

Substrata

Archaeological Geophysical Surveyors

An archaeological magnetometer survey

**Land off Hollow Lane and
Cumberland Way, Exeter, Devon**

Centred on NGR (E/N): 296310,093380

Report: 1801CUM-R-1

Ross Dean BSc MSc MA MCifA

20 February 2018

Substrata Ltd
Langstrath
Goodleigh
Barnstaple
Devon EX32 7LZ
Tel: 01271 342721
Email: geophysics@substrata.co.uk
Web: substrata.co.uk

Client
Cotswold Archaeology Ltd
Unit 53
Basepoint Business Centre
Yeoford Way
March Barton Trading Estate
Exeter
EX2 8LB
Tel: 01392 826185

Substrata Limited

Company number: 10348811

Registered office: Unit 6 Bude Business Centre, Kings Hill Industrial Estate, Bude, Cornwall, England EX23 8QN

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Project archive

Report	Adobe PDF format
Raw and processed grid & composite files.....	DW Consulting TerraSurveyor 3 formats
Minimal processing data plots and metadata.....	DW Consulting TerraSurveyor 3 formats
Final data processing data plots and metadata.....	DW Consulting TerraSurveyor 3 formats
GIS project, shape files and classification schema	
GIS project.....	Manifold 8 '.map' file
GIS shape files.....	ESRI standard
GIS classification schema.....	Adobe PDF format
AutoCAD version of the survey interpretation.....	AutoCAD DXF

Website: substrata.co.uk

For an overview of Substrata, our archaeological geophysical surveying techniques and the results we obtain.

1 Survey description and summary

1.1 Survey

Type: twin-sensor fluxgate gradiometer
Date: 8 February 2018
Area: 1.45ha
Lead surveyor: Mark Edwards BA
Author: Ross Dean BSc MSc MA MifA

1.2 Clients

Cotswold Archaeology Ltd, Unit 53, Basepoint Business Centre, Yeoford Way, March Barton Trading, Estate, Exeter EX2 8LB

1.3 Location

Site: Land off Hollow Lane and Cumberland Way, Monkerton, Pinhoe
District: Exeter
County: Devon
Nearest Postcode: EX1 3PH
NGR: SX 96310 93380 (point)
NGR (E/N): 296310,093380 (point)

1.4 Archive

OASIS number: substrat1-308887
Archive: At the time of writing, the archive of this survey will be held by Substrata Ltd. Depending on local authority policy, an archive of the unprocessed data may be deposited with the Archaeological Data Service

1.5 Introduction

This report presents the results of an archaeological magnetometer survey at the above site, hereafter referred to as the survey area. It has been prepared for Cotswold Archaeology Ltd on behalf of Growen Estates Ltd. The survey area location is shown in Figure 1.

1.6 Summary

The magnetic responses across the survey area were sufficient to be able to differentiate between anomalies representing possible archaeological features and background magnetic responses.

The survey area comprised a large garden and two small fields. The nature of garden surveying is such that obstacles to survey progress are inevitable. Of the two fields in the survey area, the western field also had a number of impediments to survey. In both cases, the author concluded that, within the limits described in Section 8 of this report, sufficient data was collected to form a reasonable view of the survival of archaeological deposits and features.

One magnetic anomaly group was mapped as representing potential archaeological deposits. It is likely to represent a former field boundary recorded on historic Ordnance Survey maps between 1905 and 1906 and removed by 1932-33.

2 Survey aims and objectives

2.1 Aims

To establish the presence or absence, extent and character of any archaeological features and deposits within the survey area.

2.2 Survey objectives

1. Complete a magnetometer survey across agreed parts of the survey area.
2. Identify any magnetic anomalies that may be related to archaeological deposits, structures or artefacts.

3. Within the limits of the techniques and dataset, archaeologically characterise any such anomalies or patterns of anomalies.
4. Accurately record the location of the identified anomalies.
5. Produce a report based on the survey that is sufficiently detailed to inform any subsequent development on the survey area about the location and possible archaeological character of the recorded anomalies.

3 Methodology

The work was undertaken in accordance with the survey methodology statement (Dean, 2018).

The survey grid location information and grid plan were recorded as part of the project in a suitable GIS system (Table 3).

