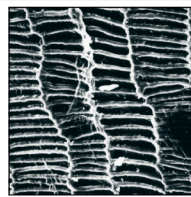
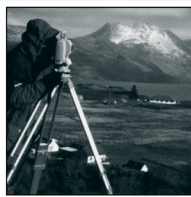
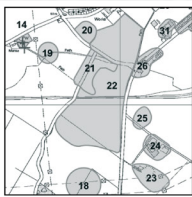


DLB0/01



DRAYTON LODGE FARM, BANBURY, OXFORDSHIRE

GEOPHYSICAL SURVEY

commissioned by EDP for Savills

Pre-application

April 2016

DRAYTON LODGE FARM, BANBURY, OXFORDSHIRE

GEOPHYSICAL SURVEY

commissioned by EDP for Savills

Pre-application

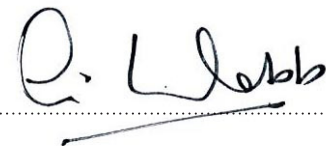
April 2016

project info

HA JOB NO. DLB0/01
NGR SP 43172,42583
PARISH Drayton
LOCAL AUTHORITY Oxfordshire
OASIS REF. headland5-247721

project team

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APPROVED BY Alistair Webb – Project Manager



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PROJECT SUMMARY

Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey, covering approximately 15 hectares, on land surrounding Drayton Lodge Farm, on the north-western outskirts of Banbury, in order to provide information on the archaeological potential of the site prior to proposed development. Anomalies consistent with multi-period archaeological activity have been identified across all parts of the site confirming a desk-based assessment which concluded that the site had moderate to high potential for the presence of prehistoric and Roman remains. To the north-west of Drayton Lodge a particularly complex series of anomalies defines a settlement covering approximately 2 hectares with probable evidence of industrial activity; this may be of regional significance. To the east of the settlement a rectilinear field system extends across the remainder of the northern half of the site. Of particular note are three kiln type anomalies. A much more complex arrangement of enclosures extends across almost the whole of the area to the south of the lodge. On the basis of the geophysical survey the archaeological potential of the site is moderate to high throughout and very high to the north-west of Drayton Lodge.

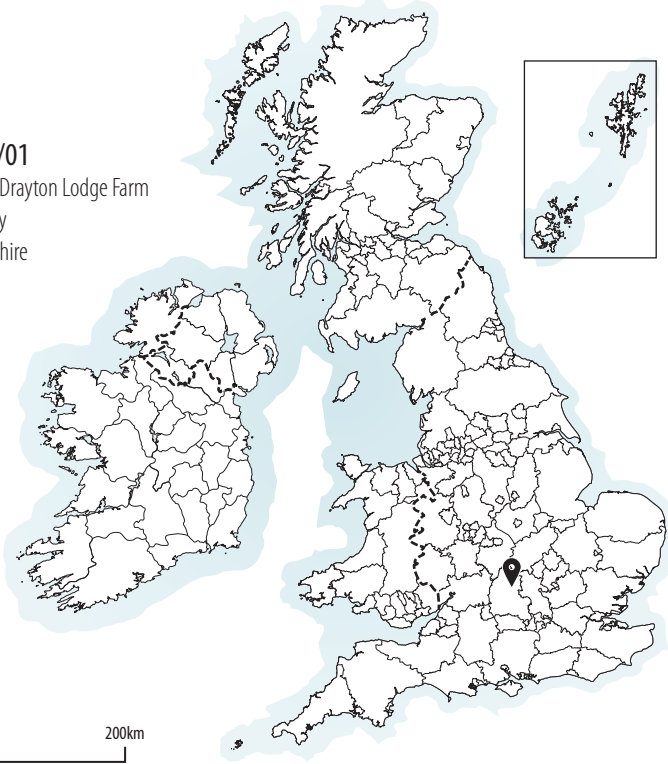
CONTENTS

1	INTRODUCTION	1
1.1	SITE LOCATION, TOPOGRAPHY AND LAND-USE	1
1.2	GEOLOGY AND SOILS	1
2	ARCHAEOLOGICAL BACKGROUND	1
3	AIMS, METHODOLOGY AND PRESENTATION	1
3.1	MAGNETOMETER SURVEY	2
3.2	REPORTING	2
4	RESULTS AND DISCUSSION	3
4.1	OVERVIEW	3
4.2	FERROUS ANOMALIES	3
4.3	AGRICULTURAL ANOMALIES	3
4.4	GEOLOGICAL AND TOPOGRAPHICAL ANOMALIES	3
4.5	QUARRYING ANOMALIES	3
4.6	ARCHAEOLOGICAL AND POSSIBLE ARCHAEOLOGICAL ANOMALIES	3
	Archaeological Area 1 (ILLUS 8–13)	3
	Archaeological Area 2 (ILLUS 14–16)	3
	Archaeological Area 3 (ILLUS 8–10)	4
5	CONCLUSION	4
6	REFERENCES	4
7	APPENDICES	17
	APPENDIX 1 MAGNETOMETER SURVEY	17
	APPENDIX 2 SURVEY LOCATION INFORMATION	18
	APPENDIX 3 GEOPHYSICAL SURVEY ARCHIVE	18
	APPENDIX 4 OASIS DATA COLLECTION FORM: ENGLAND	19

