Substrata
Archaeological Geophysical Surveyors

An archaeological magnetometer survey

Land at Area 3, Secmanton Lane Dawlish, Devon

Centred on NGR (E/N): 296290,078360 (point)

Report: 1610DAW-R-1

Ross Dean BSc MSc MA MCIfA

12 December 2016

Substrata Ltd
Office 1, 5 Mill Street
Bideford
Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk

Client
AC Archaeology Ltd
4 Halthaies Workshops
Bradninch
Nr Exeter
Devon EX5 4QL
Tel: 01392 882410

Contents

1. Survey description and summary 1
2. Survey aims and objectives 1
3. Standards 2
4. Site description 2
5. Archaeological background 2
6. Results, discussion and conclusions 4
7. Disclaimer and copyright 6
8. Acknowledgements 6
9. Bibliography 6

Appendix 1 Figures 7
Appendix 2 Tables 18

Figures

Figure 1: location map 8
Figure 2: survey interpretation, entire area 9
Figure 3: survey interpretation, areas 3 and 4 10
Figure 4: survey interpretation, areas 5 and 6 11
Figure 5: survey interpretation, areas , area7 12
Figure 6: shade plot of processed data, entire area 13
Figure 7: shade plot of processed data, areas 3 and 4 14
Figure 8: shade plot of processed data, areas 5 and 6 15
Figure 9: shade plot of processed data, area 7 16
Figure 10: shade plot of minimally processed data 17

Tables

Table 1: data analysis 19
Table 2: methodology summary 20
Table 3: processed data metadata, fields 1, 2, 4 and 5 21

Project archive

Report ..... Adobe PDF format
Copies of report figures ..... 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:	between 22 and 25 November 2016
Area:	15ha
Lead surveyor:	Mark Edwards BA
Author:	Ross Dean BSc MSc MA MIfA

1.2 Clients

AC Archaeology Ltd, 4 Halthaies Workshops, Bradninch Nr Exeter, Devon EX5 4QL

1.3 Location

Site:	Land at Area 3, Secmanton Lane
Civil Parish & Town:	Dawlish
District:	Teignbridge
County:	Devon
Nearest Postcode:	EX7 0LW
NGR:	SX 9629 7836 (point)
NGR (E/N):	296290,078360 (point)

1.4 Archive

OASIS number:	substrat1-271026
Archive:	At the time of writing, the archive of this survey will be held by Substrata. 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 AC Archaeology Ltd on behalf of clients. The survey area location is shown in Figure 1. The survey area sub-division into seven units as shown in Figure 2 follows the sub-division used by AC Archaeology in their Historic Environment Impact Assessment for the same programme of work (Costen & Valentin, 2016).

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.

Twenty-nine magnetic anomaly groups were mapped as representing possible archaeological deposits or features. None were mapped in the accessible parts of areas 1 and 2. Seven of these anomaly groups represent former field boundaries recorded on historic maps. Four groups have a distinct and unusually clear presence in the dataset. They may have archaeological significance such as industrial or craft deposits although a modern origin is equally likely. One group is most likely to represent a former field boundary or narrow, ditched lane removed before AD 1839. Four groups may represent areas of rubble of unknown origin or near surface bedrock. The remaining groups are most likely to represent linear and disrupted linear deposits, such as former ditches or banks, of unknown period and from one or more phases of past land management.

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 Standards

The standards used to complete this survey are defined by the Chartered Institute for Archaeologists (2014a) and Historic England (2010). The codes of approved practice that were followed are those of the Chartered Institute for Archaeologists (2014b) and Archaeology Data Service (undated).

4 Site description

4.1 Landscape and land use

The survey area is located to the northwest of Secmaton Lane, Dawlish as shown in Figure 1. It includes the buildings that comprise Secmaton Farm and a number of large fields that are in agricultural use. The survey area is irregular in shape, with the majority of the boundaries formed by the Shutterton Brook and existing hedgerows. The exception being the southeast boundary which is formed by Secmaton Lane and from which there are two vehicular accesses to the farm. The topography of the application area varies extensively ranging from 9m to 21m AOD (Costen & Valentin, 2016): 1).

4.2 Geology

1:50 000 scale superficial deposits description: sandstone and breccia of the Permian Dawlish Sandstone Formation. The generic description is, “Reddish brown sands and sandstones, cross-bedded, with intercalated thin lenses and beds of breccia and mudstone.” (British Geological Survey, undated).

1:50 000 scale superficial deposits description: Quaternary alluvium. Normally alluvium comprises soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel. A stronger, desiccated surface zone may be present (ibid).