Data processing was undertaken using appropriate software (Table 3), with all anomalies being digitised and geo-referenced. The final report (this document) includes a graphical and textual account of the techniques undertaken, the data obtained and an archaeological interpretation of that data and conclusions about any likely archaeology.

4 Standards

The standards used to complete this survey are defined by the Chartered Institute for Archaeologists (2014a) and Historic England (2008). The codes of approved practice that were followed are those of the Chartered Institute for Archaeologists (2014b) and Archaeology Data Service (undated).

5 Site description

5.1 Landscape and land use

The survey area comprises two adjacent fields off Cumberland Way and a private house and garden to the north off Hollow Lane (Figure 1). The land slopes from approximately 45m AOD in the north to approximately 40m AOD in the south.

The survey area is bordered by Hollow Lane and residential housing to the north, Cumberland Way, an agricultural field and a college to the east, an industrial estate to the south and a school to the west with an agricultural field beyond.

The external and internal divisions are a mix of wire fencing and hedges. The garden areas have brick and wooden fencing in places. A tennis court with tall wire fencing and flood lights is situated between the garden and the western field.

The garden is landscaped in places and has stands of mature trees and bushes. The western field was under grass at the time of the survey and had been partially landscaped in the past. Tree felling had taken place before the survey and tree trunks, logs and associated waste were still present. The eastern field was also under grass and had been recently mowed.

5.2 Geology

The bedrock across the site is sandstone of the Permian Dawlish Sandstone Formation. Generically, these rocks comprise reddish brown sands and sandstones, cross-bedded, with intercalated thin lenses and beds of breccia and mudstone. The superficial deposits for the site are unknown (British Geological Survey, undated).

6 Archaeological background

6.1 Historic landscape characterisation

‘Medieval enclosures based on strip fields’: This area was probably first enclosed with hedge-banks during the later middle ages. The curving form of the hedge-banks suggests that earlier it may have been farmed as open strip-fields (Devon County Council, undated)

6.2 Summary of archaeological background

This section is not designed to provide a comprehensive understanding of the historic environment of the surrounding area and should not be used as a source for further work.

A detailed assessment of the historic environment of the site is presented in Dowding (2016).

The Devon County Council Historic Environment Record (DHER) was examined via the Heritage Gateway (Historic England, undated) to gain an appreciation of historic assets pertinent to the geophysical survey data within approximately 500m of the survey area perimeter.

Table 1 provides a summary of the DHER entries though relevant to the survey.

7 Results, discussion and conclusions

7.1 Scope and definitions

This survey was designed to record magnetic anomalies. A magnetic anomaly is a local variation in the Earth's magnetic field. Such variations can result from changes in the magnetism of the underlying solid geology, superficial geology and other near-surface deposits including those altered and created by past human activities. Near-surface artefacts can also create magnetic anomalies.

The terms 'archaeological deposit', 'structure' and 'feature' refer to any artefacts, material deposits or disturbance of natural deposits thought to be the result of human activity, excluding recent land maintenance and farming.

Magnetic anomalies cannot be regarded as physical archaeological deposits, structures or features and the dimensions of the anomalies shown do not represent the dimensions of any associated archaeology.

The analysis presented below identifies and characterises anomalies and anomaly groups that may relate to archaeological deposits, structures and features.

The reader is referred to section 8.

7.2 Results

Figure 2 shows the interpretation of the survey data which includes the anomaly groups identified as possibly relating to archaeological deposits along with their identifying numbers. Table 2 is an extract of the detailed analysis of the survey data sourced from the attribute tables of the GIS project provided in the project archive.

Figure 2 along with Table 2 comprise the analysis of the survey data.

Figures 3 and 4 are plots of processed data as specified in Table 4. Figure 5 is a plot of minimally processed data with its metadata.

7.3 Discussion

7.3.1 General points

Discussion scope

Not all anomalies or anomaly groups identified in Table 2 are necessarily discussed below. All identified anomaly groups are recorded in the GIS project held the survey archive.

Data collection

Data collection along the survey area edges was restricted as shown in the figures due to the presence of magnetic materials within and adjacent to boundaries. Strong magnetic responses mapped close to the boundaries are likely to relate to these materials except where otherwise indicated in Figure 2 and Table 2.

