

HLCS20



LAND NORTH OF HOLWELL LANE, CHEDDAR, SOMERSET

GEOPHYSICAL SURVEY REPORT

commissioned by The Environmental Dimension Partnership Ltd
on behalf of Bloor Homes South West

March 2020

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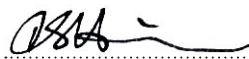
PROJECT INFO:

HA Project Code **HLCS20** / NGR **ST 4480 5410** / Parish **Cheddar** / Local Authority **Sedgemoor District Council** / OASIS Ref. **headland5-389183**

PROJECT TEAM:

Project Manager **Sam Harrison** / Author **Alistair Webb** / Fieldwork **Ben Tipton, Richard McGregor Edwards** / Graphics **David Harrison, Eleanor Winter, Sam Harrison**

Approved by **Sam Harrison**



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part of the **RSK** Group



PROJECT SUMMARY

Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey covering approximately 9 hectares on land north of Holwell Lane, Cheddar, which has planning permission for a new housing development. The survey has successfully evaluated the proposed development area (PDA) and has identified part of a well-defined, localised and probable double-ditched 'enclosure' of unknown date in the centre of the site. Parallel linear anomalies immediately east of the 'enclosure' may define a trackway which may be associated with the enclosure. Due to the partial and discontinuous nature of the anomalies an archaeological interpretation is considered to be probable rather than definite. Across the remainder of the site anomalies caused by recent agricultural activity (field drains) and modern activity (haul road and railway line) are identified. Overall, the archaeological potential of the PDA is assessed as moderate in and around the enclosure, but low for the majority.

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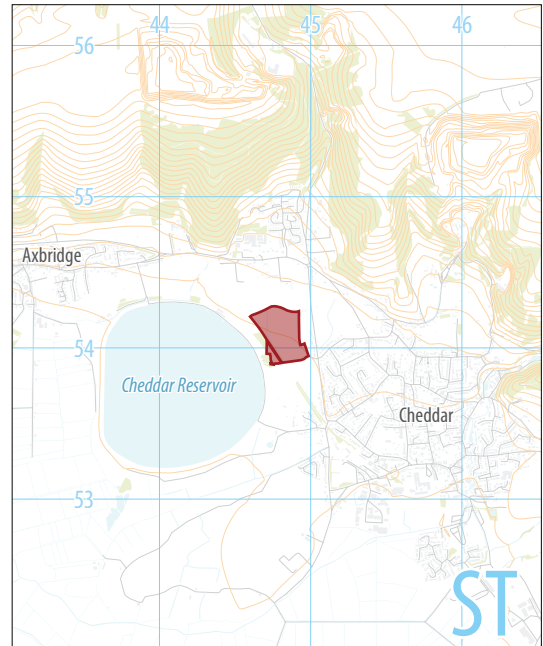
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Land north of Holwell Lane
Cheddar
Somerset



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



0 150m
1:7,500 @ A4

 proposed development area



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GEOPHYSICAL SURVEY REPORT

1 INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by The Environmental Dimension Partnership Ltd (the Consultant) on behalf of Bloor Homes South West (the Client) to undertake a geophysical survey on land north of Holwell Lane, Cheddar, Somerset (ie 'the PDA'). The results of the survey will be submitted to inform a planning condition for Phase 2 of a residential development (planning application Ref 17/19/00005 Condition 9) and will inform future archaeological strategy at the site.

The survey was undertaken in order to assess the impact of the consented development on the historic environment and was undertaken in accordance with a Method Statement (Harrison 2020) incorporated within a Written Scheme of Investigation for Archaeological Investigations (EDP 2020 which was submitted to and approved by Steven Membury (Historic Environment Officer at Somerset County Council). It was also completed in light of guidance within the National Planning Policy Framework (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 PDA is located on the north-western periphery of Cheddar, north of Holwell Lane, centred on ST 4480 5410 (Illus 1). It comprises a single irregularly shaped block of land covering approximately 9ha (seven fields – F1 to F7 inclusive) which is bound by Holwell Lane to the south, a former railway line (now a Bicycle Way) to the west, and agricultural land to the north.

The site is positioned on a slight slope, from the high point of 25m Above Ordnance Datum (AOD) in the north, to the low point of

20m AOD to the south. At the time of the survey the field was ungrazed, tussocky grass with scattered hay bales in F4 (Illus 2 and Illus 3). One field, F7, was completely overgrown and unsuitable for survey (Illus 4).