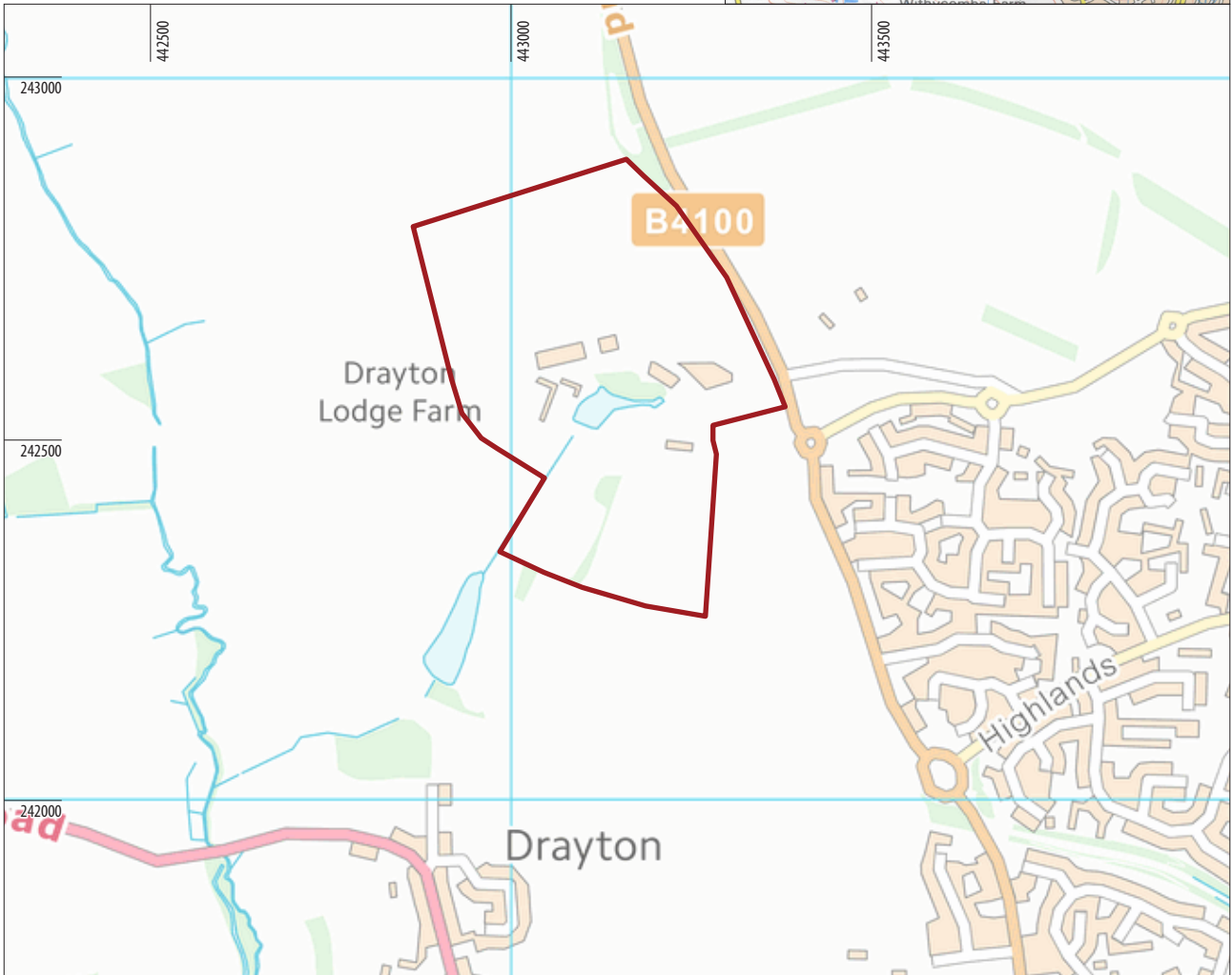
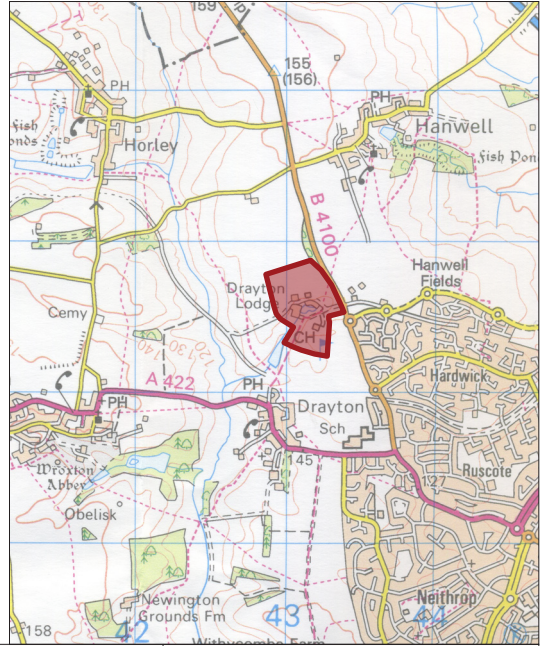
LIST OF ILLUSTRATIONS

ILLUS 1 SITE LOCATION	VIII
ILLUS 2 GENERAL VIEW OF FIELD 1, LOOKING SOUTH-WEST	2
ILLUS 3 GENERAL VIEW OF FIELD 2, LOOKING NORTH	2
ILLUS 4 GENERAL VIEW OF FIELD 3, LOOKING SOUTH-WEST	2
ILLUS 5 SURVEY LOCATION SHOWING MAGNETOMETER DATA (1:5000)	5
ILLUS 6 PROCESSED GREYSCALE MAGNETOMETER DATA OVERLAIN BY CONTOUR DATA AND GEOLOGY DETAIL (1:5000)	6
ILLUS 7 OVERALL INTERPRETATION OF MAGNETOMETER DATA (1:5000)	7
ILLUS 8 PROCESSED GREYSCALE MAGNETOMETER DATA; FIELD 1 SECTOR 1 (1:1250)	8
ILLUS 9 XY TRACE PLOT OF MAGNETOMETER DATA; FIELD 1 SECTOR 1 (1:1250)	9
ILLUS 10 INTERPRETATION OF MAGNETOMETER DATA; FIELD 1 SECTOR 1 (1:1250)	10
ILLUS 11 PROCESSED GREYSCALE MAGNETOMETER DATA; FIELD 1 SECTOR 2 (1:1250)	11
ILLUS 12 XY TRACE PLOT OF MAGNETOMETER DATA; FIELD 1 SECTOR 2 (1:1250)	12
ILLUS 13 INTERPRETATION OF MAGNETOMETER DATA; FIELD 1 SECTOR 2 (1:1250)	13
ILLUS 14 PROCESSED GREYSCALE MAGNETOMETER DATA; FIELD 2 AND FIELD 3 (1:1250)	14
ILLUS 15 XY TRACE PLOT OF MAGNETOMETER DATA; FIELD 2 AND FIELD 3 (1:1250)	15
ILLUS 16 INTERPRETATION OF MAGNETOMETER DATA; FIELD 2 AND FIELD 3 (1:1250)	16

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 land at Drayton Lodge Farm
 Banbury
 Oxfordshire



0 200km



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KEY
 application boundary

0 500m
 1:10,000 @ A4

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DRAYTON LODGE FARM, BANBURY, OXFORDSHIRE

1 INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by the Environmental Dimension Partnership Ltd (EDP) on behalf of Savills (the Client) to undertake a geophysical (magnetometer) survey of three blocks of land immediately north and south of Drayton Lodge Farm, on the north-western outskirts of Banbury, Oxfordshire (ILLUS 1). The survey was undertaken in order to evaluate the archaeological potential of the site prior to the determination of a planning application.

The work was undertaken in accordance with a Written Scheme of Investigation (Headland Archaeology 2016), approved by Richard Oram (Planning Archaeologist at Oxfordshire County Council) 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 between on March 7th and March 8th 2016 in order to provide information on the archaeological potential of the site.

1.1 SITE LOCATION, TOPOGRAPHY AND LAND-USE

The proposed development area (PDA) comprises of three fields surrounding Drayton Lodge Farm, centred at NGR 442945, 242737, and covers approximately 15 hectares (see ILLUS 1). The PDA is bound to the north, west and south by agricultural land and to the east by Warwick Road.