The nature of garden surveying is such that obstacles to survey progress are inevitable and these are pointed out in Figures 2 to 4. Of the two fields in the survey area, the western field also had a number of impediments to survey as indicated in the figures. In both cases, the author concluded that, within the limits described in Section 8 of this report, sufficient data was collected to form a reasonable view of the survival of archaeological deposits and features.

Anomaly characterisation and mapping

There are a number of anomaly groups that could be interpreted as relating to large postholes or pits although most will have natural origins. Anomalies of this sort were mapped as potential archaeology when they were associated with other significant anomaly groups or otherwise formed recognisable patterns as listed in Table 2.

Anomalies thought to relate to natural features and recent man-made objects such as manholes, water management equipment, drains, cables and other services were only mapped where they comprised significant magnetic responses across the dataset that needed clarification.

Numerous dipole magnetic anomalies are present within the dataset. These are likely to represent recent ferrous objects. They are only mapped if they could influence the analysis of anomaly groups thought to have an archaeological origin.

Data trends

No trends in the dataset were attributed to potential archaeological activity.

7.3.2 Data relating to historic maps and other records

Magnetic anomaly group 1 coincides with and likely represents a former field boundary mapped between 1905 and 1906 and removed by 1932-33. The boundary is not depicted on earlier historical maps.

7.3.3 Data with no previous archaeological provenance

No other magnetic anomaly groups were characterised as representing potential archaeological deposits or features.

No anomaly groups were characterised as representing modern services.

7.4 Conclusions

The magnetic responses across the survey area were sufficient to be able to differentiate between anomalies representing possible archaeological features and background magnetic responses.

The survey area comprised a large garden and two small fields. The nature of garden surveying is such that obstacles to survey progress are inevitable. Of the two fields in the survey area, the western field also had a number of impediments to survey. In both cases, the author concluded that, within the limits described in Section 8 of this report, sufficient data was collected to form a reasonable view of the survival of archaeological deposits and features.

One magnetic anomaly group was mapped as representing potential archaeological deposits. It is likely to represent a former field boundary recorded on historic Ordnance Survey maps between 1905 and 1906 and removed by 1932-33.

8 Disclaimer and copyright

The description and discussion of the results presented in this report are the author's, based on his interpretation of the survey data. Every effort has been made to provide accurate descriptions and interpretations of the geophysical data set. The nature of archaeological geophysical surveying is such that interpretations based on geophysical data, while informative, can only be provisional. Geophysical surveys are a cost-effective early step in the multi-phase process that is archaeology. The evaluation programme of which this survey is part may also be informed by other archaeological assessment work and analysis. It must be presumed that more archaeological features will be evaluated than those specified in this report.

Substrata Ltd will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988 (Chapter IV, s.79). This report contains material that is non-Substrata Limited copyright or the intellectual property of third parties. Such material is labelled with the appropriate copyright and is non-transferrable by Substrata Ltd.

9 Acknowledgements

Substrata would like to thank Zoe Arkley, Heritage Consultant, Cotswold Archaeology Ltd for commissioning us to complete this survey.

10 Bibliography

Archaeology Data Service (undated) *Archaeology Data Service/Digital Antiquity Guides to Good Practice: Geophysical Data in Archaeology, 2nd Edition* [Online], Available: http://guides.archaeologydataservice.ac.uk/g2gp/Geophysics_Toc [February 2018]

British Geological Survey (undated) *Geology of Britain viewer, 1:50000 scale data* [Online], Available: <http://www.bgs.ac.uk/discovering-Geology/geologyOfBritain/viewer.html> [February 2018]

Chartered Institute for Archaeologists (2014a) *Standard and guidance archaeological geophysical survey* [Online], Available: http://www.archaeologists.net/sites/default/files/CIfAS&GGeophysics_1.pdf [February 2018]

Chartered Institute for Archaeologists (2014b) *Code of conduct* [Online], <http://www.archaeologists.net/sites/default/files/CodesofConduct.pdf> [February 2018]

Clark, A. (2000) *Seeing Beneath the Soil, Prospecting methods in archaeology*. London: Routledge

