

HFSL19



LAND AT HOLLANDS FARM AND JACKSONS FIELD, BOURNE END, BUCKINGHAMSHIRE

GEOPHYSICAL SURVEY

commissioned by The Environmental Dimension Partnership
on behalf of Catesby Estates and Mr L Noé c/o Capreon

September 2019

LAND AT HOLLANDS FARM AND JACKSONS FIELD, BOURNE END, BUCKINGHAMSHIRE

GEOPHYSICAL SURVEY

commissioned by The Environmental Dimension Partnership
on behalf of Catesby Estates and Mr L Noé c/o Capreon

September 2019

© 2019 by Headland Archaeology (UK) Ltd
Contains OS open data © Crown copyright and database right (2019).

This report adheres to the quality standard of ISO 9001:2015

PROJECT INFO:

HA Project Code **HFSL19** / NGR **SU 9000 8688** / Parish **Wooburn** / Local Authority
Buckinghamshire / OASIS Ref. **headland5-368230**

PROJECT TEAM:

Project Manager **Sam Harrision** / Author **Krasimir Dyulgierski** / Fieldwork **Krasimir Dyulgierski, Phoebe Utting** / Graphics **Beata Wieczorek-Oleksy, Eleanor Winter, Krasimir Dyulgierski, Phoebe Utting**

Approved by **Sam Harrision**



Headland Archaeology Yorkshire & North
Unit 16 | Hillside | Beeston Rd | Leeds LS11 8ND
t 0113 387 6430
e yorkshireandnorth@headlandarchaeology.com
w www.headlandarchaeology.com



part of the **RSK** Group



PROJECT SUMMARY

Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey, covering approximately 22 hectares south-east of Bourne End, Buckinghamshire, to inform planning proposals for the possible future development of land north of Hedsor Road and west of Heavens Lea. No anomalies of clear archaeological potential have been identified by the survey with only an isolated pit-type anomaly and a vague curvilinear anomaly being ascribed any archaeological potential, although this is thought to be low. Therefore, on the basis of the survey the archaeological potential of the site is assessed as low, corroborating the results of an earlier heritage assessment report.

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	2
3.1	MAGNETOMETER SURVEY	2
3.2	REPORTING	2
4	RESULTS AND DISCUSSION	3
4.1	FERROUS AND MODERN ANOMALIES	3
4.2	AGRICULTURAL ANOMALIES	4
4.3	POSSIBLE ARCHAEOLOGICAL ANOMALIES	4
5	CONCLUSION	4
6	REFERENCES	5
7	APPENDICES	15
APPENDIX 1	MAGNETOMETER SURVEY	15
APPENDIX 2	SURVEY LOCATION INFORMATION	16
APPENDIX 3	GEOPHYSICAL SURVEY ARCHIVE	16
APPENDIX 4	DATA PROCESSING	16
APPENDIX 5	OASIS DATA COLLECTION FORM: ENGLAND	17