5 Archaeological background

5.1 Sources

AC Archaeology Ltd completed a heritage desk-based assessment of the site (Costen & Valentin, 2016) for a 1300m study area which provides a comprehensive assessment of the historical and archaeological background of the survey area. This document is the source used below.

5.2 Historic landscape characterisation

Modern enclosures adapted from post-medieval fields.

Modern enclosures that have been created by adapting earlier fields of probable post-medieval date apart from the majority of area 4 where the modern enclosure is of re-planted ancient woodland or secondary woodland (Devon County Council, undated).

5.3 Historical and archaeological background

There are a total of one hundred and twenty individual heritage assets within study area, three of which are within the application area itself. The most relevant to this survey being the chance discovery of a Bronze Age palstave (DCC HER MDV21941 at SX 963 783).

Previous fieldwork within the general area has produced mixed results, although geophysical survey to the to the southwest and west has identified parts of two settlement-type enclosures of late prehistoric or Romano-British form (HER MDV105492 at SX 9570 7794 and MDV16935 at SX 9563 7841).

Based on present evidence, findings nearby and aerial photographic transcription, the parts of the application area with topographic potential (i.e. away from the steeper-sloping ground) do have the potential to contain buried remains relating to early settlement, funerary or land division. In addition, former boundaries depicted on historic maps are likely to survive as now infilled ditches (Costen & Valentin, 2016: 1).

7.

6 Results, discussion and conclusions

6.1 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 variations in the magnetism of 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 7.

6.2 Results

Figures 2 to 5 show the interpretation of the survey data. They include the anomaly groups identified as possibly relating to archaeological deposits along with their identifying numbers. Table 1 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.

Figures 2 to 5 along with Table 1 comprise the analysis of the survey data.

Figures 6 to 9 are plots of processed data as specified in Table 3. Figure 10 is a plot of minimally processed data.

6.3 Discussion

6.3.1 General points

Discussion scope

Not all anomalies or anomaly groups identified in Table 1 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 and internal field boundaries 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 Figures 2 to 5 and Table 1.

Surveying was restricted around the farm and in areas 6 and 7 by the presence of significant amounts of magnetic material and objects.

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 are only mapped as potential archaeology if they are clustered in groups or otherwise form recognisable patterns.

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 scattered across the data set. 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

The faint parallel, linear trends visible in the data (Figures 7 to 9) are likely to represent relatively recent ploughing disturbance. Some of those in areas 4 and 6 may be related to ridge-and-furrow cultivation although this is not clear. A distinct north-south trend in area 6 is partially the result of minor variations in the gradiometer sensors balance highlighted when displayed using a low-range scale.

6.3.2 Data relating to historic maps and other records

Magnetic anomaly groups **1** (area 1), **14** (area 4), **19**, **20** and **21** (area 5), **26** (area 6) and **32** (area 7) coincide with former field boundaries recorded on historic maps published during or later than AD 1839 as shown in Table 1.

6.3.3 Data with no previous archaeological provenance

Anomaly groups **6** to **9** in area 3 represents a magnetically enhanced area of deposits with unusually clear form that may have archaeological significance such as industrial or craft deposits although a modern origin cannot be ruled out.

Group **11** (area 4) may represent a ditch-sided narrow track or former field boundary of the Devon bank type removed before the creation of the 1839 Dawlish tithe map.

Groups **13** to **16** (area 4) are most likely to represent rubble or near-surface bedrock. The ground is relatively stony underfoot. The rubble, if present, may have archaeological origins such as demolished buildings or in-filled quarries.

The remaining groups are most likely to represent disrupted linear and curvilinear deposits, such as former ditches or banks, of unknown period and phase of past land management.

6.4 Conclusions

Twenty-nine magnetic anomaly groups were mapped as representing possible archaeological deposits or features. None were mapped in the accessible parts of areas 1 and 2 (Figure 2). Seven of these anomaly groups (1, 14, 19, 20, 21, 26 and 32) represent former field boundaries recorded on historic maps. Four groups (6 to 9) have a distinct and unusually clear presence in the dataset (Figure 7). They may have archaeological significance such as industrial or craft deposits although a modern origin is equally likely. One group (11) is most likely to represent a former field boundary or narrow, ditched lane removed before AD 1839. Four groups (13 to 16) may represent areas of rubble of unknown origin or near surface bedrock. The remaining groups are most likely to represent linear and disrupted linear deposits, such as former ditches or banks, of unknown period and from one or more phases of past land management.

7 Disclaimer and copyright

The description and discussion of the results presented in this report are the authors, 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.

8 Acknowledgements

Substrata would like to thank John Valentin of AC Archaeology Ltd for commissioning us to complete this survey.

