

**Substrata**

Archaeological Geophysical Surveyors

An archaeological magnetometer survey

**Land at Tregoddick  
Madron, Cornwall**

Centred on NGR: 145415,032000

Report: 1806MAD-R-1

Ross Dean BSc MSc MA MCifA  
Mark Edwards BA

3 August 2018

Substrata Ltd  
Langstrath  
Goodleigh  
Barnstaple  
Devon EX32 7LZ  
Tel: 01271 342721  
Email: [geophysics@substrata.co.uk](mailto:geophysics@substrata.co.uk)  
Web: [substrata.co.uk](http://substrata.co.uk)

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

Substrata Limited

Company number: 10348811

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

## Contents

1. Introduction .....	1
2. Client .....	1
3. Copyright.....	1
4. Survey type and location .....	1
5. Summary.....	1
6. Aims and objectives.....	2
7. Standards .....	2
8. Methodology.....	2
9. Survey Area .....	2
10. Archaeological background .....	3
11. Results .....	3
12. Discussion.....	3
13. Conclusions .....	4
14. Disclaimer.....	4
15. Archive .....	4
16. Acknowledgements .....	4
17. Bibliography .....	5
Appendix 1 Figures .....	6
Appendix 2 Tables.....	13
Appendix 3 Project archive contents .....	18

## Figures

Figure 1: location map .....	7
Figure 2: survey interpretation.....	8
Figure 3: shade plot of processed data .....	9
Figure 4: contour plot of processed data .....	10
Figure 5: shade plot of minimally processed data.....	11
Figure 6: survey grid plan and location.....	12

## Tables

Table 1: data analysis .....	14
Table 2: methodology information .....	15
Table 3: processed data metadata.....	16
Table 4: minimally processed data metadata .....	17

## 1 Introduction

This report presents the results of an archaeological geophysical survey at the site listed in Section 4 and shown in Figure 1, hereafter referred to as the 'Survey Area'. It was commissioned by AC Archaeology Ltd on behalf of clients. The commissioning of this report was in keeping with the National Planning Policy Framework, Chapter 16, Paragraph 189 (Ministry of Housing, Communities & Local Government, 2018).

The survey and report were completed in compliance with a Survey Method Statement (Dean, 2018).

## 2 Client

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

## 3 Copyright

Substrata Ltd shall retain full copyright as defined in the Copyright, Designs and Patents Act 1988 with all rights reserved, excepting that it hereby provides an exclusive licence to the Client for the use of the report by the Client in all matters directly relating to the project. Any document produced to meet planning requirements may be freely copied for planning, development control, education and research purposes without recourse to the Copyright owner subject to all due and appropriate acknowledgements being provided. 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.

© Substrata Ltd 2018

## 4 Survey type and location

### 4.1 Survey

Method:	shallow depth magnetometer survey
Instrument:	twin-sensor fluxgate gradiometer
Date:	30 July 2018
Area:	0.5ha

### 4.2 Location

Site name:	Land at Tregoddick
Village:	Madron
Civil Parish:	Madron
District:	Penwith
County:	Cornwall
Nearest post code:	TR20 8SS
Survey centre NGR:	SW 45415 32000
Survey centre NGR (E/N):	145415,032000
Historic environment designation:	None
OASIS ID:	substrat1-324650

## 5 Summary

A magnetometer survey was selected to provide a relatively fast and cost-effective evaluation of any buried archaeology across the Survey Area (see Section 14). The magnetic anomaly groups pertaining to potential buried archaeology were georeferenced to the Ordnance Survey National Grid, mapped, characterised and assigned with an appropriate degree of certainty in conformance with the survey aims and objectives set out in Section 6.

The differences in magnetic responses across the Survey Area were sufficient to be able to differentiate between anomalies representing possible buried archaeology and background magnetic responses. One magnetic anomaly group was characterised as representing either a potential linear archaeological deposit or recent ground disturbance.

## 6 Aims and objectives

### 6.1 Aims

1. Within the framework set out in Chartered Institute for Archaeologists (2014a), complete an archaeological geophysical survey and report which will, as far as possible, establish the presence or absence, extent and character of any buried archaeology within the Survey Area.
2. Provide sufficient information on the nature of any archaeological remains to facilitate the assessment of their interest prior to the determination of the planning application.

### 6.2 Objectives

1. Complete a magnetometer survey across the Survey Area.
2. Identify any magnetic anomalies that may be related to buried archaeology.
3. Within the limits of the technique 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 informs any subsequent development on the survey area about the location and possible archaeological character of the recorded anomalies.