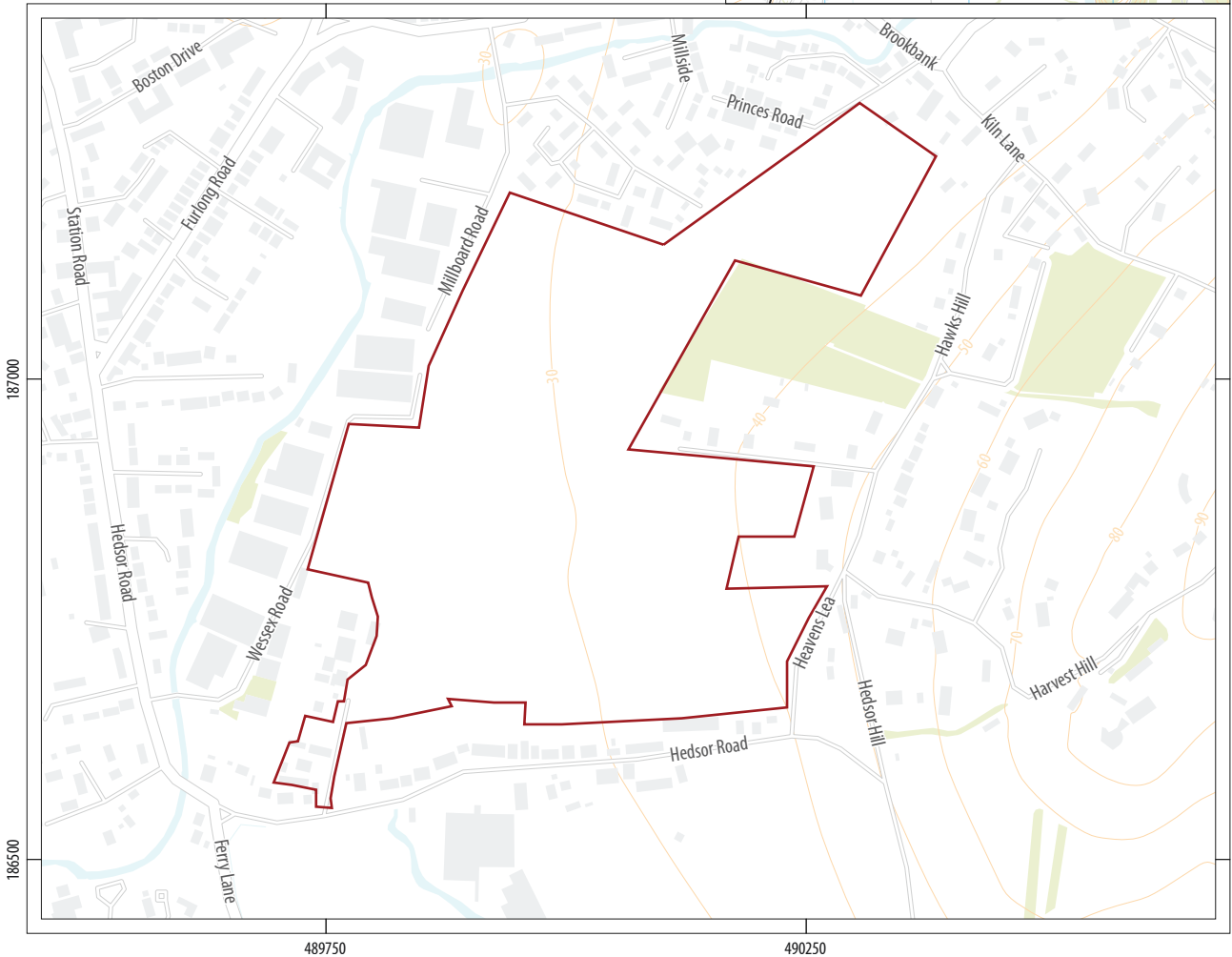
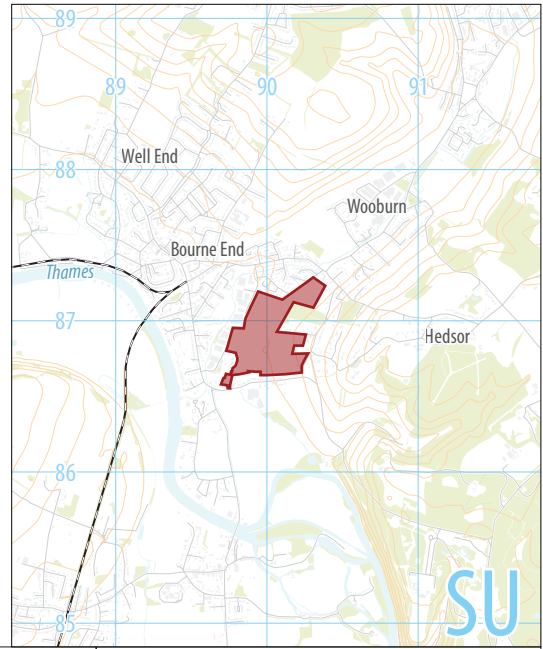
LIST OF ILLUSTRATIONS

ILLUS 1 SITE LOCATION	VIII
ILLUS 2 F1, LOOKING NORTH-EAST	2
ILLUS 3 F7, LOOKING SOUTH-WEST	3
ILLUS 4 F4, LOOKING NORTH-EAST	4
ILLUS 5 SURVEY AREA SHOWING GPS SWATHS (1:3,000)	7
ILLUS 6 PROCESSED GREYSCALE MAGNETOMETER DATA (1:2,500)	9
ILLUS 7 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA (1:2,500)	11
ILLUS 8 INTERPRETATION OF MAGNETOMETER DATA (1:2,500)	13

Land at Hollands Farm and Jacksons Field
 Bourne End
 Buckinghamshire



0 200km
 1:12,500,000 @ A4



187000
 186500

489750 490250

0 150m
 1:7,500 @ A4

□ survey area



**HEADLAND
 ARCHAEOLOGY**
 Headland Archaeology Yorkshire & North
 Unit 16 | Hillside | Beeston Rd | Leeds LS11 8ND
 t 0113 387 6430
 e yorkshireandnorth@headlandarchaeology.com
 w www.headlandarchaeology.com

LAND AT HOLLANDS FARM AND JACKSONS FIELD, BOURNE END, BUCKINGHAMSHIRE

GEOPHYSICAL SURVEY

1 INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by the Environmental Dimension Partnership on behalf of Catesby Estates and Mr L Noé c/o Capreon (the Client), to undertake a geophysical (magnetometer) survey on land south-east of Bourne End, Buckinghamshire. The survey was undertaken in order to assess the impact of the proposed development on the historic environment.