9 Bibliography

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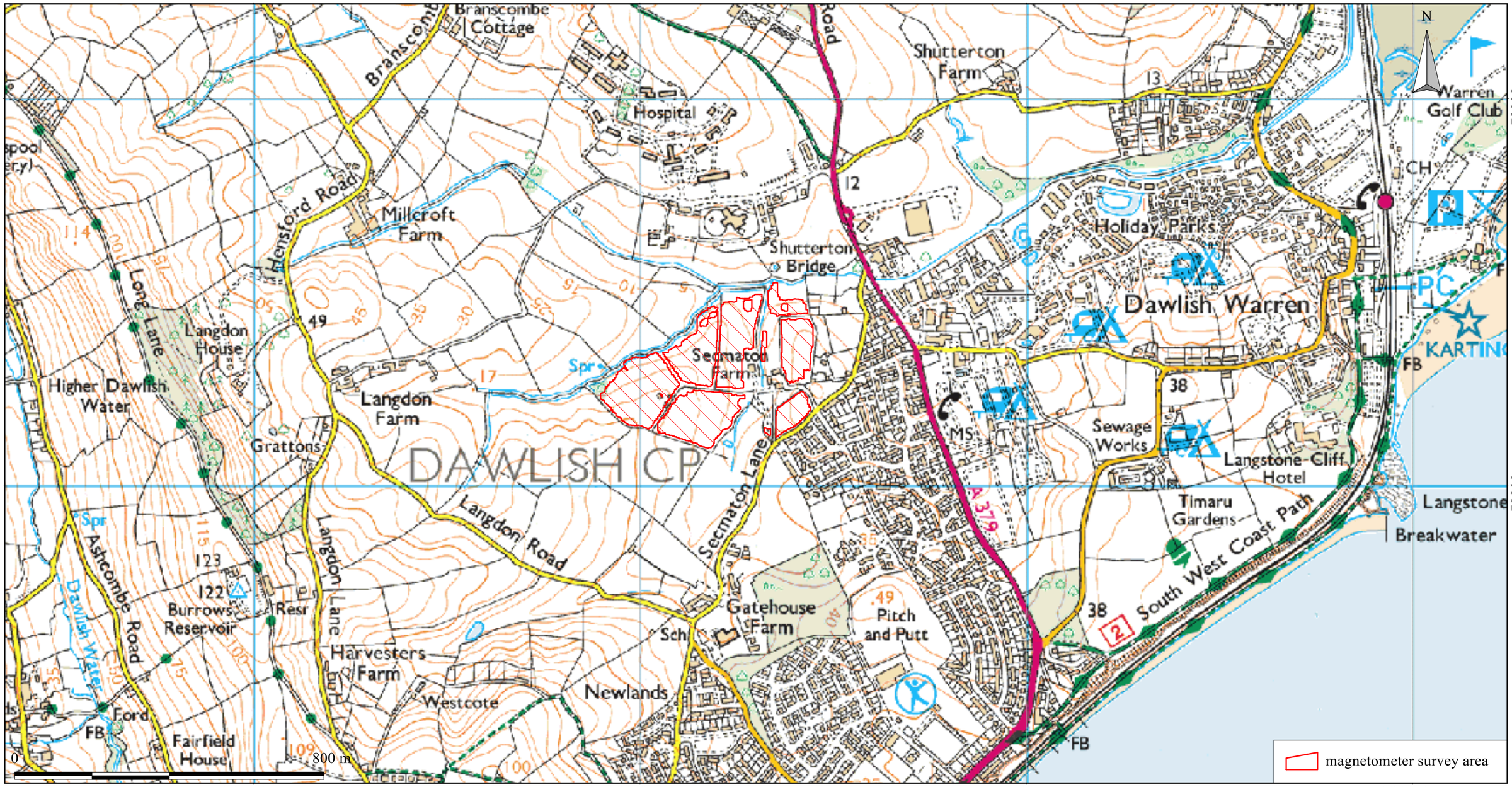
Appendix 1 Figures

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 (see Section 6.1).

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.



