OASIS REF.** headland5-217764

project team

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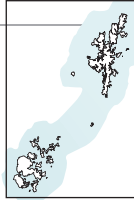
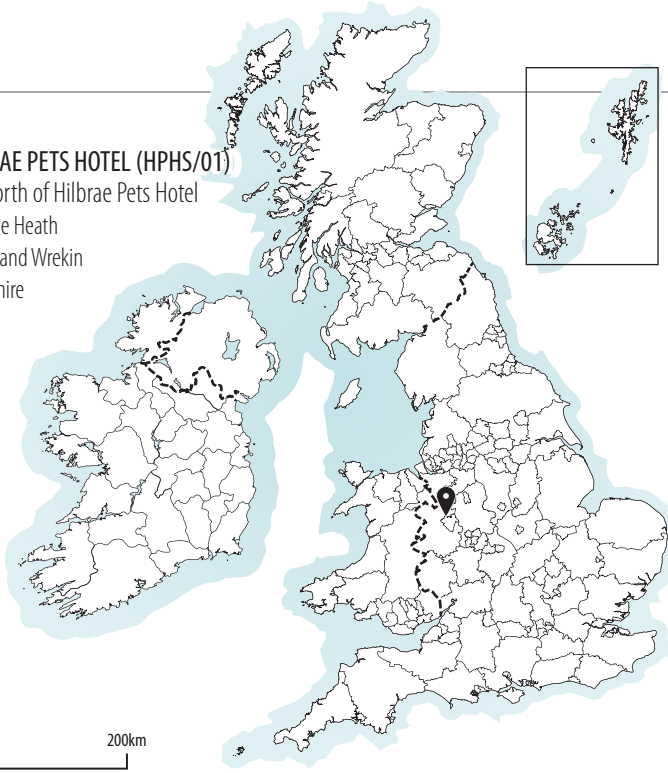
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## LIST OF ILLUSTRATIONS