The survey area is located either side of a valley, being 129m Above Ordnance Datum (AOD) in the south-west. The land then rises to 147m in the north and 142m in the east.

The survey area was under arable cultivation at the time of survey, although Field 2 was until recently part of a golf course.

1.2 GEOLOGY AND SOILS

The underlying bedrock geology mainly comprises of ferruginous limestone and ironstone of the Marlstone Rock Formation. A band of Dyrham Formation - siltstone and mudstone, interbedded is located in a small valley along a watercourse. Two small areas of Whitby Mudstone Formation are also present in the east of the PDA (see ILLUS 6). There are no superficial deposits recorded (British Geological Survey 2016).

The soils are classified in the Soilscape 7 association in the south which are characterised as freely draining, slightly acid base-rich soils (LandIS 2016).

2 ARCHAEOLOGICAL BACKGROUND

The following background is abstracted from an Archaeological Assessment (EDP 2016). The site contains a single non-designated heritage asset, as recorded by the Oxfordshire HER, a post-medieval fishpond in the centre of the site. The pond is enclosed by a small copse and existing residential properties comprising of Drayton Lodge Farmstead.

The archaeological evidence from the wider study area suggests a moderate to high potential for remains of prehistoric and Roman date to survive within the site due to the presence of a settlement/occupation site attributed to these periods c.35m to the east of the site, at Hanwell Fields.

The distance of the application site from known areas of medieval settlement, suggests that it most likely comprised agricultural 'hinterland' throughout the medieval period. Therefore, it has a low potential to contain significant archaeological deposits from this period, with any present likely to consist of 'low value' features, i.e. field boundaries and plough soils etc. and not evidence for settlement activity.

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 any potential sub-surface archaeological remains.

The general archaeological objectives of the geophysical survey were:

- › to provide information about the nature and possible interpretation of any magnetic anomalies identified;



ILLUS 2 General view of Field 1, looking south-west **ILLUS 3** General view of Field 2, looking north **ILLUS 4** General view of Field 3, looking south-west

- › to therefore model 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). Further information on soil magnetism and the interpretation of magnetic anomalies is provided in Appendix 1.

The majority of the survey was undertaken using four Bartington Grad601 sensors mounted at 1m intervals (1m traverse interval) onto a rigid carrying frame. The system is programmed to take readings at a frequency of 10Hz (allowing for a 10–15cm sample interval) on roaming traverses 4m apart. These readings are stored on an external weatherproof laptop and later downloaded for processing and interpretation. The system is linked to a Trimble R8s Real Time Kinetic (RTK) differential Global Positioning System (dGPS) outputting in NMEA mode to ensure a high positional accuracy for each data point.

MLGrad601 and MultiGrad601 (Geomar Software Inc.) software has been used to collect and export the data. Terrasurveyor V3.0.28.4 (DWConsulting) software has been used to process and present the data.

The remaining survey was carried out using standard dual sensor Bartington Grad601 instruments. Data collected with this system was processed using Geoplot 3 software. Readings were taken at 0.25m intervals on zig-zag traverses 1m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. The site grid was established using a Trimble VRS differential Global Positioning System (Trimble GeoXR model).

3.2 REPORTING

A general site location plan is shown in Illus 1 at a scale of 1:10,000. Illus 2, 3 and 4 are general site condition photographs. A large scale (1:5,000) survey location plan showing the processed greyscale magnetometer data is presented in Illus 5. Illus 6 shows contour data and geological detail whilst Illus 7 is an overall interpretation of the data.

Detailed data plots (greyscale and XY trace) and interpretative illustrations are presented at a scale of 1:1,250 in Illus 8 to Illus 16 inclusive.

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. A copy of the OASIS entry (Online Access to the Index of Archaeological Investigations) is reproduced in Appendix 4.

The survey methodology, report and any recommendations comply with the Written Scheme of Investigation (Headland Archaeology 2016) 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

4.1 OVERVIEW

A plethora of archaeological anomalies are identified across almost all of the site with only the south-eastern corner of the site being devoid of any archaeological potential. However, three distinct areas of activity can be identified and in an attempt to simplify the results these areas are discussed separately.

Only the anomalies defining more distinctive features are discussed (and highlighted specifically) on the interpretation figures. Unless specified all the linear anomalies described are likely to be due to soil filled cut features, such as ditches, forming patterns of enclosure and land division, and gulleys, possibly defining structural features such as round-houses. A multitude of discrete anomalies are also of likely archaeological origin relating to settlement activity being indicative of pits and larger post-holes. Other discrete (thermoremanent) anomalies are likely caused by hearths or other heat affected areas, possibly indicative of industrial activity and including at least two possible kiln features.

Non-archaeological anomalies are discussed first by category type.

4.2 FERROUS ANOMALIES

Ferrous anomalies, characterised 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.

Relatively few 'spike' anomalies have been recorded by the survey.

Several larger areas of magnetic disturbance are noted in the northern half of F3. These high magnitude anomalies are probably associated with the recent use of this part of the site as a golf driving range; the two most extensive areas of disturbance are adjacent to the location of the covered area from where the balls were hit.

4.3 AGRICULTURAL ANOMALIES

Broad, slightly sinuous linear anomalies are recorded to the south of the site in F2 aligned broadly north/south. These anomalies are characteristic of the medieval and post-medieval practice of ridge and furrow cultivation, with the striped appearance being due to the contrast between former ridges and the soil-filled furrows.

More closely spaced linear trend anomalies, aligned east/west in F1, reflect recent ploughing. Other linear trend anomalies aligned obliquely to the direction of modern cultivation are likely to be caused by field drains.

4.4 GEOLOGICAL AND TOPOGRAPHICAL ANOMALIES

Throughout the site numerous low magnitude discrete anomalies are recorded. These anomalies are indicative of minor variations in the composition of the topsoil.

4.5 QUARRYING ANOMALIES

In the south-eastern portion of Field 1 there are anomalies that are indicative of quarrying. This probable quarry does not appear on any historical mapping and therefore is thought to have been backfilled by the time of the first edition Ordnance Survey mapping of 1882 (old-maps 2016).

4.6 ARCHAEOLOGICAL AND POSSIBLE ARCHAEOLOGICAL ANOMALIES

Three distinct areas of archaeological activity have been identified each with different morphology and characteristics which probably imply different phases of activity although no attempt is made to date these distinct areas.

Archaeological Area 1 (ILLUS 8–13)

This area comprises the majority (75%) of F1 to the north of Drayton Lodge and is centred at NGR 443100 242700.

It is characterised by a series of linear ditch type anomalies describing a series of conjoining rectilinear enclosures (E1–E14) which are aligned broadly east/west. Parallel linear anomalies aligned along this axis suggest a trackway (T1) dividing the northern and southern halves of the complex. A cluster of discrete anomalies centred on the intersection of E7, E8, E11 and E13 are also interpreted as of probable archaeological potential.