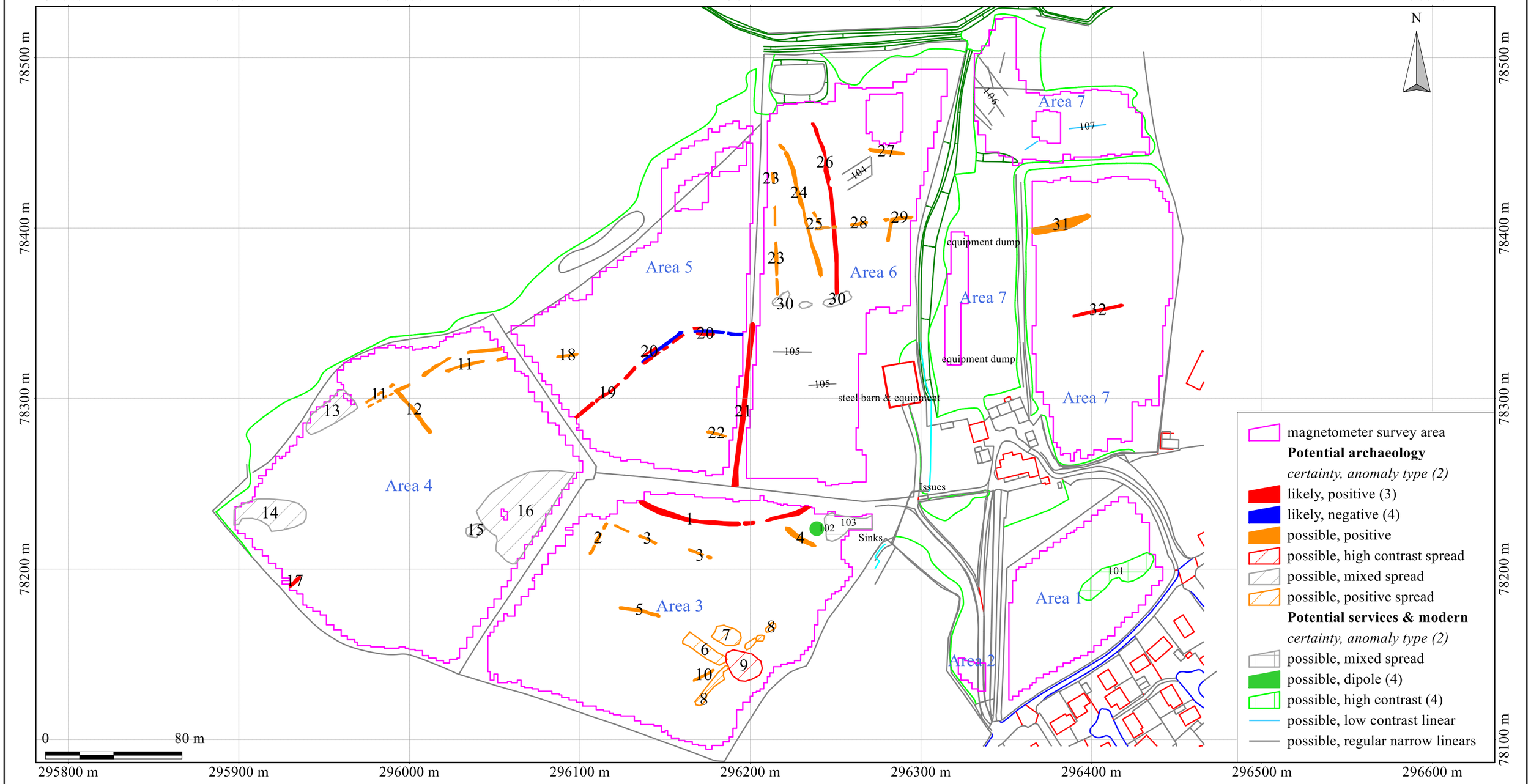
British Grid
centre X: 296300.16 m, centre Y: 78236.53 m

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

An archaeological magnetometer survey
Land at Area 3, Secmanton Lane, Dawlish, Devon
Centred on NGR (E/N): 296290,078360 (point)
Report: 1610DAW-R-1

Figure 1: location map

Substrata Limited
Office 1, 5 Mill Street
Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk



British Grid
centre X: 296208.68 m, centre Y: 78308.38 m

Scale: 1:2200 @ 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. Representative; not all instances are mapped.
5. Anomalies likely to represent geological or other natural deposits are not mapped unless relevant to potential archaeological events or deposits.

An archaeological magnetometer survey
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Figure 2: survey interpretation, entire area