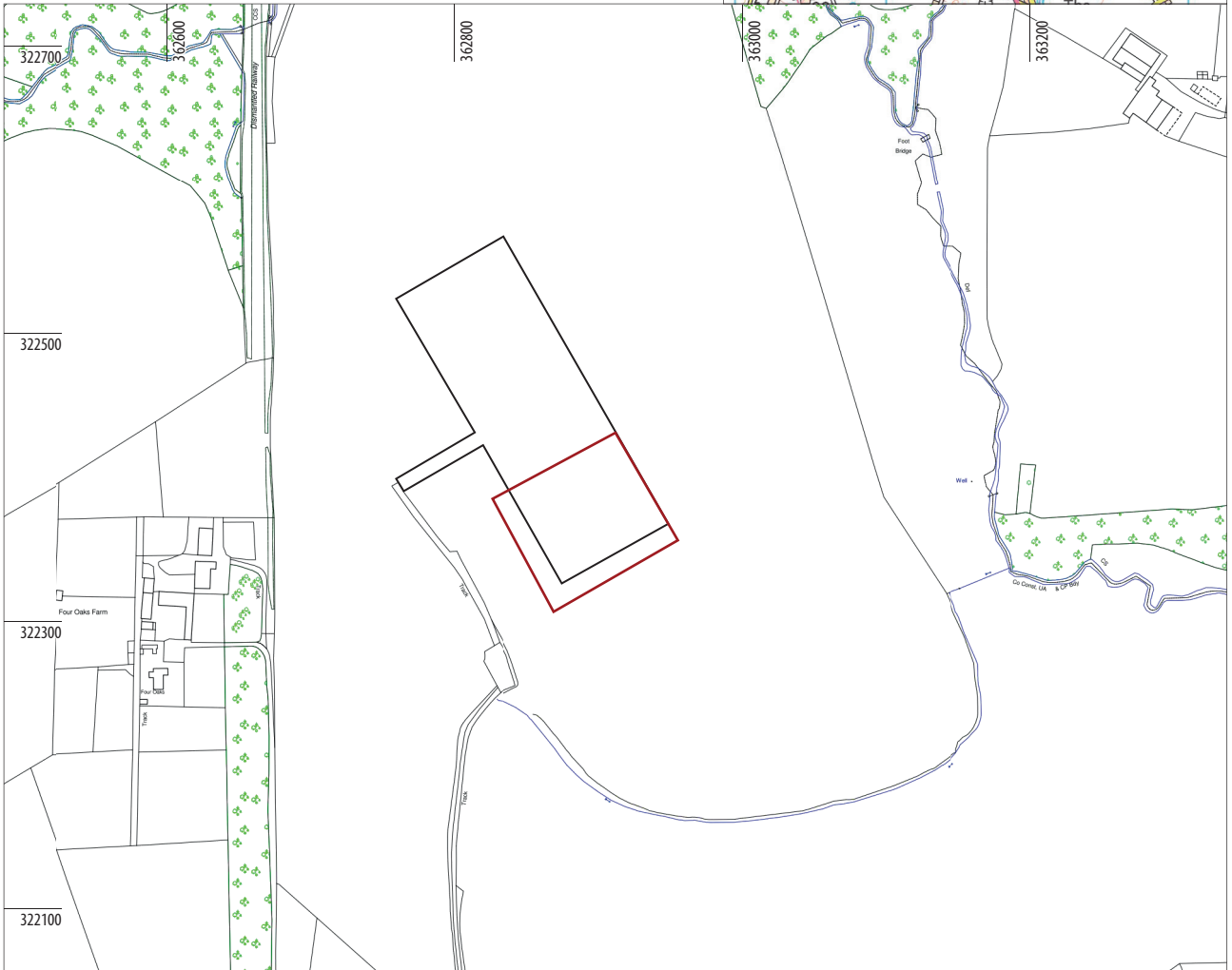
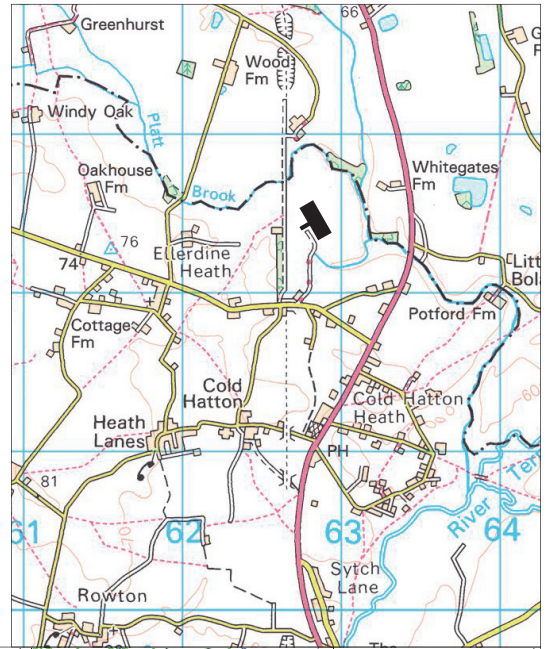
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**HILBRAE PETS HOTEL (HPHS/01)**

land north of Hilbrae Pets Hotel  
 Ellerdine Heath  
 Telford and Wrekin  
 Shropshire



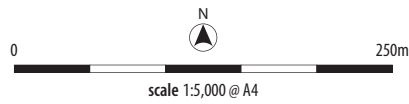
0 200km



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**KEY**

- development boundary
- survey boundary



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**ILLUS 1**

Site location (1:50,000)

# LAND NORTH OF HILBRAE PETS HOTEL

## Geophysical Survey

Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey covering 1 hectare on land north of Hilbrae Pets Hotel, Ellerdine Heath, Shropshire, in advance of the development of a proposed free range egg poultry unit. No anomalies of obvious archaeological potential have been located. The data is dominated by anomalies caused by variations in the local superficial deposits. Therefore, based on the geophysical survey, the archaeological potential of the site is considered to be low.

## 1 INTRODUCTION

### 1.1 PLANNING BACKGROUND

Headland Archaeology (UK) Ltd was commissioned by The Environmental Dimension Partnership Ltd on behalf of Heal Farms to undertake a geophysical (magnetometer) survey in order to inform a planning application (Ref. TWC/2014/1116) for the construction of a free range egg poultry unit on land to the north of Hilbrae Pets Hotel, Ellerdine Heath, Shropshire. The work was undertaken in accordance with a brief prepared by Shropshire Council (Shropshire Council 2015), with a Project Design (Headland Archaeology 2015) supplied to and approved by the Client, with guidance within the National Planning Policy Framework (DCLG 2012) and in line with current best practice (David et al. 2008). The survey was carried out on June 25th 2015 in order to provide additional information on the archaeological potential of the site.