Several less well defined linear trend anomalies are identified in E13 suggesting sub-division of this enclosure.

Three potential large burned features, or possible kilns (K1–K3) are identified in E2, E4 and E7 respectively.

Archaeological Area 2 (ILLUS 14–16)

Archaeological Area 2 comprises all of F2 and most of F3 and is situated south of Drayton Lodge, centred at NGR 443150 242400.

Parallel linear anomalies running east/west across the two fields define a second trackway (T2) with a complex series of enclosures to the north and south. To the south of the trackway linear and curvilinear anomalies define two enclosures (E17 and E18), both with a complicated arrangement of entrances into and between the two main enclosed areas. To the west of E17 and E18 an even more complicated pattern of enclosure is apparent with a small sub-square enclosure, E19, contained within much larger enclosure, E16, which has two encircling ditches to the western and northern sides.

Archaeological Area 3 (ILLUS 8–10)

Archaeological Area 3 comprises a triangular area covering just over 2 hectares to the west of F1, north-west of the lodge. It is centred at NGR 443000 242700.

This area is covered by an incredibly dense plethora of anomalies which are constrained by a sinuous linear ditch type anomaly, D1, aligned broadly north-west/south-east. Two main enclosures, E20 and E21, are identified appended to the south of D1. Within these two enclosures several circular, square and numerous discrete anomalies indicative of occupational and possibly industrial activity are identified.

To the south-west of these two enclosures is a line of at least three more enclosures, E22, E23 and E24, aligned along a north-west/south-east axis. Numerous discrete anomalies are again identified throughout these three enclosures and in the area immediately to the south.

5 CONCLUSION

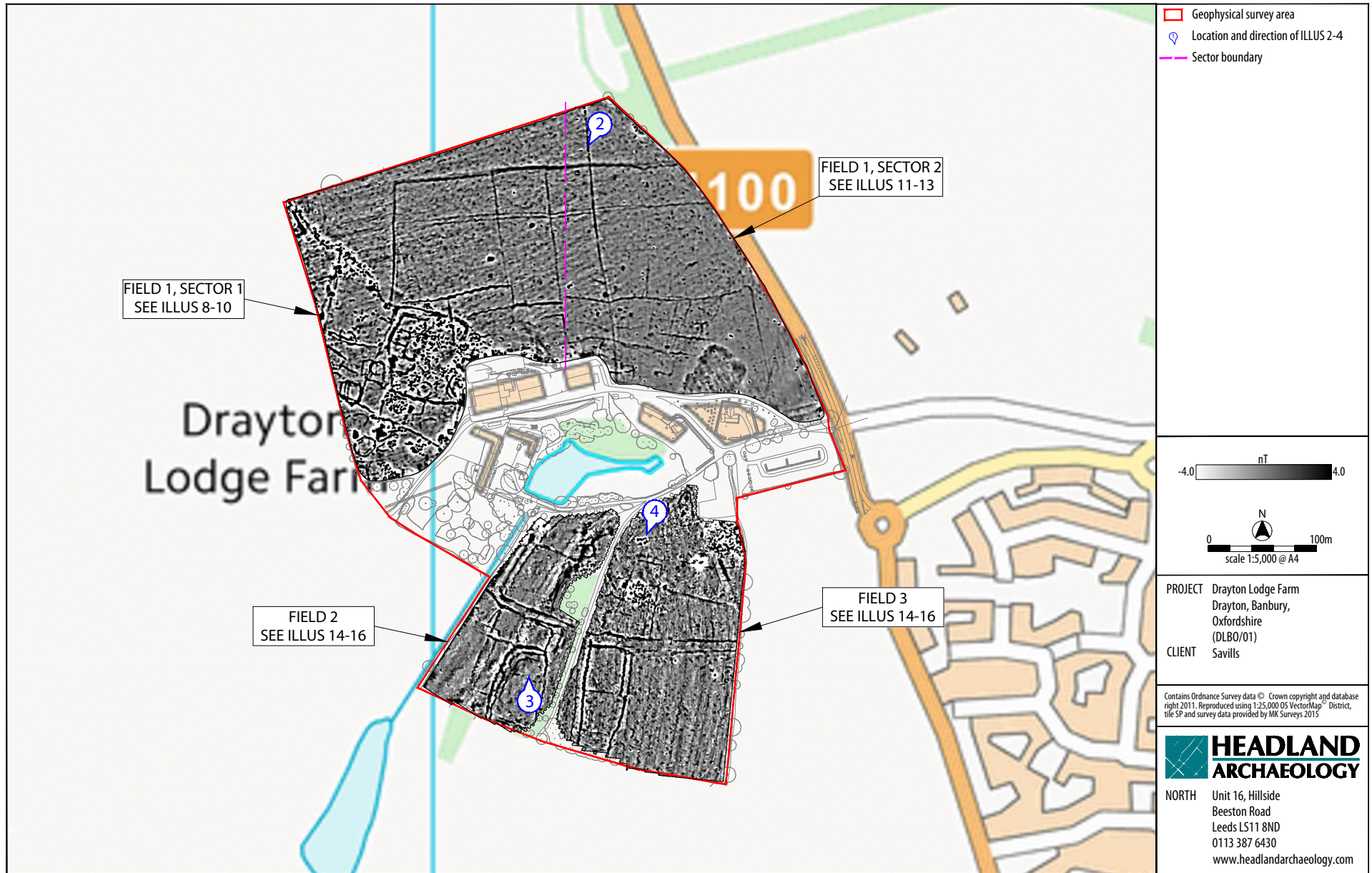
The geophysical survey has recorded anomalies indicative of archaeological activity across the majority of the site; only the south-eastern corner of the site is seemingly devoid of archaeological.

Three distinct archaeological areas are interpreted probably reflecting different phases of activity. A rectilinear field system is identified to the north-east of the lodge. This abuts an area of about 2 hectares of intense archaeological activity with anomalies indicative of occupation and potentially industrial activity. South of the lodge a much more complicated pattern of enclosure has been identified.