The survey was carried out on 23rd January 2020.

1.2 GEOLOGY AND SOILS

The bedrock geology comprises Mercia Mudstone (mudstone and halite-stone) overlain by deposits of clay, silt, sand and gravel – Head (NERC 2020).

The soils are classified in the Soilscape 8 Association, characterised as loams and clays with impeded drainage (Cranfield University 2020).

2 ARCHAEOLOGICAL BACKGROUND

An Archaeological and Heritage Assessment (EDP 2018) confirmed that there is a scarcity of finds and records from the prehistoric, Roman and medieval periods in the vicinity of the PDA. A trial trench evaluation to the south of the PDA did not identify any archaeological remains.

The assessment concluded that:

'on this evidence, the site (PDA) has an overall low potential to contain archaeological remains from any periods, other than 'low value' remains related to former farming practices from the medieval period onwards and railway construction.'



ILLUS 2 Field 3, looking north-west

3 AIMS, METHODOLOGY AND PRESENTATION

The general aim of the geophysical survey was to provide enough information to establish the presence/absence, character and extent of any archaeological remains within the PDA. 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:

- › to provide information about the nature and possible interpretation of any magnetic anomalies identified;
- › to therefore determine the likely presence/absence and extent of any buried archaeological features; and
- › to produce a comprehensive site archive and report.

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, Illus 3 and Illus 4 are site condition photographs. Illus 5 is a 1:2,000 survey location plan showing the direction of survey as GPS swaths. Large scale (1:2,000) fully processed (greyscale) data, minimally processed (XY trace plot) data and an accompanying interpretation plot are presented in Illus 6, Illus 7 and Illus 8.

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.



ILLUS 3 Field 4, looking north-west

The survey methodology, report and any recommendations comply with the Method Statement (Harrison 2020), 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

Ground conditions were below optimal across the PDA (see Illus 2 and Illus 3) but nevertheless a high standard of data throughout was achieved.

There are noticeable differences in the magnetic background across the PDA. Across most of the site (F1, F3 and F4) the background is homogenous. In F2 the background is much more variable and in F5, F6 and F8 the data is very perturbed throughout.

Against this background numerous anomalies have been identified and these are cross-referenced to specific examples on the interpretation figure (Illus 8), 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. There is no obvious clustering to these ferrous anomalies which might indicate an archaeological origin. Far more probable is that the 'spike' responses are likely caused by the random distribution of ferrous debris in the upper soil horizons.

Three equidistantly spaced high magnitude 'spikes' are caused by electricity poles.

A broad band of magnetic disturbance approximately 8m wide along the western edge of the PA is caused by the remains of the former railway line.

A faint linear anomaly in F4 aligned south-west/north-east and extending across the full width of the field correlates with an access track which is visible on recent satellite images.

High magnitude dipolar responses clustering together to effectively form large areas of magnetic disturbance dominate the data set across almost the whole of F5, F6 and F8. There was nothing on the ground surface to explain the data. It is assumed that the responses are due to the spreading/infilling of magnetic material in the topsoil, perhaps from the dismantling of the former railway. The magnitude of the ferrous responses is such that it might not be possible to



ILLUS 4 Field 6, showing area unsuitable for survey, looking north-west

identify any weaker responses from any underlying archaeological features, if present.

Magnetic disturbance along the field edges is due to the presence of ferrous material within and adjacent to the field boundaries and is of no archaeological interest.

4.2 AGRICULTURAL ANOMALIES

Linear anomalies aligned north/south are identified in F2 and F3. These anomalies are too straight and too widely spaced to be due to ridge and furrow cultivation and are interpreted as probable drains. Discontinuous linear anomalies oblique to the main pattern of drainage in F2, aligned north-west/south-east and north-west/south-east, are also interpreted as possible land drains. In F3 two similar parallel trends in the north-eastern corner of the field are also interpreted as possible drains.

4.3 GEOLOGICAL ANOMALIES

In F4 a band of irregular randomly spaced poorly defined linear trends, broadly aligned north/south, are identified. These anomalies are interpreted as geological in origin.