Dean, R. (2018) *Method statement for a detailed magnetometer survey over land at Cumberland Way, Exeter, Devon*. Substrata Ltd unpublished document 1801CUM-M-1

Devon County Council (undated) *Historic Environment* [Online], <https://new.devon.gov.uk/historicenvironment/> [February 2018]

Dowding, K. (2016) *Land off Hollow Lane and Cumberland Way, Exeter, Devon, Heritage Desk-Based Assessment*, Cotswold Archaeology Ltd unpublished report 16686, project 880161

Historic England (undated) *Heritage Gateway* [Online], <http://www.heritagegateway.org.uk/Gateway/> [February 2018]

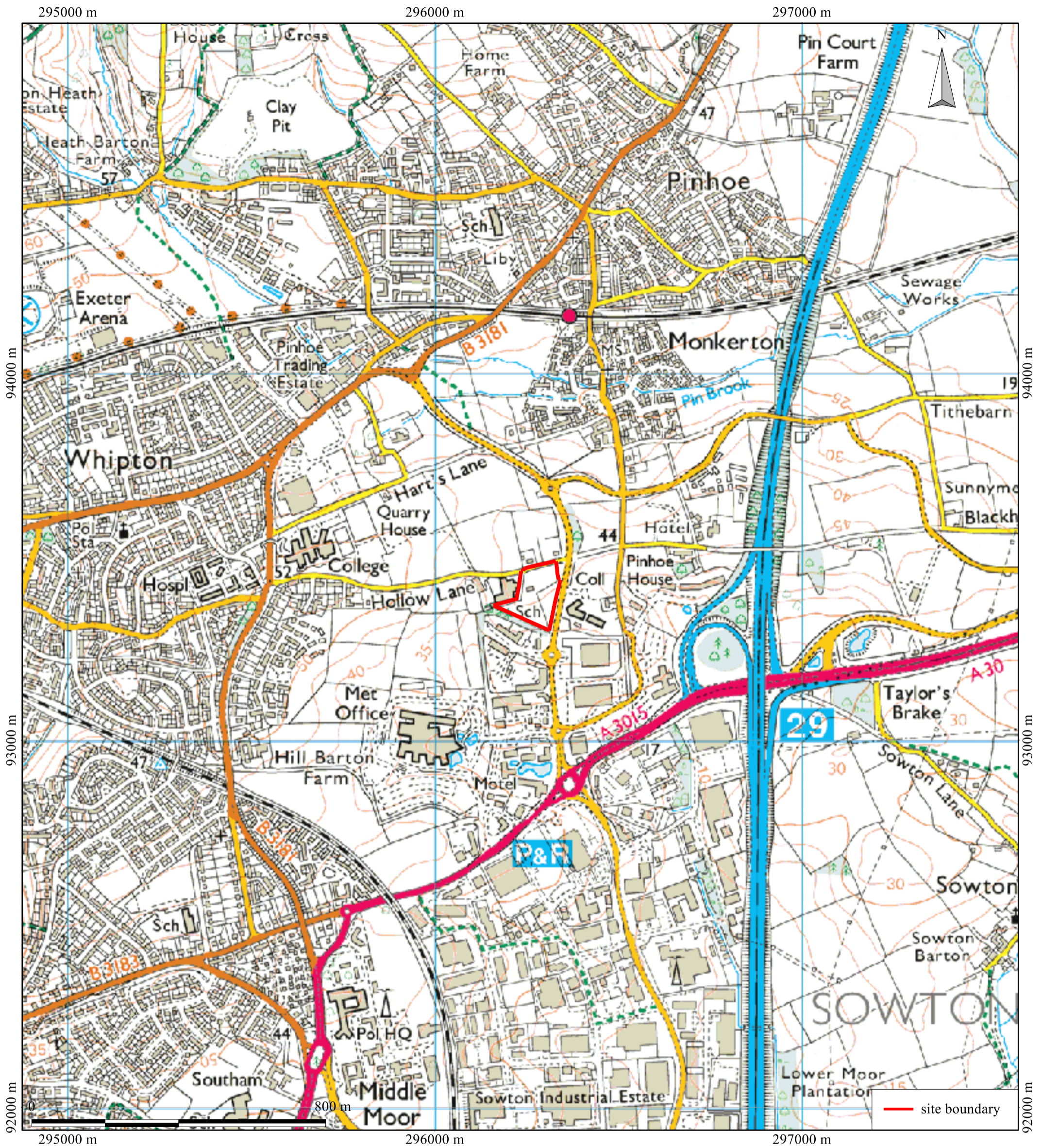
Historic England (2008) *Geophysical Survey in Archaeological Field Evaluation* [Online], Available: <https://content.historicengland.org.uk/images-books/publications/geophysical-survey-in-archaeological-field-evaluation/geophysics-guidelines.pdf/> [February 2018]