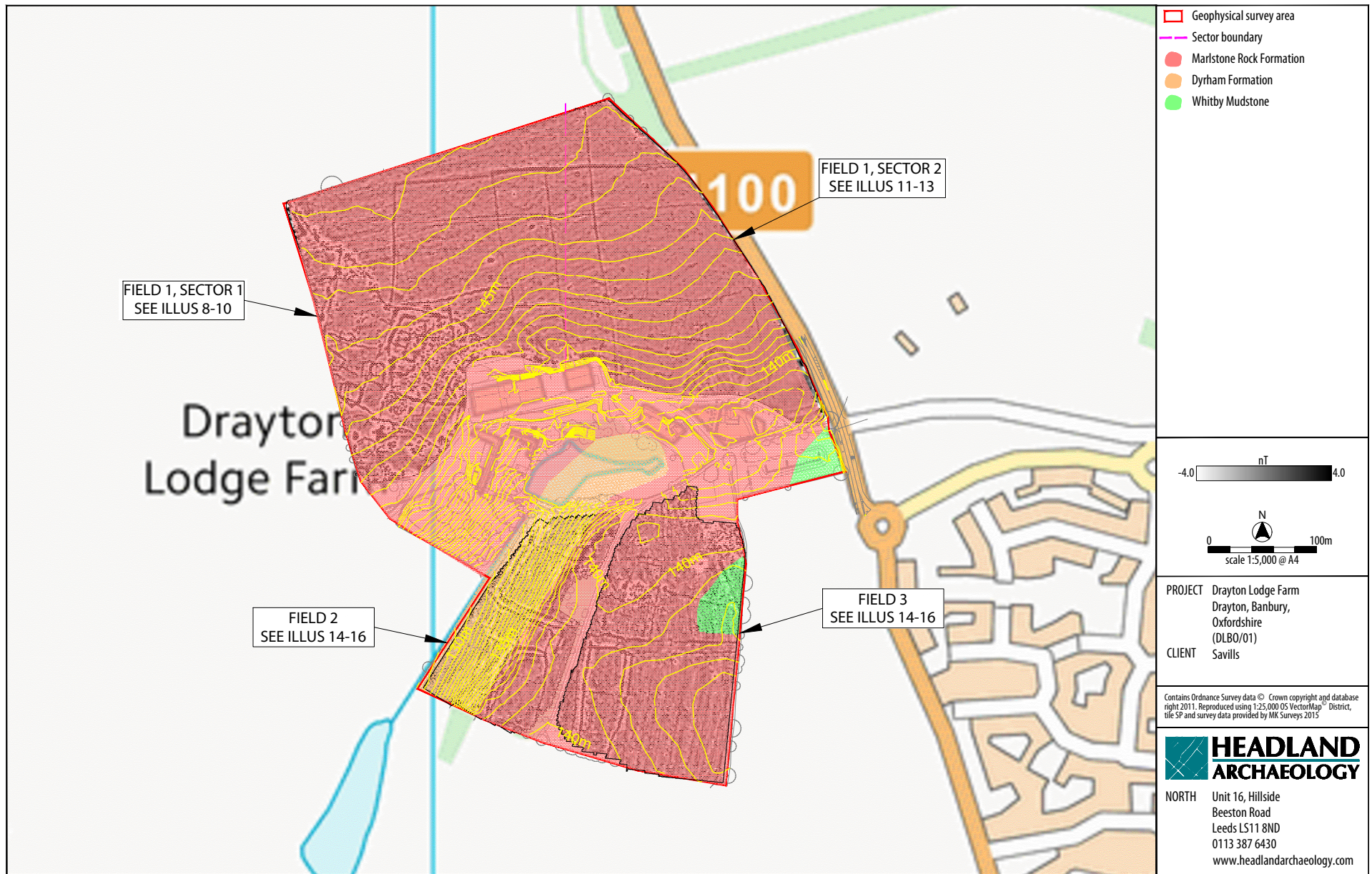
On the basis of the survey the archaeological potential of the site is assessed as high throughout, with the exception of the south-eastern corner, and locally very high.

6 REFERENCES

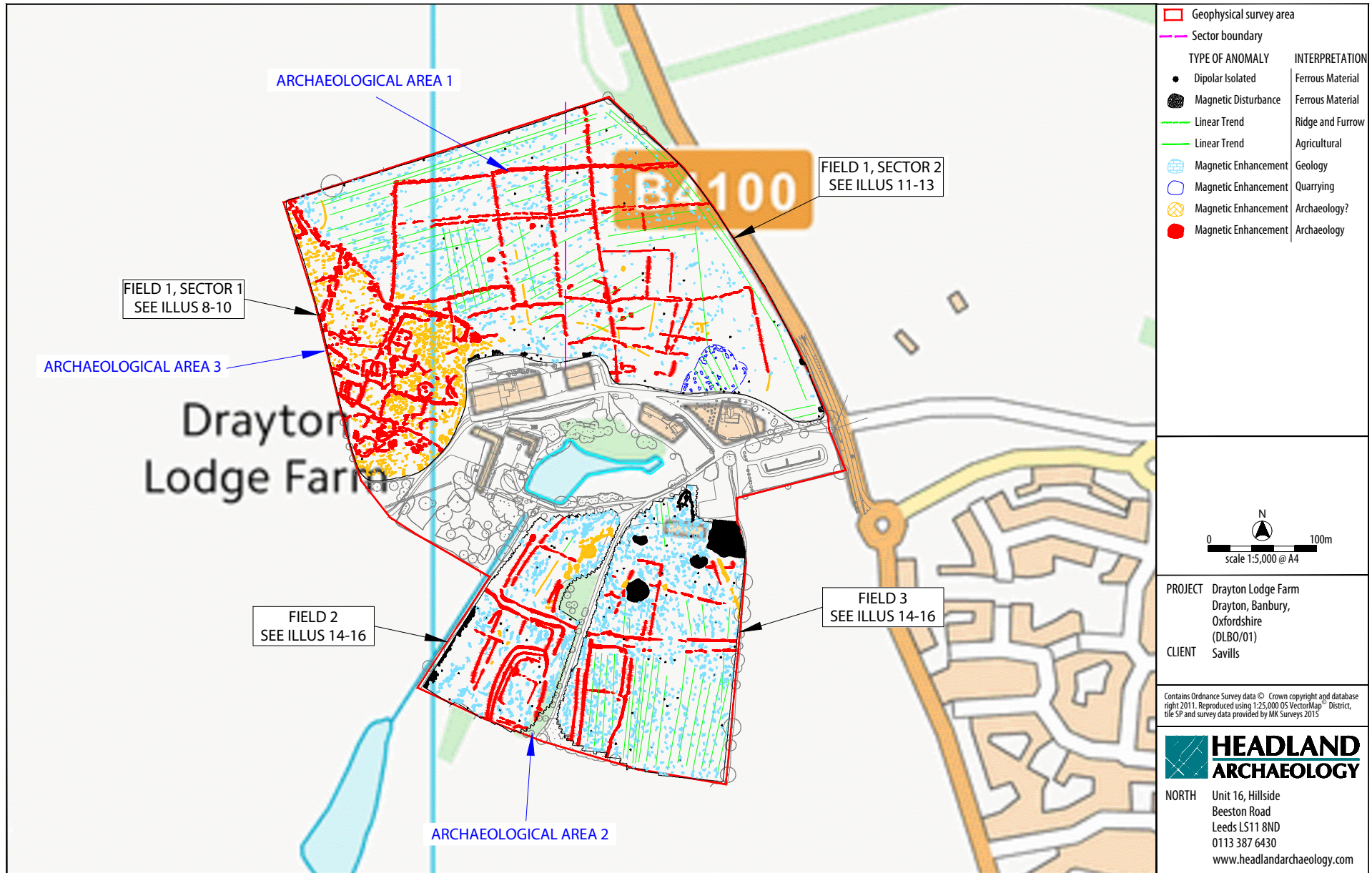
- British Geological Survey* 2016 Available: www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html Accessed: March 29th 2016
- Chartered Institute for Archaeologists 2014 *Standard and Guidance for archaeological geophysical survey* CfA
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- EDP 2016 *Drayton Lodge Farm, Banbury: Archaeological Assessment* Unpublished EDP Report Number EDP2697_01a
- Gaffney, C & Gater, J 2003 *Revealing the Buried Past Tempus Publishing*
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- LandIS* 2016 Available: www.landis.org.uk/soilscapes/ Accessed: March 29th 2016
- Old-maps* 2016 Available: www.old-maps.co.uk Accessed: March 29th 2016