4.4 POSSIBLE ARCHAEOLOGICAL ANOMALIES

In the centre of F3 parallel curvilinear anomalies (Illus 8 – D1 and D2) are clearly identified and interpreted as ditches probably forming part of a double-ditched enclosure. Only two sides of the probable enclosure are present as magnetic anomalies and therefore the

interpretation is classed as probably archaeological rather than definitely archaeological. A third curvilinear anomaly, D3, is identified midway between D1 and D2 at their northern end. A discontinuous linear anomaly, D4, locates a fourth possible ditch, possibly forming part of the third side of the 'enclosure'. Several discrete anomalies in the immediate vicinity of the enclosure have been interpreted as of possible archaeological origin, possibly pits although this interpretation is tentative.

In F4 low magnitude parallel linear anomalies (Illus 8 – D5 and D6), aligned south-west/north-east, extend intermittently across the field extending for a short distance into F3. These anomalies are interpreted as ditches possibly defining a trackway associated with the adjacent enclosure.

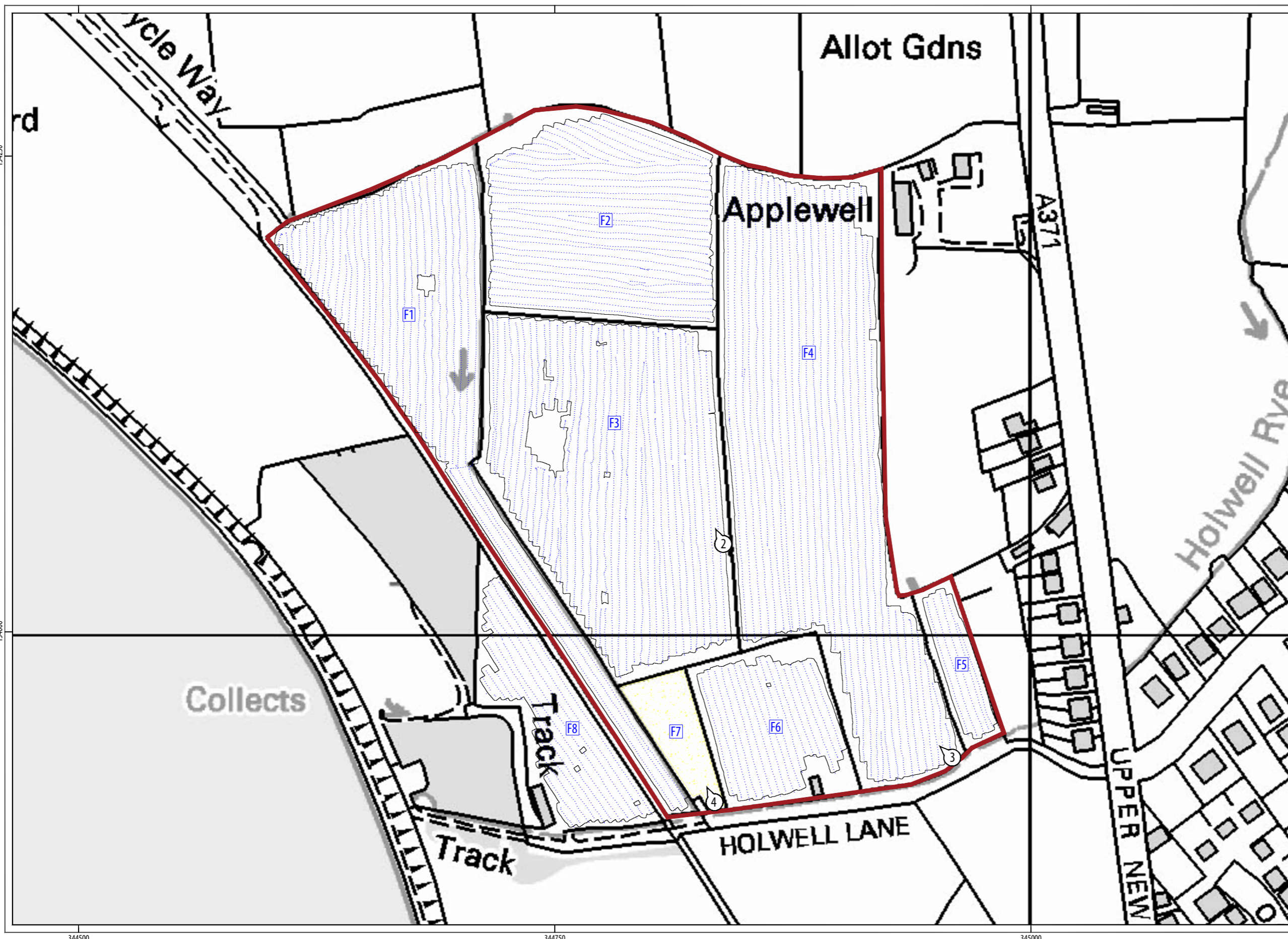
5 CONCLUSION

The survey has successfully evaluated the PDA and has identified part of a probable double-ditched enclosure of unknown date. This is localised and well-defined, and positioned in the centre of the PDA. Due to the partial and discontinuous nature of the anomalies an archaeological interpretation is considered to be probable rather than definite. Parallel linear anomalies immediately east of the enclosure may define a trackway which may be associated with the enclosure.

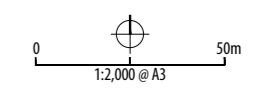
Across the remainder of the site anomalies caused by recent agricultural activity (field drains) and modern activity (haul road and railway line) are identified. Overall, the archaeological potential of the PDA is assessed as moderate in and around the enclosure, but low for the majority of the PDA.

6 REFERENCES

- Bishop R 2020 *Hambleton Crematorium, Carlton Miniott, North Yorkshire; Written Scheme of Investigation for Geophysical Survey* [unpublished client report] Headland Archaeology Ref HCCM20
- 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 29 January 2020
- Cranfield University 2019 *Cranfield Soil and Agrifood Institute Soilscales* <http://www.landis.org.uk/soilscales/> accessed 29 January 2020
- The Environmental Dimension Partnership 2018 *Land North of Holwell Lane, Cheddar Archaeological and Heritage Assessment* [unpublished client report] EDP Report Reference edp1853_r013e
- The Environmental Dimension Partnership 2020 *Holwell Lane, Cheddar – Phase 2 Written Scheme of Investigation for Archaeological Investigations* [unpublished client document] EDP Report Reference edp1853
- 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 29 January 2020
- 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 24 January 2020
- Harrison 2020 *Method Statement for Geophysical Survey Holwell Lane, Cheddar – Phase 2 Somerset Ref: 17/19/00005 Condition 9* [unpublished client document] Headland Archaeology
- Natural Environment Research Council (NERC) 2019 *British Geological Survey* <http://www.bgs.ac.uk/> accessed 29 January 2020



- geophysical survey area
- GPS swaths
- area unsuitable for survey
- location and direction of ILLUS 2-4