Appendix 1 Figures

General Guidance

The anomalies represented in the survey plots provided in this appendix are magnetic anomalies. The apparent size of such anomalies and anomaly patterns are unlikely to correspond exactly with the dimensions of any associated archaeological features .

A rough rule for interpreting magnetic anomalies is that the width of an anomaly at half its maximum reading is equal to the width of the buried feature, or its depth if this is greater (Clark, 2000: 83). Caution must be applied when using this rule as it depends on the anomalies being clearly identifiable and distinct from adjacent anomalies. In northern latitudes the position of the maximum of a magnetic anomaly will be displaced slightly to the south of any associated physical feature.



British Grid
 centre X: 296232.50 m, centre Y: 93445.34 m

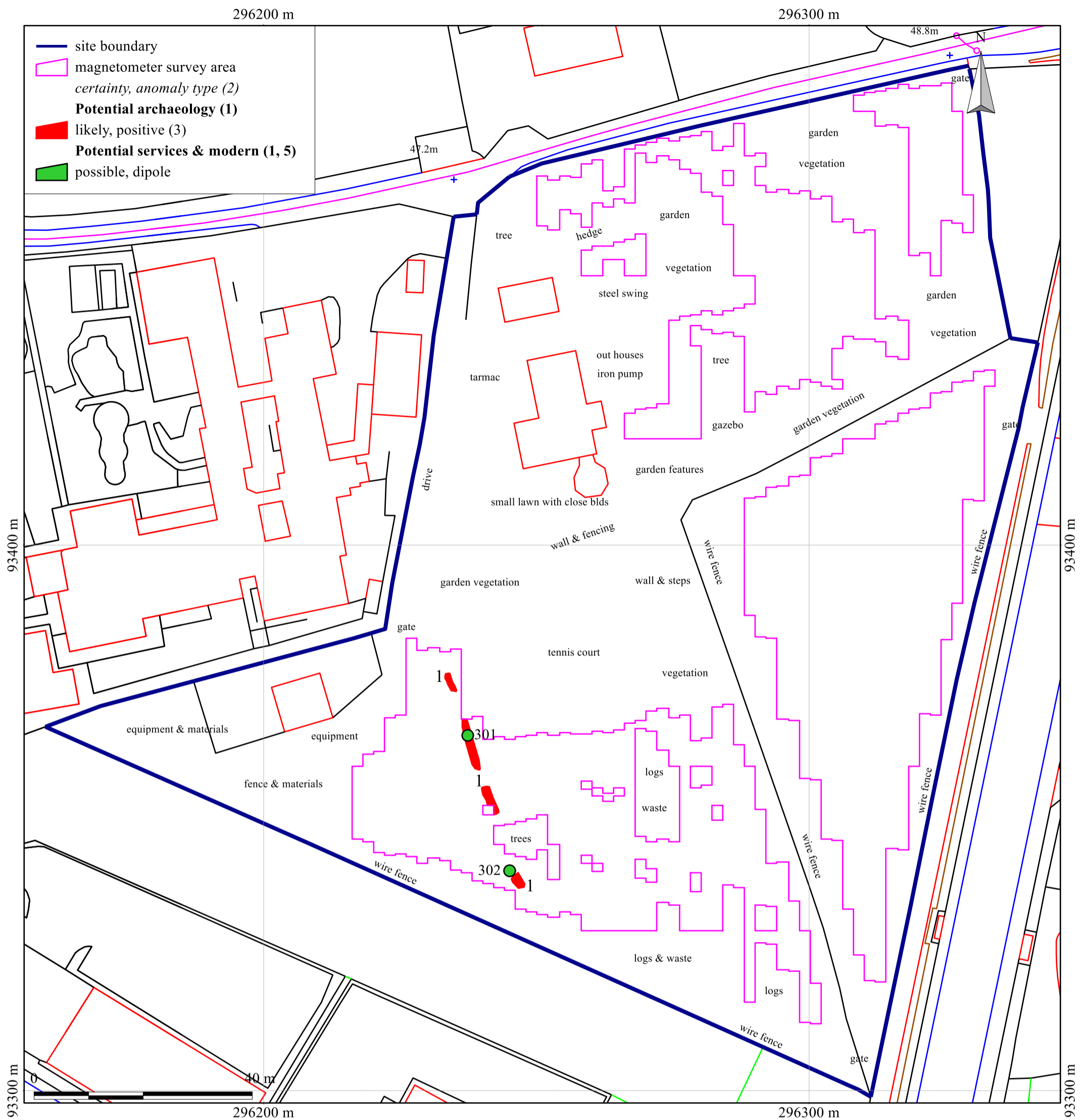
Geophysical survey: Copyright Substrata Limited.
 Base map: Ordnance Survey (c) Crown Copyright 2018.
 All rights reserved. Licence number 100022432