The work was undertaken in accordance with a Written Scheme of Investigation (WSI) (Webb 2019), with guidance within the Ministry of Housing, Communities and Local Government (MHCLG 2019) and in line with current best practice (Chartered Institute for Archaeologists 2014; Europae Archaeologia Consilium 2016).

1.1 SITE LOCATION, TOPOGRAPHY AND LAND-USE

The survey area (SA) comprises an irregularly shaped parcel of land to the south-east of Bourne End (Illus 1). It is bound to the south by Hedsor Road, by Wessex Road to the west, Heavens Lea to the east and a residential development to the north. The SA comprises of eight fields (F1–F8) comprising of paddocks and arable farmland (see Illus 2–4).

The SA is located at the base of a west-facing slope being at 44m Above Ordnance Datum (AOD) in the east and at approximately 27m AOD in the west.

The survey was carried out between the 2nd and the 5th of September 2019.

1.2 GEOLOGY AND SOILS

The underlying bedrock comprises Lewes Nodular Chalk Formation which is mostly overlain by alluvium. Sand and gravel of the Shepperton Gravel Member is recorded in the east (NERC 2019).

The soils are mostly classified in the Soilscape 7 Association being characterised as freely draining, slightly acid but base rich soils. In the west the soils are recorded as loamy and clayey floodplain soils with naturally high groundwater (Soilscape 20) (Cranfield University 2019).

2 ARCHAEOLOGICAL BACKGROUND

A heritage assessment report (EDP 2017) has identified that there are no scheduled monuments, listed buildings, registered parks and gardens or registered battlefields. Four non-designated assets are recorded within the SA on the Buckinghamshire Historic Environment Record (HER). These relate to spot finds recovered during non-systematic metal detecting and comprise Roman metalwork (0667200000), Roman coins (MBC26604 and MBC26605, and a medieval mount (MBC26610). These are spread throughout the site and there is no indication of a pattern of deposition and are probably the result of accidental loss in antiquity, rather than an indication of below ground archaeological remains. The report concluded that:

Based on the current evidence, the potential to encounter archaeological activity from the prehistoric, Roman and early medieval periods is low, and (if present) are most likely to be in the form of individual, unstratified artefacts. The potential to encounter features associated with medieval, post-medieval or modern



ILLUS 2 F1, looking north-east

periods, such as former field boundaries, is considered to be high, although these remains will be of 'low' archaeological value.

3 AIMS, METHODOLOGY AND PRESENTATION

The general aim of the geophysical survey was to provide sufficient information to establish the presence/absence, character and extent of any archaeological remains within the SA. This will therefore enable an assessment to be made of the impact of the proposed development on any sub-surface archaeological remains, if present.

The specific archaeological objectives of the geophysical survey were:

- › gather sufficient information to inform the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the survey area;
- › to obtain information that will contribute to an evaluation of the significance of the scheme upon cultural heritage assets; 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. A feature 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 & Gater 2003). Further information on soil magnetism and the interpretation of magnetic anomalies is provided in Appendix 1.

The survey was undertaken using four Bartington Grad601 sensors mounted at 1m intervals (1m traverse interval) onto a rigid carrying frame. The system was programmed to take readings at a frequency of 10Hz (allowing for a 10–15cm sample interval) on roaming traverses (swaths) 4m apart. These readings were stored on an external weatherproof laptop and later downloaded for processing and interpretation. The system was 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 was used to collect and export the data. Terrasurveyor V3.0.35.1 (DWConsulting) software was used to process and present the data.

3.2 REPORTING

A general site location plan is shown in Illus 1 at a scale of 1:7,500. Illus 2 to Illus 4 inclusive are site condition photographs. Illus 5 is a 1:3,000 survey location plan showing the HER data and the direction



ILLUS 3 F7, looking south-west

of survey as GPS swaths. The data is presented in greyscale and XY trace formats, at a scale of 1:2,500, in Illus 6 and Illus 7. Illus 8 is an interpretation plot of the data also at a scale of 1:2,500.

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. Data processing details are presented in Appendix 4. A copy of the OASIS entry (Online Access to the Index of Archaeological Investigations) is reproduced in Appendix 5.