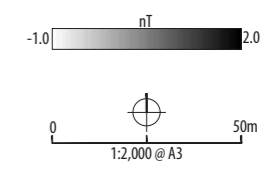
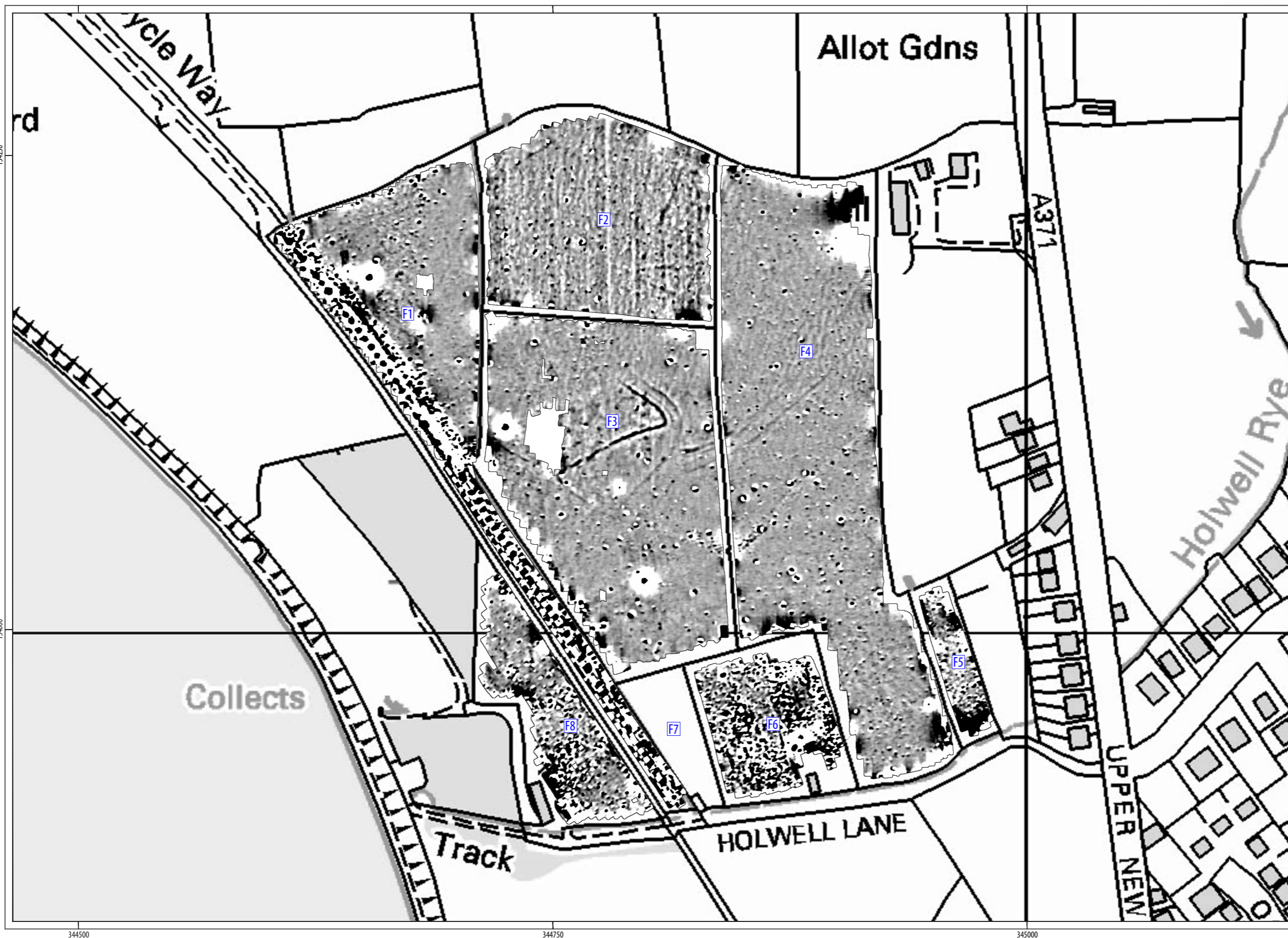
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ILLUS 5 Survey location showing GPS swaths (1:2,000)