Scale: 1:10000 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey
 Land off Hollow Lane and Cumberland Way
 Exeter, Devon
 Centred on NGR (E/N): 296310,093380
 Report: 1801CUM-R-1

Figure 2: survey interpretation

Substrata Limited
 Langstrath, Goodleigh
 Barnstaple, Devon EX32 7LZ
 Tel: 01271 342721
 Email: geophysics@substrata.co.uk
 Web: substrata.co.uk



British Grid
centre X: 296251.08 m, centre Y: 93396.49 m

Geophysical survey: Copyright Substrata Limited.
Base map: Ordnance Survey (c) Crown Copyright 2018.
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Scale: 1:700 @ A3. Spatial Units: Meter. Do not scale off this drawing

Notes:

1. All interpretations are provisional and represent potential archaeological deposits.
2. 'Anomaly type' is a description of the magnetic anomaly. See the report text or GIS for an archaeological characterisation.
3. Anomalies designated "likely archaeology" have supporting evidence e.g. historical maps and or visible earthworks.
4. Not all instances are mapped.
5. Anomalies likely to represent recent disturbance, recent deposits, geological or other natural deposits are not mapped unless relevant to potential archaeological deposits.

An archaeological magnetometer survey
Land off Hollow Lane and Cumberland Way
Exeter, Devon
Centred on NGR (E/N): 296310,093380
Report: 1801CUM-R-1

Figure 2: survey interpretation

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Tel: 01271 342721
Email: geophysics@substrata.co.uk
Web: substrata.co.uk



British Grid
 centre X: 296251.08 m, centre Y: 93396.49 m

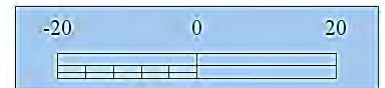
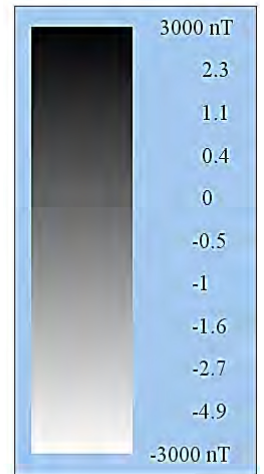
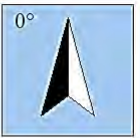
Geophysical survey: Copyright Substrata Limited.
 Base map: Ordnance Survey (c) Crown Copyright 2018.
 All rights reserved. Licence number 100022432

Scale: 1:700 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey
 Land off Hollow Lane and Cumberland Way
 Exeter, Devon
 Centred on NGR (E/N): 296310,093380
 Report: 1801CUM-R-1

Figure 3: shade plot of processed data

Substrata Limited
 Langstrath, Goodleigh
 Barnstaple, Devon EX32 7LZ
 Tel: 01271 342721
 Email: geophysics@substrata.co.uk
 Web: substrata.co.uk