Illus 5
Survey location showing magnetometer data



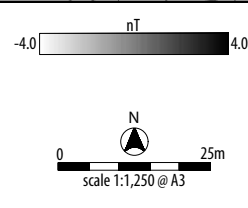
Illus 6
 Processed greyscale magnetometer data overlain by contour data and geology detail (after BGS 2016)



Illus 7
Overall interpretation of magnetometer data



— Sector boundary

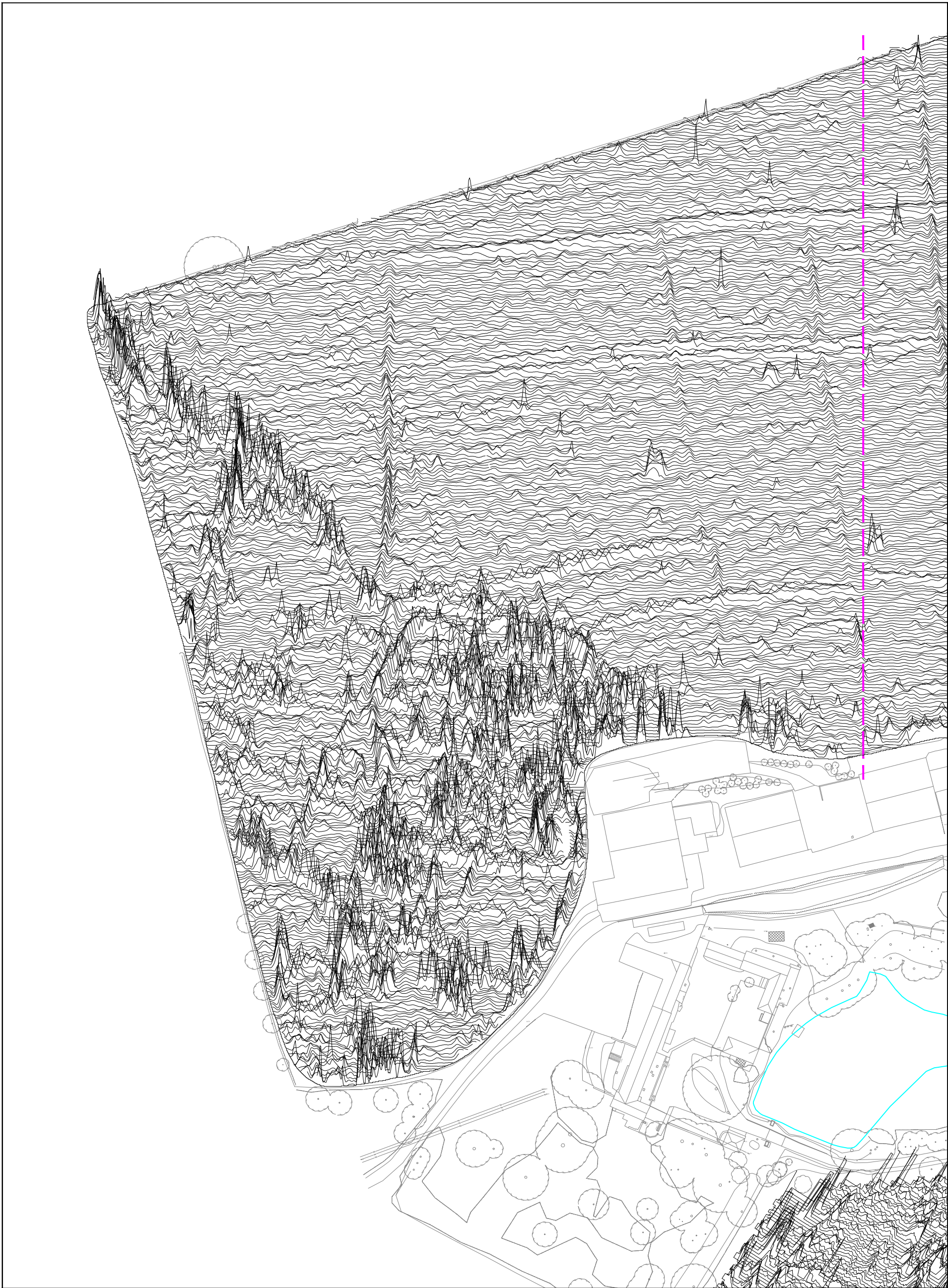


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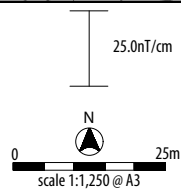
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Illus 8
Processed greyscale magnetometer data; Field 1, Sector 1