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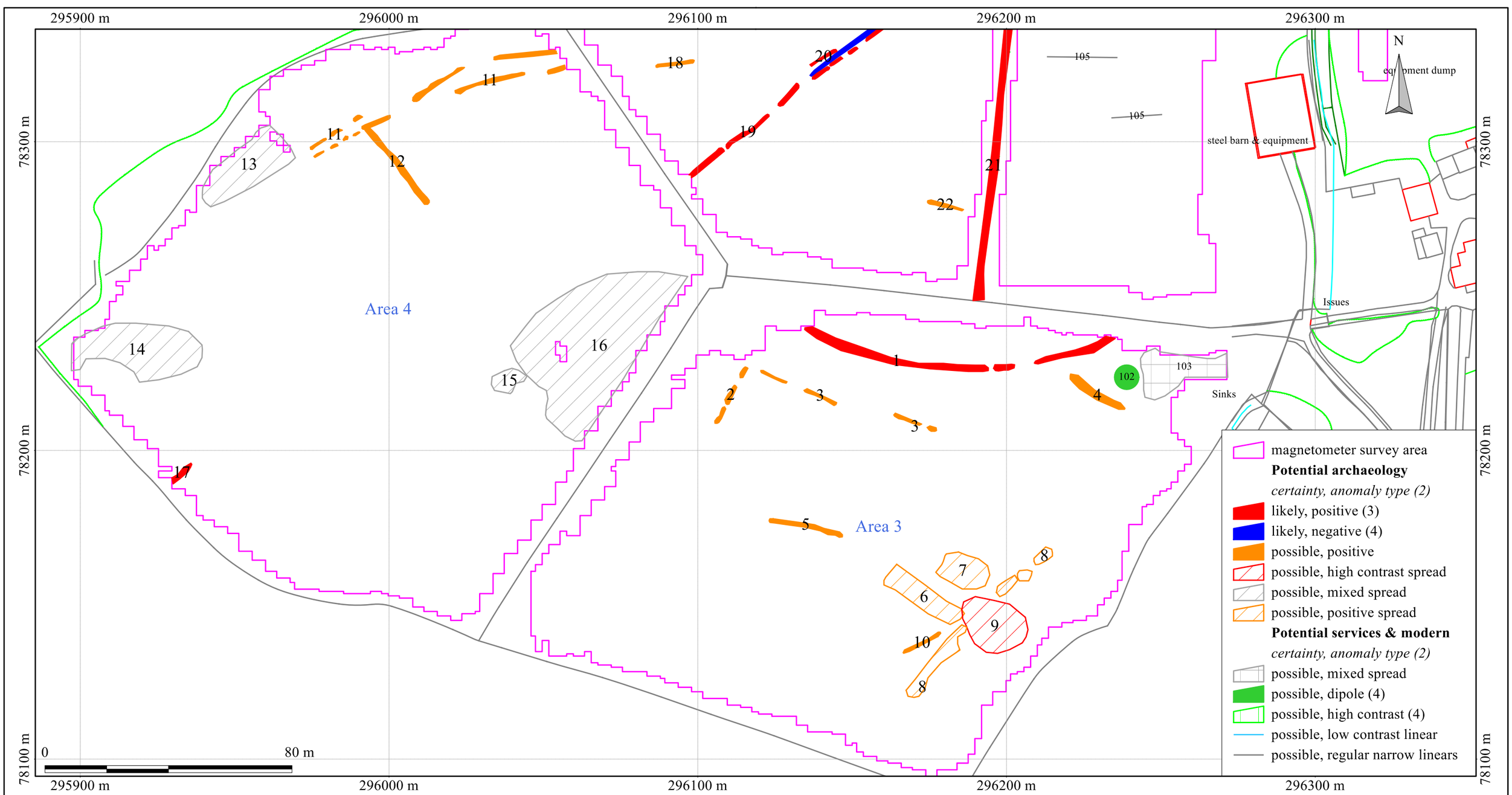
Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk



British Grid
centre X: 296118.77 m, centre Y: 78215.46 m

Scale: 1:1200 @ 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. Representative; not all instances are mapped.
5. Anomalies likely to represent geological or other natural deposits are not mapped unless relevant to potential archaeological events or deposits.

An archaeological magnetometer survey
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Figure 3: survey interpretation, areas 3 and 4

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Office 1, 5 Mill Street
Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk

296100 m 296200 m 296300 m

78500 m

78400 m

78300 m

magnetometer survey area

Potential archaeology

certainty, anomaly type (2)

likely, positive (3)

likely, negative (4)

possible, positive

possible, high contrast spread

possible, mixed spread

possible, positive spread

Potential services & modern

certainty, anomaly type (2)

possible, mixed spread

possible, dipole (4)

possible, high contrast (4)

possible, low contrast linear

possible, regular narrow linears

N

Area 5

Area 6

Area 7

steel barn & equipment

Issues

0 16 80 m

British Grid
centre X: 296197.34 m, centre Y: 7837

Scale: 1:1000 @ 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. Representative; not all instances are mapped.
5. Anomalies likely to represent geological or other natural deposits are not mapped unless relevant to potential archaeological events or deposits.