The survey methodology, report and any recommendations comply with the Written Scheme of Investigation (Webb 2019), guidelines outlined by Europae Archaeologia Consilium (EAC 2016) and by the Chartered Institute for Archaeologists (CIfA 2014). All illustrations from Ordnance Survey (OS) mapping are reproduced 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

The ground conditions were good across the SA and the overall data quality is good.

The survey has detected a homogenous magnetic background throughout which is thought to reflect the properties of the prevailing alluvial deposits. Against this background, numerous anomalies have been identified and cross-referenced to specific examples on the interpretation figures, where appropriate.

4.1 FERROUS AND MODERN 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 is common on most sites, often being present as a result of manuring or tipping/infilling. Spike anomalies are clearly more densely concentrated within F4 than the surrounding fields indicating differing land-use/spreading within this field. A localised cluster of spikes within the centre of F6 (MS1) is caused by a spread of modern ferrous material within the topsoil and is of no archaeological interest. Elsewhere, the 'spike' anomalies display no obvious clustering which might indicate an archaeological origin - far more probable is that they are likely caused by the random distribution of ferrous debris in the upper soil horizons.



ILLUS 4 F4, looking north-east

High magnitude dipolar linear anomalies (SP1 and SP2) aligned broadly north/south in the F2 and the west of F6/F7 locate buried service pipes.

Magnetic disturbance around the field edges is due to ferrous material within, or adjacent to the boundaries and is of no archaeological interest.

4.2 AGRICULTURAL ANOMALIES

High magnitude linear anomalies FB1 and FB2 within the east of F1 and the west of F8 respectively correspond to former field boundaries shown on historic Ordnance Survey (OS) mapping. The anomalies are caused by the magnetic contrast between the soil-fill of a ditch and the surrounding soils. The clear north-east/south-west linear anomaly crossing F7 is also depicted on historic and current OS mapping as a public footpath. This anomaly is likely caused by a buried metal surface.

Elsewhere faint parallel linear anomalies in the south of the SA are mostly aligned parallel with the surrounding field boundaries and are interpreted as being due to modern ploughing.

4.3 POSSIBLE ARCHAEOLOGICAL ANOMALIES

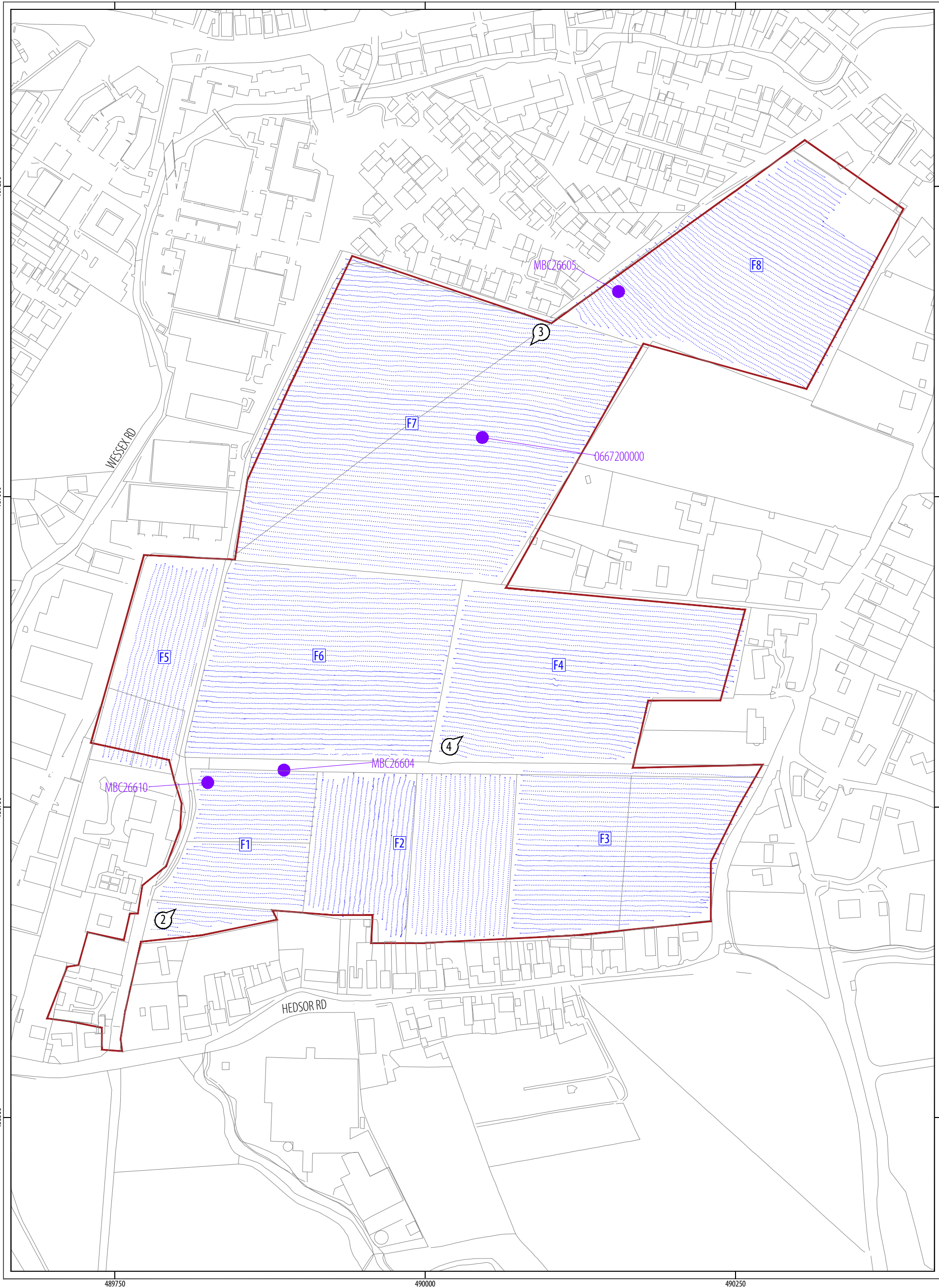
Two isolated anomalies have been identified which do not obviously fit into the above categories and therefore an archaeological origin cannot be dismissed. These comprise a faint discontinuous curving trend anomaly (perhaps a ditch or gully), D1, in the east of F1 and a high magnitude pit-type anomaly, P1, in the west of F5. Either of these may be due to archaeological activity, although, in the absence of any other supporting evidence this interpretation is considered tentative and a modern origin is equally plausible.