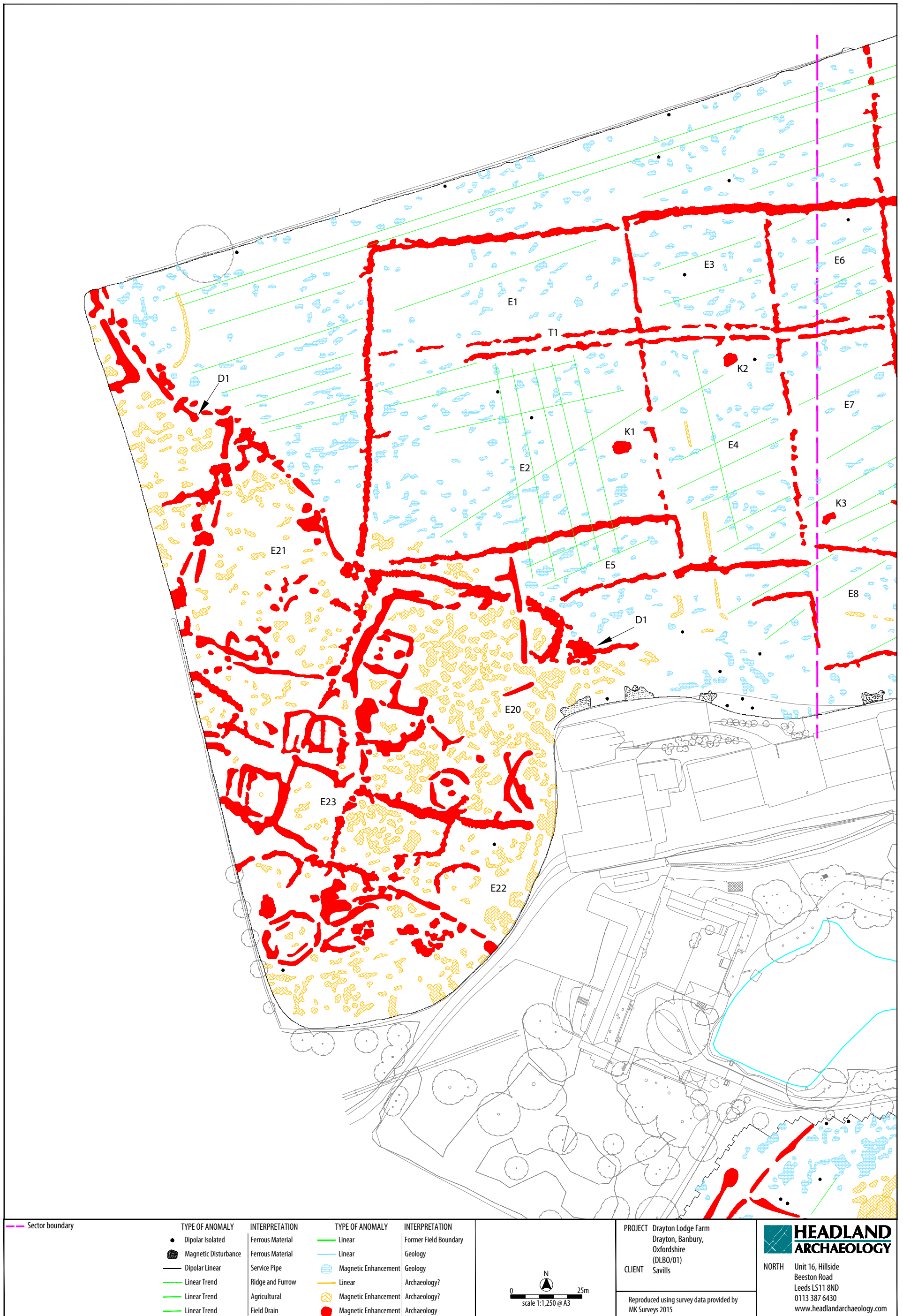
— Sector boundary



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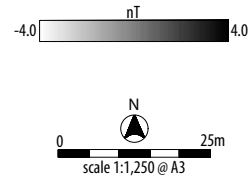
Illus 9
 XY trace plot of magnetometer data; Field 1, Sector 1



Illus 10
 Interpretation of magnetometer data; Field 1, Sector 1



— Sector boundary



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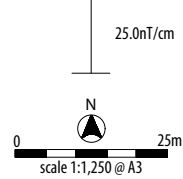
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Illus 11
Processed greyscale magnetometer data; Field 1, Sector 2



— Sector boundary



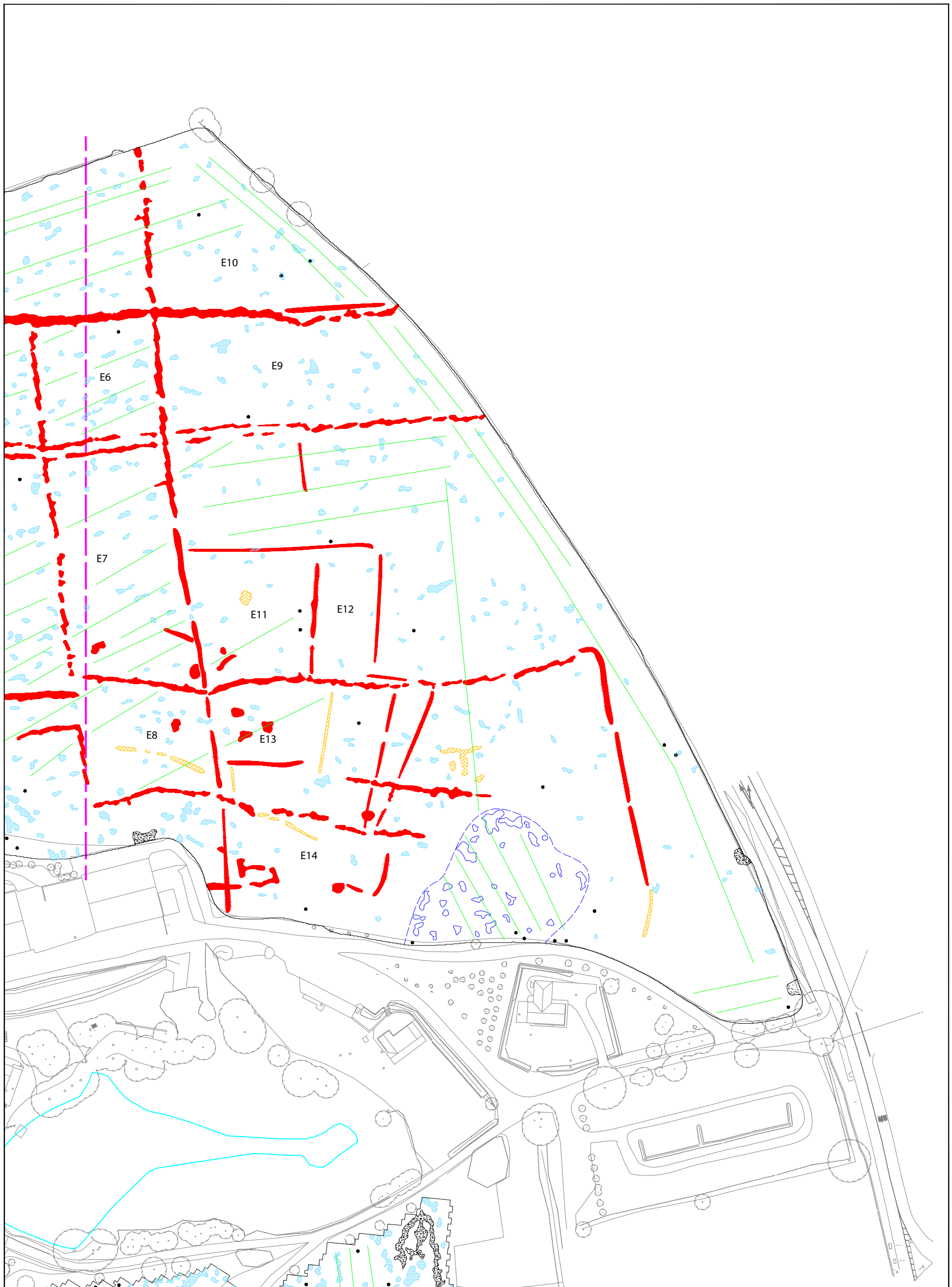
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Illus 12
 XY trace plot of magnetometer data; Field 1, Sector 2