An archaeological magnetometer survey
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Figure 4: survey interpretation, areas 5 and 6

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Office 1, 5 Mill Street
Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk

296300 m 296400 m 296500 m

78500 m 78400 m 78300 m

N

Area 7

106

107

107

27

104

28

29

31

equipment dump

Area 6

Area 7

32

equipment dump

steel barn & equipment

Area 7

Issues

0 80 m

296300 m 296400 m 296500 m

magnetometer survey area

Potential archaeology

certainty, anomaly type (2)

likely, positive (3)

likely, negative (4)

possible, positive

possible, high contrast spread

possible, mixed spread

possible, positive spread

Potential services & modern

certainty, anomaly type (2)

possible, mixed spread

possible, dipole (4)

possible, high contrast (4)

possible, low contrast linear

possible, regular narrow linears

British Grid
centre X: 296386.25 m, centre Y: 7837

Scale: 1:1000 @ 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. Representative; not all instances are mapped.
5. Anomalies likely to represent geological or other natural deposits are not mapped unless relevant to potential archaeological events or deposits.

An archaeological magnetometer survey
Land at Area 3, Secmanton Lane, Dawlish, Devon
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Figure 5: survey interpretation, area 7

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Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk

British Grid
centre X: 296208.68 m, centre Y: 78308.38 m

Scale: 1:2200 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey
Land at Area 3, Secmanton Lane, Dawlish, Devon
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Figure 6: shade plot of processed data, entire area

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Tel: 01273 273599
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Web: substrata.co.uk

British Grid
centre X: 296118.77 m, centre Y: 78215.46 m

Scale: 1:1200 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey
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Figure 7: shade plot of processed data, areas 3 and 4

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Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk

296100 m 296200 m 296300 m

78500 m

78400 m

78300 m

Processed gradiometer
shade plot (nT)
1.5
-1.5

N

steel barn & equipment

Issues

0 80 m

296100 m 296200 m 296300 m

British Grid
centre X: 296197.34 m, centre Y: 7837

Scale: 1:1000 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey
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Figure 8: shade plot of processed data, areas 5 and 6

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Office 1, 5 Mill Street
Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk

296300 m
296400 m
296500 m
78500 m
78400 m
78300 m
N
equipment dump
equipment dump
steel barn & equipment
Issues
0
80 m
Processed gradiometer
shade plot (nT)
1.5
-1.5

British Grid
centre X: 296386.25 m, centre Y: 7837

Scale: 1:1000 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey
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Figure 9: shade plot of processed data, area 7

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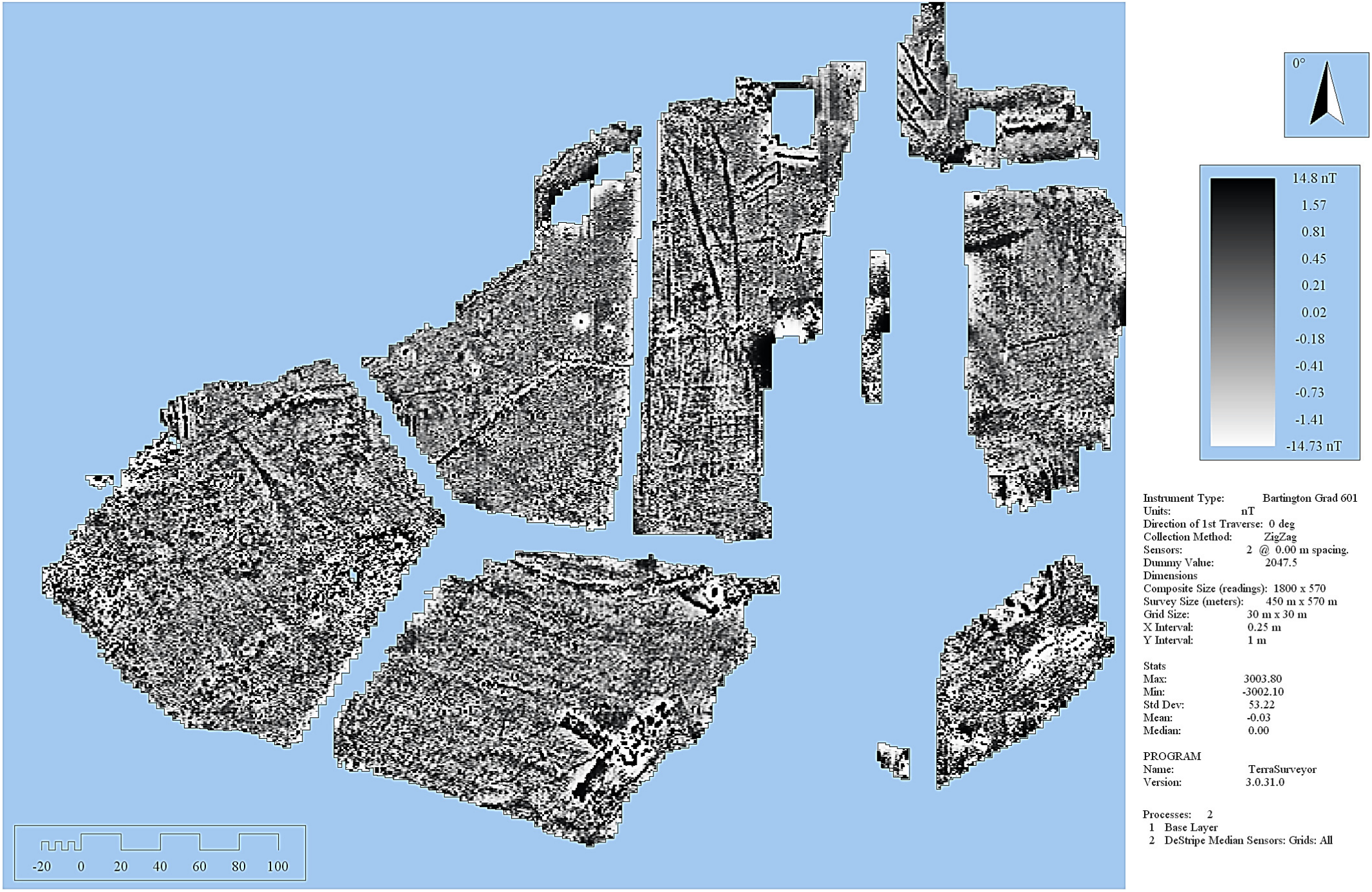
Office 1, 5 Mill Street
Bideford, Devon EX39 2JT
Tel: 01273 273599
Email: geophysics@substrata.co.uk
Web: substrata.co.uk