5 CONCLUSION

The survey has successfully evaluated the SA and has not identified any anomalies of archaeological potential. An isolated pit-type anomaly and a vague curvilinear anomaly have been tentatively ascribed as possibly archaeological in origin, although a modern origin is equally plausible and the archaeological potential of these anomalies, and the site as a whole, is assessed as low, corroborating the results of an earlier heritage assessment report.

6 REFERENCES

- Chartered Institute for Archaeologists (CIfA) 2014 *Standard and guidance for archaeological geophysical survey* (Reading) http://www.archaeologists.net/sites/default/files/CIfA%26GGeophysics_2.pdf accessed 10 September 2019
- Cranfield University 2019 *Cranfield Soil and Agrifood Institute Soilscales* www.landis.org.uk/soilscales/ accessed 10 September 2019
- EDP (2017) Land at Hollands farm, Bourne End: Representations in *Respect of Ecological, Landscape and Heritage Circumstances Report* reference: EDP3922_01d
- Europae Archaeologia Consillium (EAC) 2016 *EAC Guidelines for the Use of Geophysics in Archaeology: Question to Ask and Points to Consider (Namur, Belgium)* http://www.old.european-archaeological-council.org/files/eac_guidelines_2_final.pdf accessed 10 September 2019
- Gaffney C & Gater J (2003) *Revealing the Buried Past: Geophysics for Archaeologists* Stroud
- Ministry of Housing, Communities and Local Government MHCLG) 2019 *National Planning Policy Framework* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/81017/NPPF_Feb_2019_revised.pdf accessed 10 September 2019
- Webb A 2019 *Holland Farm, Bourne End, Slough; Written Scheme of Investigation for Geophysical Survey* [unpublished client document] Headland Archaeology Ref HFSL19



- ▭ survey area
- ▨ GPS swaths
- Buckinghamshire HER Monument
- 2 location and direction of ILLUS 2-4

PROJECT HFSL19
Land at Hollands Farm
Bourne End
Buckinghamshire
Catesby Estates PLC