<p>— Sector boundary</p>	<p>TYPE OF ANOMALY</p> <ul style="list-style-type: none"> ● Dipolar Isolated ● Magnetic Disturbance — Dipolar Linear — Linear Trend — Linear Trend — Linear Trend 	<p>INTERPRETATION</p> <ul style="list-style-type: none"> Ferrous Material Ferrous Material Service Pipe Ridge and Furrow Agricultural Field Drain 	<p>TYPE OF ANOMALY</p> <ul style="list-style-type: none"> — Linear — Linear ● Magnetic Enhancement — Linear ● Magnetic Enhancement ● Magnetic Enhancement 	<p>INTERPRETATION</p> <ul style="list-style-type: none"> Former Field Boundary Geology Geology Archaeology? Archaeology? Archaeology 	<p>PROJECT Drayton Lodge Farm Drayton, Banbury, Oxfordshire (DLBO/01)</p> <p>CLIENT Savills</p>	<p>HEADLAND ARCHAEOLOGY</p> <p>NORTH Unit 16, Hillside Beeston Road Leeds LS11 8ND 0113 387 6430 www.headlandarchaeology.com</p>
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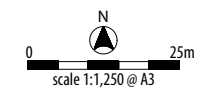
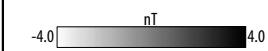


Illus 13
Interpretation of magnetometer data; Field 1, Sector 2



FIELD 2

FIELD 3



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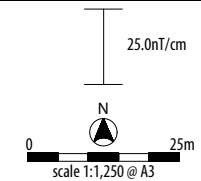
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Illus 14
 Processed greyscale magnetometer data; Field 2 and Field 3



FIELD 2

FIELD 3



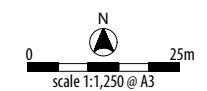
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Illus 15
 XY trace plot of magnetometer data; Field 2 and Field 3



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Illus 16
 Interpretation of magnetometer data; Field 2 and Field 3

7 APPENDICES

APPENDIX 1 MAGNETOMETER SURVEY

Magnetic susceptibility and soil magnetism

Iron makes up about 6% of the Earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haematite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms so that by measuring the magnetic susceptibility of the topsoil, areas where human occupation or settlement has occurred can be identified by virtue of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of topsoils, subsoils and rocks into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected.

The magnetic susceptibility of a soil can also be enhanced by the application of heat. This effect can lead to the detection of features such as hearths, kilns or areas of burning.

Types of magnetic anomaly

In the majority of instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a '?' is appended.

It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

Isolated dipolar anomalies (iron spikes)

These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being present as a consequence of manuring.

Areas of magnetic disturbance

These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire fencing and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

Linear trend

This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

Areas of magnetic enhancement/positive isolated anomalies

Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response (sometimes only visible on an XY trace plot) on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

Linear and curvilinear anomalies

Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains), natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

APPENDIX 2 SURVEY LOCATION INFORMATION

An initial survey base station was established using a Trimble VRS differential Global Positioning System (dGPS). The magnetometer data was georeferenced using a Trimble RTK differential Global Positioning System (Trimble R8s model).

Temporary sight markers were laid out using a Trimble VRS differential Global Positioning System (Trimble R8s model) to guide the operator and ensure full coverage. The accuracy of this dGPS equipment is better than 0.01m.

The survey data were then super-imposed onto a base map provided by the client to produce the displayed block locations. However, it should be noted that Ordnance Survey positional accuracy for digital map data has an error of 0.5m for urban and floodplain areas, 1.0m for rural areas and 2.5m for mountain and moorland areas. This potential error must be considered if coordinates are measured off hard copies of the mapping rather than using the digital coordinates.

Headland Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

APPENDIX 3 GEOPHYSICAL SURVEY ARCHIVE

The geophysical archive comprises:

- › an archive disk containing the raw data in XYZ format, a raster image of each greyscale plot with associate world file, and a PDF of the report

The project will be archived in-house in accordance with recent good practice guidelines (http://guides.archaeologydataservice.ac.uk/g2gp/Geophysics_3). The data will be stored in an indexed archive and migrated to new formats when necessary.

APPENDIX 4 OASIS DATA COLLECTION FORM: ENGLAND

OASIS ID: headland5-247721

PROJECT DETAILS	
Project name	Drayton Lodge Farm, Banbury
Short description of the project	Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey, covering approximately 15 hectares, on land surrounding Drayton Lodge Farm, on the north-western outskirts of Banbury, in order to provide information on the archaeological potential of the site prior to proposed development. Anomalies consistent with multi-period archaeological activity have been identified across all parts of the site confirming a desk-based assessment which concluded that the site had moderate to high potential for the presence of prehistoric and Roman remains. To the north-west of Drayton Lodge a particularly complex series of anomalies defines a settlement covering approximately 2 hectares with probable evidence of industrial activity; this may be of regional significance. To the east of the settlement a rectilinear field system extends across the remainder of the northern half of the site. Of particular note are three kiln type anomalies. A much more complex arrangement of enclosures extends across almost the whole of the area to the south of the lodge. On the basis of the geophysical survey the archaeological potential of the site is moderate to high throughout and very high to the north-west of Drayton Lodge.
Project dates	Start: 07-03-2016 End: 08-03-2016
Previous/future work	Not known / Not known
Any associated project reference codes	DLBO - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	N/A None
Significant Finds	N/A None
Methods & techniques	"Geophysical Survey"
Development type	Not recorded
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Pre-application
Solid geology (other)	Marlstone Rock Formation, Dyrham Formation, Whitby Mudstone Formation
Drift geology (other)	None
Techniques	Magnetometry
Techniques	Magnetometry
PROJECT LOCATION	
Country	England
Site location	OXFORDSHIRE CHERWELL BANBURY Drayton Lodge Farm, Banbury
Study area	15 Hectares
Site coordinates	SP 43080 42598 52.079646405011 - 1.371294239322 52 04 46 N 001 22 16 W Polygon
PROJECT CREATORS	
Name of Organisation	Headland Archaeology
Project brief originator	Consultant
Project design originator	Headland Archaeology
Project director/manager	Harrison, S

Project supervisor Schmidt, A
Type of sponsor/funding body Developer

PROJECT ARCHIVES

Physical Archive Exists? No
Digital Archive recipient In house
Digital Contents "other"
Digital Media available "Geophysics"
Paper Archive Exists? No

PROJECT BIBLIOGRAPHY 1

Publication type Grey literature (unpublished document/manuscript)
Title Drayton Lodge Farm, Banbury: Geophysical Survey
Author(s)/Editor(s) Harrison, S. and Webb, A.
Other bibliographic details DLBO16/01
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