### 1.2 SITE LOCATION, TOPOGRAPHY AND LAND-USE

The Proposed Development Area (PDA) is located 1km north of Hilbrae Pets Hotel, Ellerdine Heath, Shropshire, and is centred at NGR 362828, 322359 (see **Illus 1**). It comprises a rectangular parcel of land aligned north-west/south-east. The survey area consists of a uniform area covering 1 hectare of arable farmland at the south-eastern extent of the PDA. The survey area lies at 67m above Ordnance Datum and is broadly flat. At the time of the fieldwork the survey area had been recently cleared of all crops (see **Illus 2**).

### 1.3 GEOLOGY AND SOILS

The underlying bedrock comprises Bridgenorth Sandstone which is overlain by superficial deposits of Till – unsorted clays, sands and gravels (British Geological Survey 2015). The soils are classified in the Soilscape 18 association, described as slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (LandIS 2015).

## 2 ARCHAEOLOGICAL BACKGROUND

Research undertaken during the compilation of an archaeological evaluation brief (Shropshire Council) concluded that there is some potential for archaeological remains based on the site in the form of a cropmark complex which is recorded in the Shropshire Historical Environment Record (Ref. 02302). The record consists of a 'rectilinear cropmark west of Sanyford Bridge' which is identified from a 1976 vertical aerial photograph.

## 3 AIMS METHODOLOGY AND PRESENTATION

The main aim of the geophysical survey was to provide sufficient information to enable an assessment to be made of the impact of any proposed development on potential sub-surface archaeological remains and for further evaluation or mitigation proposals, if appropriate, to be recommended. Specifically, the aim of the survey was to target and investigate the cropmarks within the south-east of the PDA.



## ILLUS 2

General view of survey area, looking NE

The general archaeological objectives of the geophysical survey were:

- to provide information about the nature and possible interpretation of any magnetic anomalies identified;
- to therefore determine the presence/absence and extent of any buried archaeological features; and
- to prepare a report summarising the results of the survey.

### 3.1 MAGNETOMETER SURVEY

Magnetic survey methods rely on the ability of a variety of instruments to measure very small magnetic fields associated with buried archaeological remains. Features such as a ditch, pit or kiln can act like a small magnet, or series of magnets, that produce distortions (anomalies) in the Earth's magnetic field. In mapping these slight variations, detailed plans of sites can be obtained as buried features often produce reasonably characteristic anomaly shapes and strengths (Gaffney and Gater, 2003).

Bartington Grad601 magnetic gradiometers were used during the survey, taking readings at 0.25m intervals on zig-zag traverses 1m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and

interpretation. Geoplot 3 (Geoscan Research) software was used to process and present the data.

### 3.2 REPORTING

A general site location plan, incorporating the 1:50,000 Ordnance Survey (OS) mapping, is shown in **Illus 1**. **Illus 2** is a general site location photograph showing the survey area following the removal of the crops. **Illus 3** is a survey location plan displaying the processed greyscale magnetometer data at a scale of 1:1,250. A minimally processed data plot and overall interpretation of the data are shown in **Illus 4** and **Illus 5**, also at a scale of 1:1,250.

The survey methodology, report and any recommendations comply with the Project Design and guidelines outlined by English Heritage (David et al. 2008) and by the Chartered Institute for Archaeologists (CIfA 2014). All illustrations reproduced from Ordnance Survey mapping are with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

The illustrations 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 illustrations are presented to most suitably display and interpret the data from this site based on the experience and knowledge of management and reporting staff



## 4 RESULTS AND DISCUSSION (ILLUS 3–5 INCLUSIVE)

### 4.1 FERROUS/MODERN ANOMALIES

Ferrous anomalies, as individual 'spikes', are typically caused by ferrous (magnetic) material, either on the ground surface or in the plough-soil. Little importance is normally given to such anomalies, unless there is any supporting evidence for an archaeological interpretation, as modern ferrous debris or material is common on most sites, often being present as a consequence of manuring or tipping/infilling. On this site there is no obvious pattern or clustering to their distribution to suggest anything other than a random background scatter of ferrous debris in the plough-soil.