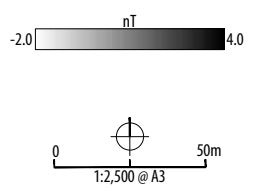
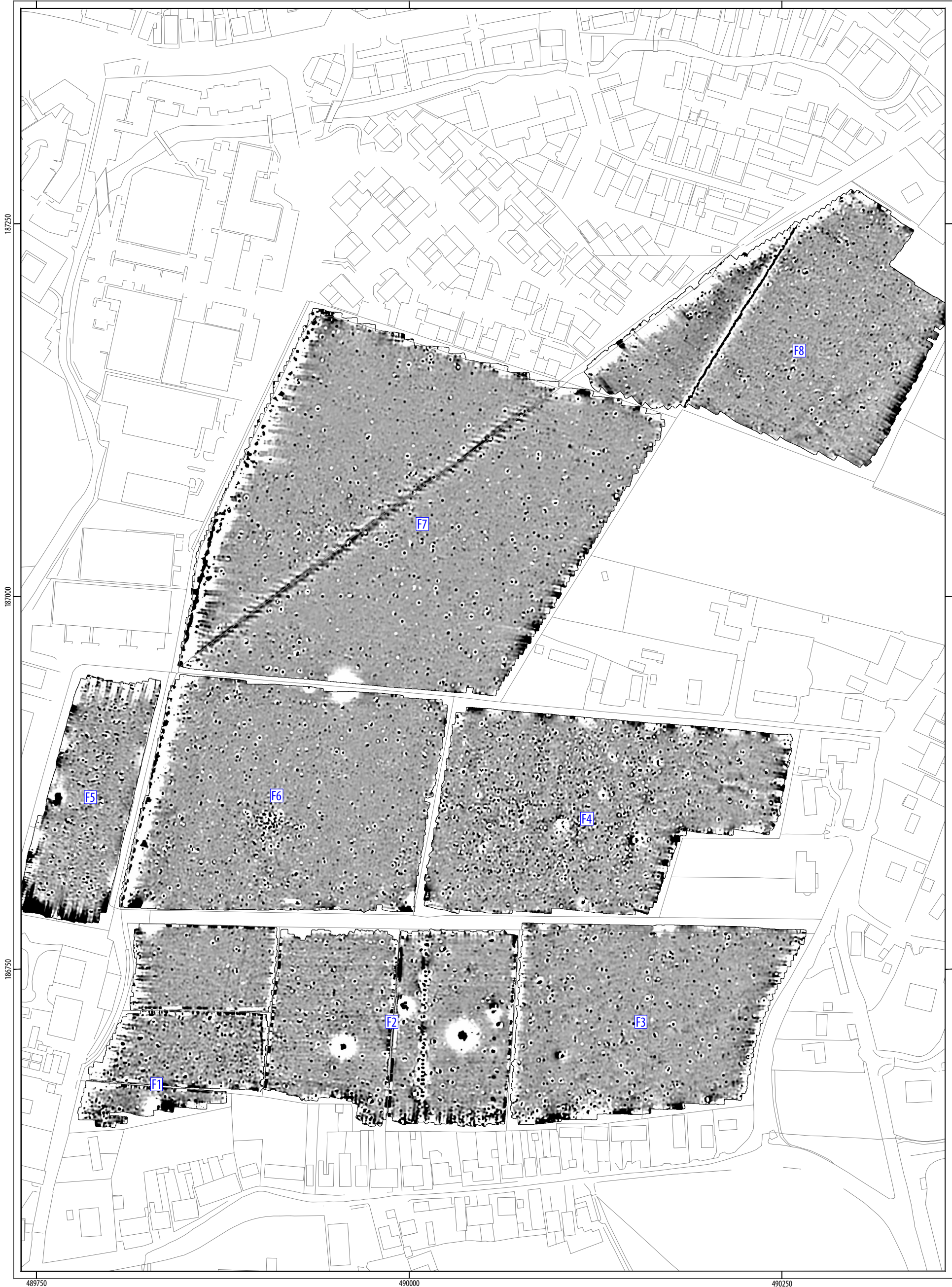
CLIENT



Headland Archaeology Yorkshire & North
Unit 16 | Hillside, Beeston Road | Leeds LS11 8ND
t 0113 387 6430
e yorkshireandnorth@headlandarchaeology.com
www.headlandarchaeology.com



ILLUS 5 Survey area showing GPS swaths



PROJECT HFSL19
Land at Hollands Farm
Bourne End
Buckinghamshire

CLIENT Catesby Estates PLC

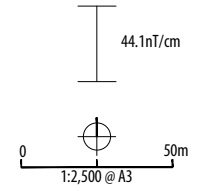
**HEADLAND
ARCHAEOLOGY**

Headland Archaeology Yorkshire & North
Unit 16 | Hillside, Beeston Road | Leeds LS11 8ND
t 0113 387 6430
e yorkshireandnorth@headlandarchaeology.com
www.headlandarchaeology.com