Instrument Type: Bartington Grad 601
Units: nT
Direction of 1st Traverse: 0 deg
Collection Method: ZigZag
Sensors: 2 @ 0.00 m spacing.
Dummy Value: 2047.5
Dimensions
Composite Size (readings): 1800 x 570
Survey Size (meters): 450 m x 570 m
Grid Size: 30 m x 30 m
X Interval: 0.25 m
Y Interval: 1 m

Stats
Max: 3003.80
Min: -3002.10
Std Dev: 53.22
Mean: -0.03
Median: 0.00

PROGRAM
Name: TerraSurveyor
Version: 3.0.31.0

Processes: 2
1 Base Layer
2 DeStripe Median Sensors: Grids: All

Figure 10: shade plot of minimally processed data

Appendix 2 Tables

Site: An archaeological magnetometer survey
Land at Area 3, Secmanton Lane, Dawlish, Devon
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area number	anomaly group	associated anomalies	anomaly characterisation certainty & class	anomaly form	additional archaeological characterisation	comments	supporting evidence
1	101		possible, high contrast	area	ferrous debris	debris spread by ploughing	
3	1		likely, positive	disrupted curvilinear	field boundary	anomaly group coincides with a field boundary recorded on historic maps	1839 Dawlish tithe, OS maps 1876 1:10560 to 1938 1:10560
	2		possible, positive	disrupted linear			
	3		possible, positive	disrupted linear			
	4		possible, positive	linear			
	5		possible, positive	linear			
	6		possible, positive spread	rectangular	magnetically enhanced material	it is not clear whether these anomaly groups represent archaeological or recent deposits	
	7		possible, positive spread	irregular	magnetically enhanced material	it is not clear whether these anomaly groups represent archaeological or recent deposits	
	8		possible, positive spread	disrupted broad linear	magnetically enhanced material	it is not clear whether these anomaly groups represent archaeological or recent deposits	
	9		possible, high contrast spread	irregular	industrial or craft deposits	it is not clear whether these anomaly groups represent archaeological or recent deposits	
	10		possible, positive	linear			
	102		possible, dipole		ferrous material		
	103		possible, mixed spread	irregular	rubble and/or landfill	anomaly group lies next to sinks and a modern origin is therefore most likely	
4	11	12?	possible, positive	disrupted parallel curvilinears		anomaly groups may represent a former Devon bank field boundary or a narrow lane	
	12		possible, positive	linear			
	13		possible, mixed spread	irregular	rubble or near-surface bedrock	anomaly groups may represent deposits rubble, filled quarries or near-surface bedrock	
	14		possible, mixed spread	irregular	rubble or near-surface bedrock	anomaly groups may represent deposits of landfill or filled quarries of unknown age	
	15		possible, mixed spread	irregular	rubble or near-surface bedrock	anomaly groups may represent deposits of landfill or filled quarries of unknown age	
	16		possible, mixed spread	irregular	rubble or near-surface bedrock	anomaly groups may represent deposits of landfill or filled quarries of unknown age	
	17		likely, positive	linear	field boundary	anomaly group coincides with a field boundary recorded on historic maps	1839 Dawlish tithe
5	18	11?	possible, positive	linear			
	19	20	likely, positive	disrupted linear	field boundary	anomaly group coincides with a field boundary recorded on historic maps	1839 Dawlish tithe, OS maps 1876 1:10560 to 1984 1:10000
	20		likely, positive/negative/positive	disrupted return	field boundary - possible Devon bank	anomaly group coincides with a field boundary recorded on historic maps	1839 Dawlish tithe, OS maps 1876 1:10560 to 1984 1:10000
	21		likely, positive	linear	field boundary	anomaly group coincides with a field boundary recorded on historic maps	1839 Dawlish tithe, OS maps 1876 1:10560 to 1984 1:10000
	22		possible, positive	linear			
6	23		possible, positive	disrupted linear	field boundary	anomaly group has the same trend as the survey traverses and so must be treated with caution - approximately coincides with a field boundary recorded on historic maps	OS maps 1876 1:10560 to 1906 1:2500 & as a partial boundary last recorded on OS 1938 1:10560
	24		possible, positive	linear			
	25		possible, positive	disrupted linear			
	26		likely, positive	linear	field boundary	anomaly group coincides with a field boundary recorded on historic maps	1839 Dawlish tithe
	27		possible, positive	linear			
	28	29	possible, positive	disrupted linear			
	29	28	possible, positive	return			
	30		possible, mixed spread	disrupted broad linear	field boundary	anomaly group approximately coincides with a field boundary recorded on historic maps	1839 Dawlish tithe, OS maps 1876 1:10560 to 1984 1:10000
	104		possible, regular narrow linears		field drain		
	105		possible, regular narrow linears		field drain or service trench		
7	31		possible, positive	broad linear			
	32		likely, positive	linear	field boundary	anomaly group approximately coincides with a field boundary recorded on historic maps	1839 Dawlish tithe
	106		possible, regular narrow linears		field drain		
	107		possible, low contrast linear		service trench		