### 4.2 AGRICULTURAL ANOMALIES

One very faint linear trend anomaly, A, has been identified on an east-west orientation within the north of the survey area. The trend is very low in magnitude and may be due to a field drain.

### 4.3 GEOLOGICAL ANOMALIES

Throughout the site numerous low to moderate magnitude areas of magnetic enhancement (anomalies) have been identified. These are due to variations of sand and gravel in the composition of the prevailing superficial deposits.

## 5 CONCLUSION

The survey data is dominated by anomalies consistent with variations of sand and gravels comprising the superficial deposits. No anomalies have been detected to confirm the presence of any features relating to the rectilinear cropmark identified on the 1976 aerial photograph and no other anomalies of any obvious archaeological potential have been located. Therefore, based on the geophysical survey, the archaeological potential of the site is considered to be low.

## 6 REFERENCES

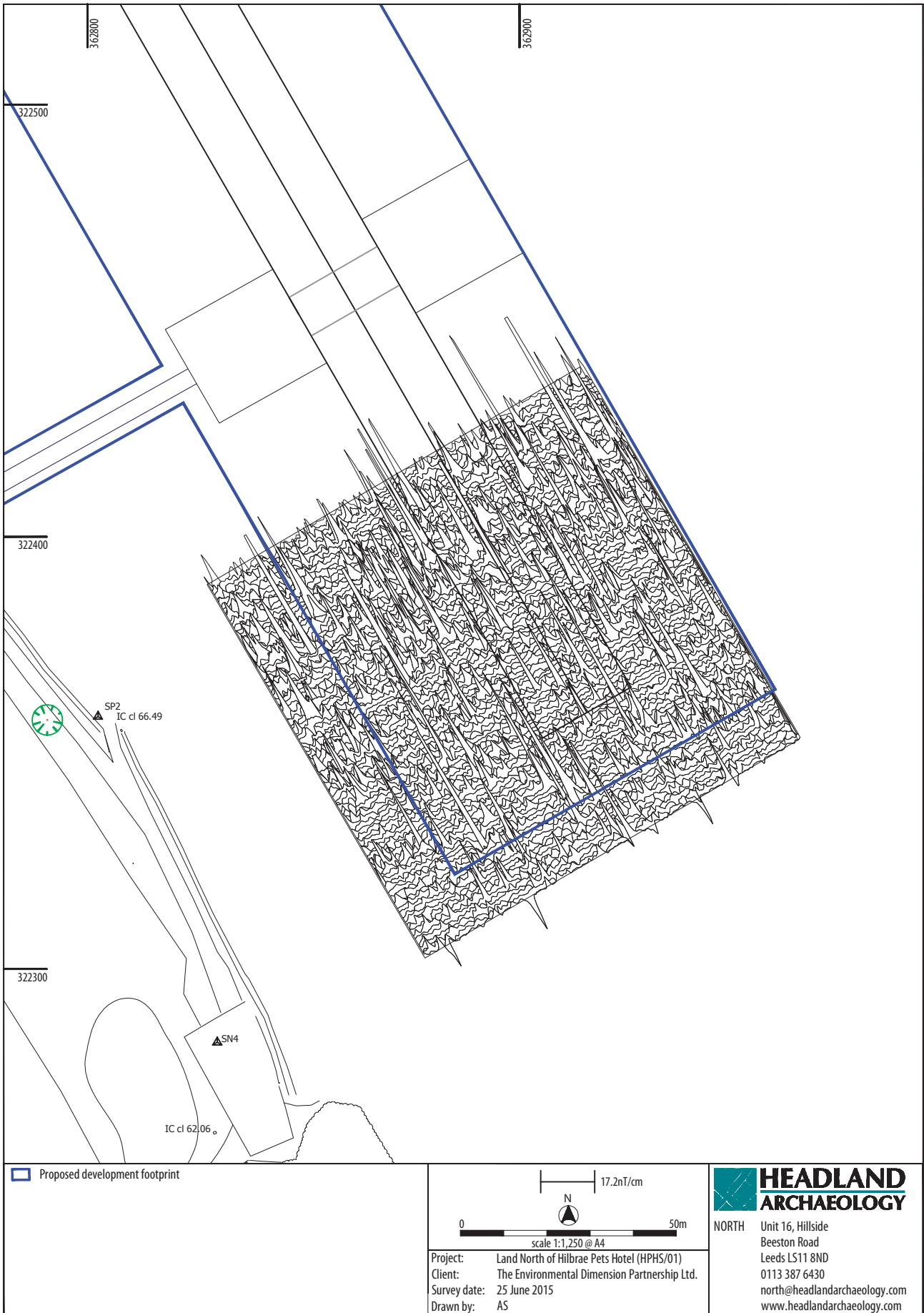
### 6.1 BIBLIOGRAPHY

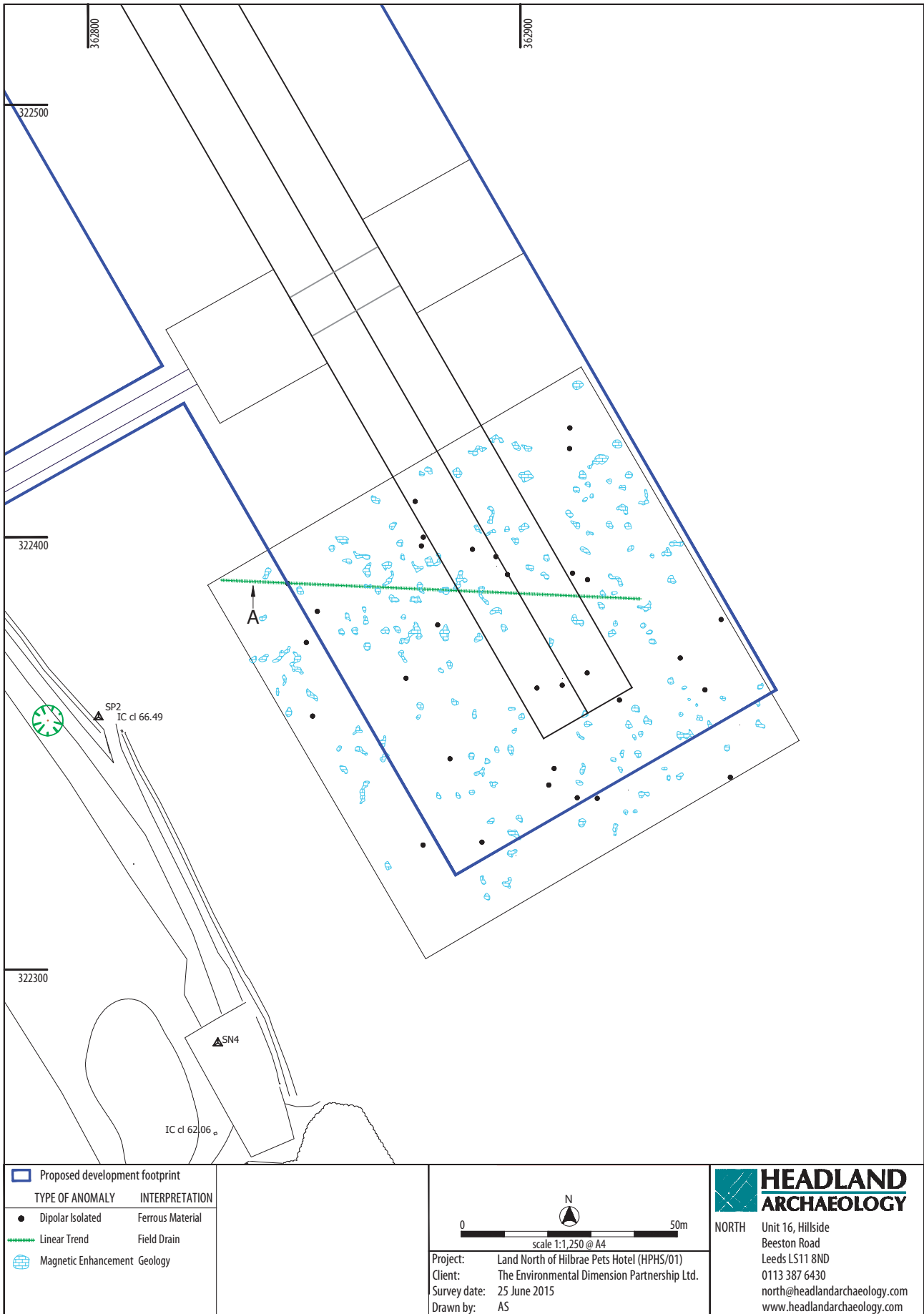
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ILLUS 3