ILLUS 6 Processed greyscale magnetometer data



489750 490000 490250



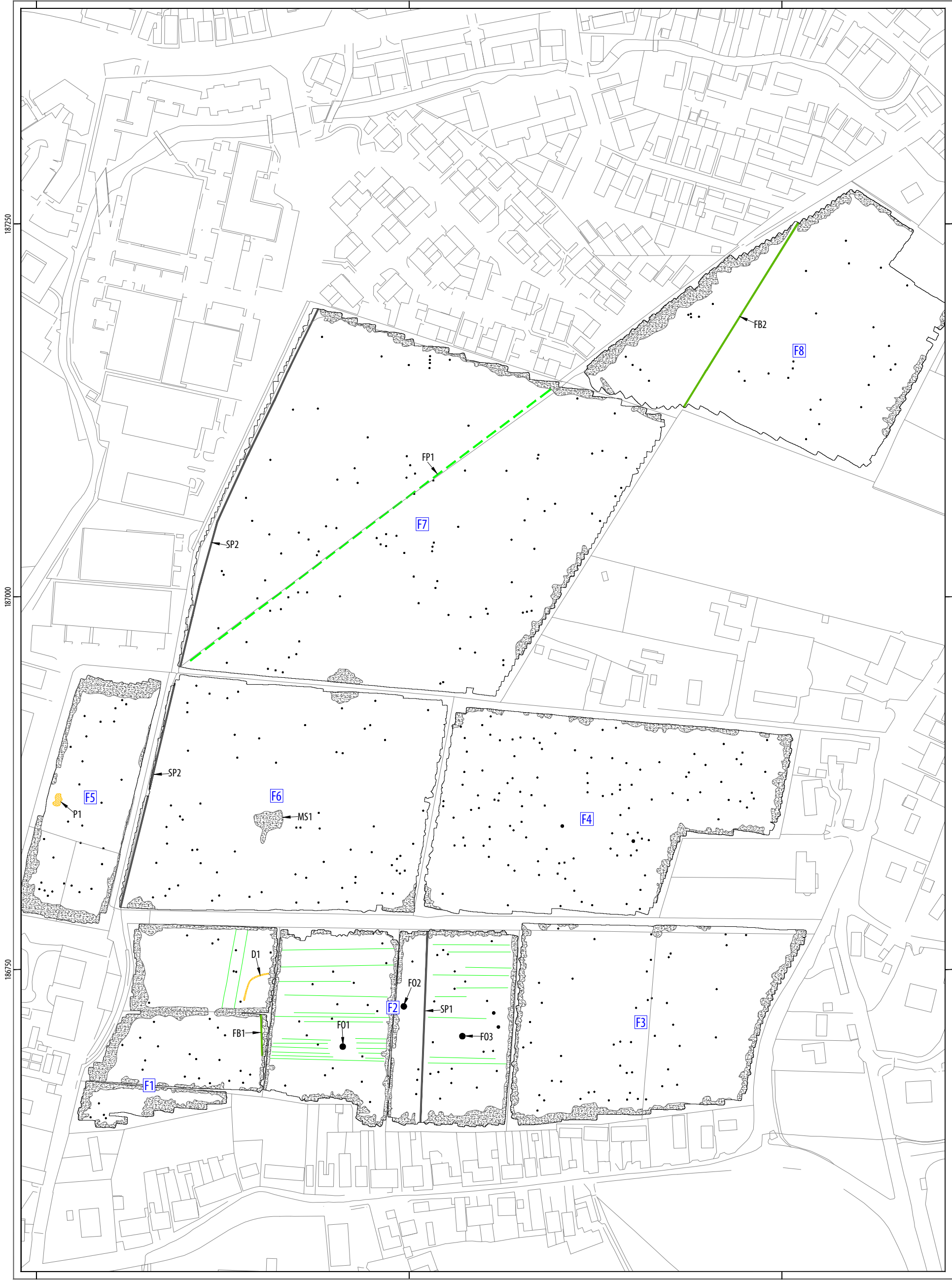
PROJECT HFSL19
Land at Hollands Farm
Bourne End
Buckinghamshire

CLIENT Catesby Estates PLC



Headland Archaeology Yorkshire & North
Unit 16 | Hillside, Beeston Road | Leeds LS11 8ND
t 0113 387 6430
e yorkshireandnorth@headlandarchaeology.com
www.headlandarchaeology.com

ILLUS 7 XY trace plot of minimally processed magnetometer data



<p>TYPE OF ANOMALY</p> <ul style="list-style-type: none"> ● dipolar isolated ● magnetic disturbance — dipolar linear — linear trend — linear trend — linear 	<p>INTERPRETATION</p> <ul style="list-style-type: none"> ferrous material ferrous material service pipe foot path agricultural former field boundary 	<p>TYPE OF ANOMALY</p> <ul style="list-style-type: none"> — linear trend 	<p>INTERPRETATION</p> <ul style="list-style-type: none"> geological variation 	<p>ABBREVIATIONS</p> <ul style="list-style-type: none"> D ditch FB former boundary FO ferrous object FP foot path MS modern spread P pit SP service pipe 	<p>PROJECT HFSL19 Land at Hollands Farm Bourne End Buckinghamshire Catesby Estates PLC</p> <p>CLIENT</p>	<p>HEADLAND ARCHAEOLOGY</p> <p>Headland Archaeology Yorkshire & North Unit 16 Hillside, Beeston Road Leeds LS11 8ND t 0113 387 6430 e yorkshireandnorth@headlandarchaeology.com www.headlandarchaeology.com</p>
--	---	--	---	--	--	--

ILLUS 8 Interpretation of magnetometer data

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.