Instrument Type:	Bartington Grad 601	Processes:	1
Units:	nT		1 Base Layer
Direction of 1st Traverse:	0 deg		
Collection Method:	ZigZag		
Sensors:	2 @ 0.00 m spacing.		
Dummy Value:	2047.5		
Dimensions			
Grid Size:	30 m x 30 m		
X Interval:	0.25 m		
Y Interval:	1 m		
Stats			
Max:	3000.00		
Min:	-3000.00		
Std Dev:	50.31		
Mean:	-1.40		
Median:	-0.50		
PROGRAM			
Name:	TerraSurveyor		
Version:	3.0.33.6		

Figure 5: shade plot of unprocessed data

Appendix 2 Tables

An archaeological magnetometer survey
 Land off Hollow Lane and Cumberland Way
 Exeter, Devon
 Centred on NGR (E/N): 296310,093380
 Report: 1801CUM-R-1

County: Devon
 Area: Monkerton, Pinhoe
 District: Exeter
 Source: Heritage Gateway

HER number	grid reference	designations	type	period	description	distance (m) from site centre	bearing (GN) from site centre
MDV71123	SX 962 934		Hospital	XIX to XX - 1801 AD to 2000 AD	Heavitree Isolation Hospital built in late 19C & extended to become the Ellen Tinkham School	112	280
MDV37499	SX 965 932		Sand pit	XIX - 1801 AD to 1900 AD	Sandpits shown on 19th century maps to the east and west of Pinn Lane	262	133
MDV113548	SX 963 937		Field boundary	Early Medieval to Post Medieval - 1066 AD to 1750 AD	Possible former field boundaries of potential medieval to post-medieval date are visible as earthwork ditches on aerial photographs of 1963 onwards, at Monkerton	320	358
MDV113539	SX 960 933		Orchard	Post Medieval to Modern - 1540 AD to 2013 AD	Orchard banks of probable post-medieval to modern date are visible as a series of linear earthwork banks on aerial photographs of 1945	320	256
MDV66167	SX 966 932		Field boundary	Unknown	Possibly represents remains of a former field boundary and may predate 19th c as not shown on 19th c maps.	341	122
MDV113547	SX 965 937		Orchard	Post Medieval to Modern - 1540 AD to 2013 AD	Orchard banks of probable post-medieval to modern date are visible as a series of linear earthwork banks on Lidar-derived images of 1998 and 2005	372	31
MDV113545	SX 967 934		Orchard	Post Medieval to Modern - 1540 AD to 2013 AD	Orchard banks of probable post-medieval to modern date are visible as a series of linear earthwork banks on Lidar-derived images of 1998 and 2005	391	87
MDV66168	SX 966 931		Hollow way	Early Medieval to Post Medieval - 1066 AD to 1750 AD	Linear feature 3m in width and 0.34m deep uncovered in arable field situated south of old 'sand pit'	403	134
MDV65418	SX 959 935		Field system	Early Medieval to XXI - 1066 AD to 2009	An archaeological assessment undertaken by Exeter Archaeology in 2002 at Monkerton in Pinhoe found a possibly medieval field system had existed at least until 1839.	427	286
MDV113540	SX 959 937		Building platform	Early Medieval to Post Medieval - 1066 AD to 1750 AD	Possible raised earthwork platforms of potential medieval to post-medieval date are visible on aerial photographs of 1945, at Pilton House. The earthworks are L-Shaped in plan, measure approximately 44m in length by 24m in width and are located within the southwest corner of an agricultural field, at the intersection between Pilton Lane and Hart's Lane.	520	308
MDV65419	SX 958 936		Quarry	Post Medieval to Modern - 1540 AD to 2013 AD	A possible quarry pit of post-medieval to modern date is visible as an earthwork pit on aerial photographs of 1945 onwards, to the west of Quarry House. Now Levelled by landscaping works	555	293
MDV113542	SX 959 938		Field boundary	Early Medieval to Post Medieval - 1066 AD to 1750 AD	Possible former field boundaries of potential medieval to post-medieval date are visible as earthwork ditches on aerial photographs of 1945 onwards, at Brookhayes. The earthworks remain visible on Lidar-derived images of 1998 and 2005.	587	316
MDV113415	SX 967 929		Narrow Ridge and Furrow	Post Medieval to Modern - 1540 AD to 2013 AD	Earthwork banks of probable 18th-19th century date are visible on aerial photographs of 1945 onwards, within the former Upper Moor Plantation. They have been completely levelled and the site developed as part of the Sowton Industrial Estate on aerial photographs of 1988	618	141
MDV113533	SX 958 930		Extraction pit	Early Medieval to Modern - 1066 AD to 2013 AD	A possible extraction pit of between medieval to modern date is visible as an earthwork pit on aerial photographs of 1945 onwards, to the east of Hill Barton Farm.	636	233