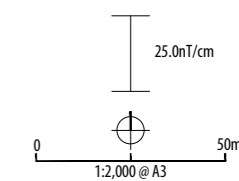
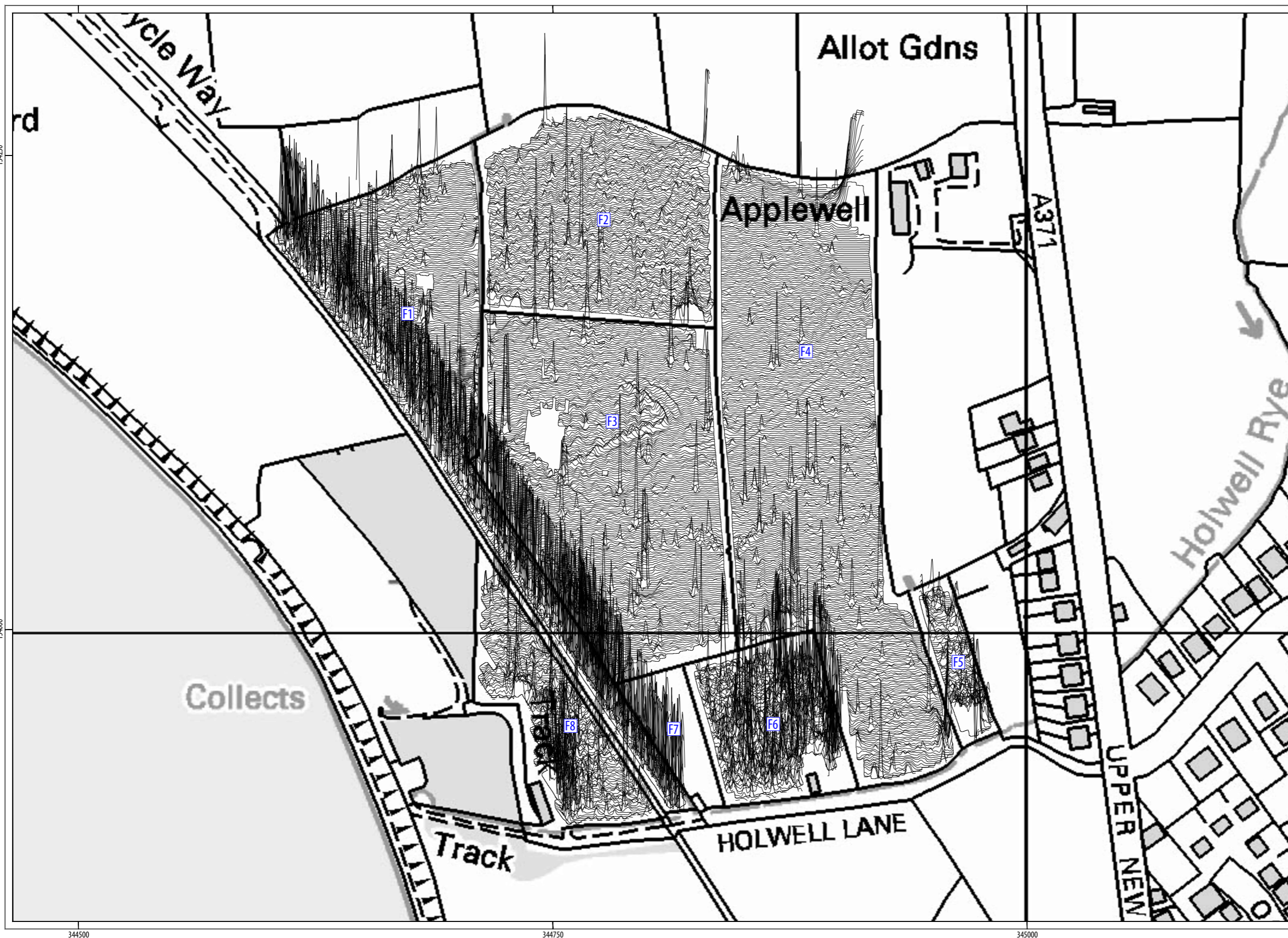
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ILLUS 6 Processed greyscale magnetometer data (1:2,000)