Lightning-induced remnant magnetisation (LIRM) LIRM anomalies are thought to be caused in the near surface soil horizons by the flow of an electrical currents associated with lightning strikes. These observed anomalies have a strong bipolar signal which decreases with distance from the spike point and often appear as linear or radial in shape.

Lineartrend 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 associated 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 DATA PROCESSING

The gradiometer data has been presented in this report in processed greyscale and minimally processed XY trace plot format.

Data collected using RTK GPS-based methods cannot be produced without minimal processing of the data. The minimally processed data has been interpolated to project the data onto a regular grid and de-striped to correct for slight variations in instrument calibration drift and any other artificial data.

A high pass filter has been applied to the greyscale plots to remove low frequency anomalies (relating to survey tracks and modern agricultural features) in order to maximise the clarity and interpretability of the archaeological anomalies.

The data has also been clipped to remove extreme values and to improve data contrast.

APPENDIX 5 OASIS DATA COLLECTION FORM: ENGLAND

OASIS ID: *headland5-368230*

PROJECT DETAILS

Project name	Land at Hollands Farm Geophysical Survey
Short description of the project	Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey, covering approximately 22 hectares south-east of Bourne End, Buckinghamshire, to inform planning proposals for the possible future development of land north of Hedsor Road and west of Heavens Lea. No anomalies of clear archaeological potential have been identified by the survey with only an isolated pit-type anomaly and a vague curvilinear anomaly being ascribed any archaeological potential, although this is thought to be low. Therefore, on the basis of the survey the archaeological potential of the site is assessed as low, corroborating the results of an earlier heritage assessment report.
Project dates	Start: 02-09-2019 End: 05-09-2019
Previous/future work	Not known / Not known
Any associated project reference codes	HFSL19 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	None
Monument type	None
Significant Finds	None
Significant Finds	None
Methods & techniques	"Geophysical Survey"
Development type	Rural residential
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Not known / Not recorded
Solid geology (other)	Lewes Nodular Chalk Formation
Drift geology	Alluvium
Techniques	Magnetometry

PROJECT LOCATION

Country	England
Site location	Buckinghamshire Wycombe Wooburn Land at Hollands Farm, Bourne End
Study area	22 Hectares
Site coordinates	SU 9000 8688 51.573116781265 -0.701178779362 51 34 23 N 000 42 04 W Point

PROJECT CREATORS

Name of Organisation	Headland Archaeology
Project brief originator	EDP
Project design originator	Headland Archaeology
Project director/manager	Harrison, S
Project supervisor	Dyulgierski, K.
Type of sponsor/funding body	Developer

PROJECT ARCHIVES

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

PROJECT BIBLIOGRAPHY 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Land at Hollands Farm, Bourne End, S Buckinghamshire: Geophysical Survey
Author(s)/Editor(s)	Dyulgerski, K.
Other bibliographic details	HFSL19
Date	2019
Issuer or publisher	Headland Archaeology
Place of issue or publication	Edinburgh
Description	A4 Glue bound report and PDF/A
Entered by	Sam Harrison (sam.harrison@headlandarchaeology.com)
Entered on	27 September 2019



© 2019 by Headland Archaeology (UK) Ltd

part of the **RSK** Group

Headland Archaeology Scotland
13 Jane Street
Edinburgh EH6 5HE
t 0131 467 7705
e scotland@headlandarchaeology.com

Headland Archaeology Yorkshire & North
Unit 16 | Hillside | Beeston Rd
Leeds LS11 8ND
t 0113 387 6430
e yorkshireandnorth@headlandarchaeology.com

Headland Archaeology South & East
Building 68C | Wrest Park | Silsoe
Bedfordshire MK45 4HS
t 01525 861 578
e southandeast@headlandarchaeology.com

Headland Archaeology Midlands & West
Unit 1 | Clearview Court | Twyford Rd
Hereford HR2 6JR
t 01432 364 901
e midlandsandwest@headlandarchaeology.com

Headland Archaeology North West
Fourways House | 57 Hilton Street
Manchester M1 2EJ
t 01432 364 901
e northwest@headlandarchaeology.com

www.headlandarchaeology.com