Survey location showing processed greyscale magnetometer data (1:1,250)





ILLUS 5

Interpretation of magnetometer data (1:1,250)

## 7 APPENDICES

### APPENDIX 1 OASIS DATA COLLECTION FORM: ENGLAND

OASIS ID: headlandS-217764

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#### PROJECT DETAILS

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<b>Project name</b>	Land North Of Hilbrae Pets Hotel
<b>Short description of the project</b>	Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey covering 1 hectare on land north of Hilbrae Pets Hotel, Ellerdine Heath, Shropshire, in advance of the development of a proposed free range egg poultry unit. No anomalies of obvious archaeological potential have been located. The data is dominated by anomalies caused by variations in the local superficial deposits. Therefore, based on the geophysical survey, the archaeological potential of the site is considered to be low.
<b>Project dates</b>	Start: 25-06-2015 End: 25-06-2015
<b>Previous/future work</b>	Not known
<b>Any associated project reference codes</b>	HPHS15 - Sitecode
<b>Any associated project reference codes</b>	001 - Contracting Unit No.
<b>Type of project</b>	Field evaluation
<b>Site status</b>	None
<b>Current Land use</b>	Cultivated Land 4 - Character Undetermined
<b>Monument type</b>	N A None
<b>Monument type</b>	N A None
<b>Significant Finds</b>	N A None
<b>Significant Finds</b>	N A None
<b>Methods &amp; Techniques</b>	"Geophysical Survey"
<b>Development type</b>	Farm infrastructure (e.g. barns, grain stores, equipment stores, etc.)
<b>Prompt</b>	National Planning Policy Framework - NPPF
<b>Position in the planning process</b>	Pre-application
<b>Solid geology (other)</b>	Bridgenorth Sandstone
<b>Drift geology (other)</b>	Till
<b>Techniques</b>	Magnetometry

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#### PROJECT LOCATION

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<b>Country</b>	England
<b>Site location</b>	Shropshire Telford and Wrekin Ercall Magna Land north of Hilbrae Pets Hotel, Ellerdine Heath
<b>Study area</b>	1.00 Hectares
<b>Site coordinates</b>	SJ 62828 22359 52.7971788963 -2.55136883766 52 47 49 N 002 33 04 W Point



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#### PROJECT CREATORS

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<b>Name of organisation</b>	Headland Archaeology
<b>Project brief originator</b>	Unitary Authority Archaeologist
<b>Project design originator</b>	Headland Archaeology
<b>Project director/manager</b>	Harrison, S
<b>Project supervisor</b>	Schmidt, A
<b>Type of sponsoring/funding body</b>	Landowner

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#### PROJECT ARCHIVES

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<b>Physical Archive exists</b>	No
<b>Digital Archive recipient</b>	In-house
<b>Digital Contents</b>	"other"
<b>Digital Media available</b>	"Geophysics"
<b>Paper Archive exists</b>	No

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#### PROJECT BIBLIOGRAPHY 1

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<b>Publication type</b>	Grey literature (unpublished document/manuscript)
<b>Title</b>	Land north of Hilbrae Pets Hotel, Ellerdine Heath, Shropshire: Geophysical Survey
<b>Author(s)/Editor(s)</b>	Schmidt, A
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<b>ENTERED BY</b>	Sam Harrison ( <a href="mailto:sam.harrison@headlandarchaeology.com">sam.harrison@headlandarchaeology.com</a> )
<b>ENTERED ON</b>	15 July 2015





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