Table 1: data analysis

Documents
Survey methodology statement: Dean (2016)

Methodology
1. The work was undertaken in accordance with the survey methodology statement. The geophysical (magnetometer) survey was undertaken with reference to standard guidance provided by the Chartered Institute for Archaeologists (2014) and Archaeology Data Service (undated).
2. The survey grid location information and grid plan was recorded as part of the project in a suitable GIS system.
3. Data processing was undertaken using appropriate software, with all anomalies being digitised and geo-referenced. The final report included 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.

Grid
Method of Fixing: DGPS set-out using pre-planned survey grids and Ordnance Survey coordinates.
Composition: 30m by 30m grids
Recording: Geo-referenced and recorded using digital map tiles.
DGPS used: Spectra Precision PM5V2 GPS with external antenna and survey pole and DigiTerra Explorer 7 as the survey control program.

Equipment
Instrument: Bartington Instruments grad601-2
Firmware: version 6.1

Data Capture
Sample Interval: 0.25m
Traverse Interval: 1 metre
Traverse Method: zigzag
Traverse Orientation: GN

Data Processing, Analysis and Presentation Software
IntelliCAD Technology Consortium IntelliCAD 8.0
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 2: methodology summary

SITE
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: 3.0.31.0

Stats	
Max:	14.80
Min:	-14.73
Std Dev:	2.80
Mean:	0.02
Median:	0.01

Processes: 19
1 Base Layer
2 Clip at 1.00 SD
3 De Stagger: Grids: c16.xgd Mode: Both By: 2 intervals
4 De Stagger: Grids: c20.xgd Mode: Both By: 2 intervals
5 De Stagger: Grids: h3.xgd b4+h14.xgd Mode: Both By: 1 intervals
6 De Stagger: Grids: d3.xgd Mode: Both By: -1 intervals
7 De Stagger: Grids: a20.xgd Mode: Both By: 1 intervals
8 De Stagger: Grids: a25.xgd Mode: Both By: 1 intervals
9 De Stagger: Grids: c3+b1.xgd b6+c4.xgd Mode: Both By: 1 intervals
10 De Stagger: Grids: e21.xgd f14.xgd Mode: Both By: -2 intervals
11 De Stagger: Grids: a14.xgd Mode: Both By: 1 intervals
12 De Stagger: Grids: b9.xgd Mode: Both By: 1 intervals
13 De Stagger: Grids: d1.xgd Mode: Both By: 1 intervals
14 DeStripe Median Sensors: Grids: All
15 De Stagger: Grids: d2.xgd d3.xgd Mode: Both By: -1 intervals
16 De Stagger: Grids: c3.xgd Mode: Both By: 1 intervals
17 De Stagger: Grids: c4.xgd Mode: Both By: 3 intervals
18 Interpolate: Match X & Y Doubled.
19 Clip at 3.00 SD

Table 3: processed data metadata