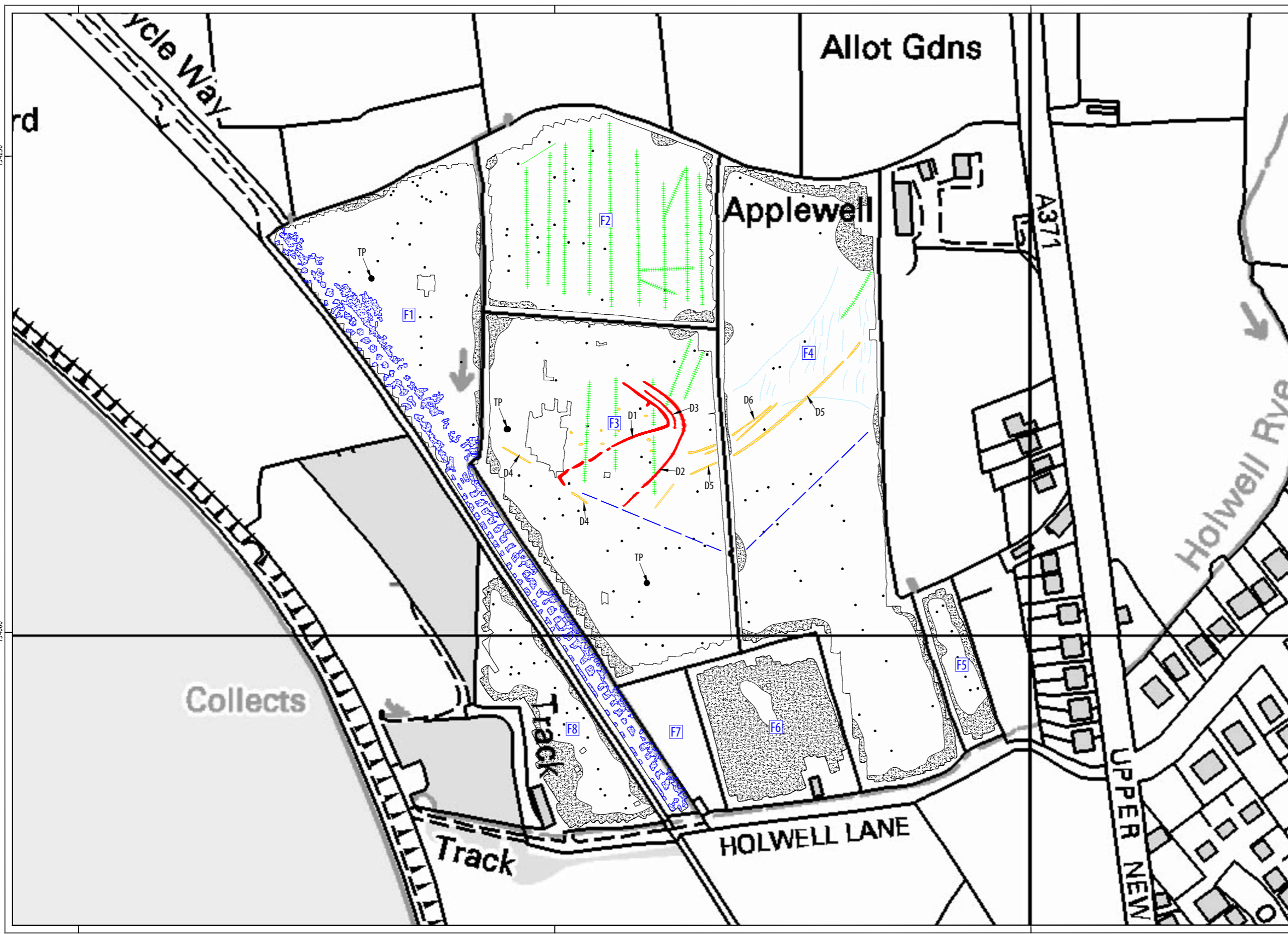
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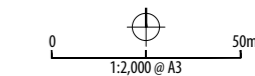
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ILLUS 7 XY trace plot of minimally processed magnetometer data (1:2,000)