Table 1: Historical Environment Entries thought relevant to geophysical survey

Site: An archaeological magnetometer survey
 Land off Hollow Lane and Cumberland Way
 Exeter, Devon
 Centred on NGR (E/N): 296310,093380

anomaly group	anomaly characterisation certainty & class	anomaly form	additional archaeological characterisation	comments	supporting evidence
1	likely, positive	disrupted linear	field boundary	anomaly group coincides with and likely represents a former field boundary mapped between 1905 and 1906 and removed by 1932-33; the boundary is not depicted on earlier maps	Ordnance Survey 1905 1:2500, 1906 1:10560
301	possible, dipole		recent ferrous material	anomaly group is mapped only because it affects a separate group likely to represent an archaeological deposit; no archaeological origin is implied	
302	possible, dipole		recent ferrous material	anomaly group is mapped only because it affects a separate group likely to represent an archaeological deposit; no archaeological origin is implied	

Table 2: data analysis

Grid <i>Method of Fixing:</i> DGPS set-out using pre-planned survey grids and Ordnance Survey coordinates. <i>Composition:</i> 30m by 30m grids <i>Recording:</i> Geo-referenced and recorded using digital map tiles. <i>DGPS used:</i> Spectra Precision PM5V2 GPS with external antenna and survey pole and DigiTerra Explorer 7 as the survey control program.	
Equipment <i>Instrument:</i> Bartington Instruments grad601-2 <i>Firmware:</i> version 6.1	Data Capture <i>Sample Interval:</i> 0.25m <i>Traverse Interval:</i> 1 metre <i>Traverse Method:</i> zigzag <i>Traverse Orientation:</i> GN
Data Processing, Analysis and Presentation Software QCAD Professional 3 DW Consulting TerraSurveyor3 Manifold System 8 GIS Microsoft Corp. Office Excel 2013 Microsoft Corp. Office Publisher 2013 Adobe Systems Inc Adobe Acrobat 9 Pro Extended	

Table 3: methodology information

Instrument Type: Bartington Grad-601 gradiometer Units: nT Direction of 1st Traverse: see below Collection Method: ZigZag Sensors: 2 @ 1.00 m spacing. Dummy Value: 32702	
Program Name: TerraSurveyor Version: 3.0.33.6	
Statistics Max: 142.08 Min: -63.99 Std Dev: 5.97 Mean: -0.34 Median: 0.00	Processing 1 Base Layer 2 Clip at 1.00 SD 3 De Stagger: Grids: All By: 0 intervals, 25.00cm 4 De Stagger: Grids: a1.xgd a4.xgd a6.xgd a2.xgd a3.xgd a7.xgd a20.xgd a23.xgd a22+a21.xgd By: 0 intervals, 25.00cm 5 De Stagger: Grids: a20.xgd a14+a25.xgd a23.xgd a22+a21.xgd a24+a26.xgd a27.xgd By: 0 intervals, 25.00cm 6 De Stagger: Grids: a29.xgd a28.xgd By: 0 intervals, 25.00cm 7 DeStripe Median Sensors: Grids: All 8 Range Match (Area: Top 60, Left 120, Bottom 89, Right 239) to Top edge 9 Edge Match (Area: Top 120, Left 240, Bottom 149, Right 359) to Right edge 10 Edge Match (Area: Top 90, Left 720, Bottom 149, Right 839) to Left edge 11 Interpolate: Match X & Y Doubled.

Table 4: processed data metadata