TYPE OF ANOMALY	INTERPRETATION
• dipolar isolated	ferrous material
• magnetic disturbance	ferrous material
• magnetic disturbance	former railway
— linear trend	former haul road/access track
— linear trend	field drain
— linear trend	geological variation
⊗ magnetic enhancement	archaeology?
• magnetic enhancement	archaeology

ABBREVIATIONS	
D	ditch
TP	telegraph pole



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ILLUS 8 Interpretation of magnetometer data (1:2,000)

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.

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 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: *headland5-389183***PROJECT DETAILS**

Project name	Land north of Holwell Lane, Cheddar, Somerset
Short description of the project	Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey covering approximately 9 hectares on land north of Holwell Lane, Cheddar, which has planning permission for a new housing development. The survey has successfully evaluated the proposed development area (PDA) and has identified part of a well-defined, localised and probable double-ditched 'enclosure' of unknown date in the centre of the site. Parallel linear anomalies immediately east of the 'enclosure' may define a trackway which may be associated with the enclosure. Due to the partial and discontinuous nature of the anomalies an archaeological interpretation is considered to be probable rather than definite. Across the remainder of the site anomalies caused by recent agricultural activity (field drains) and modern activity (haul road and railway line) are identified. Overall, the archaeological potential of the PDA is assessed as moderate in and around the enclosure, but low for the majority.
Project dates	Start: 23-01-2020 End: 23-01-2020
Previous/future work	Not known
Any associated project reference codes	HLCS20 – 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	Housing estate
Prompt	National Planning Policy Framework – NPPF
Position in the planning process	Pre-application
Solid geology (other)	Mercia Mudstone (mudstone and halite-stone)
Drift geology (other)	of clay, silt, sand and gravel – Head
Techniques	Magnetometry

PROJECT LOCATION

Country	England
Site location	Somerset, Sedgemoor, Cheddar, Land north of Holwell Lane, Cheddar, Somerset
Study area	9 Hectares
Site coordinates	ST 4480 5410 51.282853132479 -2.791568963953 51 16 58 N 002 47 29 W Point

PROJECT CREATORS

Name of Organisation	Headland Archaeology
Project brief originator	EDP
Project design originator	Headland Archaeology
Project director/manager	Sam Harrison
Project supervisor	Richard McGregor Edwards
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 raster / digital photography", "Images vector"
Paper Archive Exists?	No

PROJECT BIBLIOGRAPHY 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Land north of Holwell Lane, Cheddar, Somerset: Geophysical Survey
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Other bibliographic details	HLCS20
Date	2020
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	17 March 2020



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