## 7 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).

## 8 Methodology

The magnetometer survey was undertaken in accordance a Survey Method Statement (Dean, 2018) to achieve the aims and objectives set out in Section 6 using the standards and guidance specified in Section 7. The survey method was selected to provide a relatively fast and cost-effective evaluation of any buried archaeology across the Survey Area (see Section 14).

Data processing was undertaken using appropriate software (Table 2), 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. The survey and report conform to the Chartered Institute for Archaeologists standard for geophysical survey (CIfA, 2014a).

## 9 Survey Area

### 9.1 Location and description

The 'Survey Area' comprises a single plot of land on the eastern side of the village of Madron (Figure 1). The plot is bounded by hedges, wooden fencing and stone walling fronted by high, rough vegetation (Figure 2).

The Survey Area was relatively flat and under recently cut rough vegetation at the time of the survey.

### 9.2 Geology

The bedrock across the Survey Area is hornfelsed slate and hornfelsed siltstone of the Devonian Mylor Slate Formation. A geological fault, trending north-north-west to south-south-east, passes through or close by the Survey Area. The superficial geology is not recorded in the source used (British Geological Survey, undated).

### 9.3 Soils and near-surface deposits

The topsoil is 'Freely draining slightly acid loamy soils over rock' (LandIS, undated).

No site-relevant geotechnical reports or borehole logs of near-surface deposits were available at the time of writing.

## 10 Archaeological background

### 10.1 Historic landscape characterisation 'Farmland: Prehistoric'

The agricultural heartland, with farming settlements documented before the 17th century AD and whose field patterns are morphologically distinct from the generally straight-sided fields of later enclosure (Cornwall Council, undated).

### 10.2 Statement of research

The Cornwall Council Historic Environment Record 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. Whilst providing a useful context for the data analysis, this source is not necessarily comprehensive and publication of the information in commercial reports is not permitted.

## 11 Results

### 11.1 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 differences in the magnetic properties 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 dimensions of magnetic anomalies mapped as representing potential buried archaeology do not represent the dimensions of any associated archaeology.

The analysis presented below identifies and characterises anomalies and anomaly groups that may relate to buried archaeology.

### 11.2 Analysis

Figure 2 shows the interpretation of the survey data and includes 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.

Figure 2 and Table 1 comprise the analysis of the survey data.

Figures 3 and 4 are plots of the processed data as specified in Table 3. Figure 5 is a plot of minimally processed data as specified in Table 4. Figure 6 shows the location of the survey grid and grid data files.

## 12 Discussion

### 12.1 General points

#### 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 in the survey archive.

#### Data collection

Data collection along the survey area edges was restricted as shown in the figures due to the presence of dense, rough vegetation and magnetic materials within and adjacent to the plot boundaries. Strong magnetic responses mapped close to the boundaries are likely to relate to the magnetic materials except where otherwise indicated in Figure 2 and Table 1.

#### Anomaly characterisation

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 mapped as potential archaeology when they are associated with other significant anomaly groups or otherwise formed recognisable patterns as listed in Table 1.

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

12.2 Data relating to historic maps and other records

None of the magnetic anomaly groups relate to known historic assets.

12.3 Data with no previous archaeological provenance

Magnetic anomaly group 1 (Figure 2) may represent a linear archaeological deposit such as a former ditch but recent ground disturbance is equally likely.

No other anomaly groups were characterised as representing potential buried archaeology.

## 13 Conclusions

The differences in magnetic responses across the Survey Area were sufficient to be able to differentiate between anomalies representing possible buried archaeology and background magnetic responses.

One magnetic anomaly group (1) was characterised as representing either a potential linear archaeological deposit or recent ground disturbance.

## 14 Disclaimer

The description and discussion of the results presented in this report are the authors', based on their 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.

## 15 Archive

15.1 Online Access to the Index of archaeological investigationS (OASIS)

OASIS ID: substrat1-324650

The OASIS entry has been completed and the boundary file and report uploaded with six months delay in publication.

15.2 Substrata Limited archive

A full archive of this survey will be held by Substrata Limited on cloud and local hard drive storage as specified in Appendix 3.

15.3 Archaeological Data Service (ADS)

Depending on local authority policy, an archive may be deposited with the ADS as specified in Appendix 3.

15.4 Historic Environment Record (HER)

Subject to any contractual requirements on confidentiality, a PDF or printed copy of the report will be submitted to the appropriate HER within six months of completion.

## 16 Acknowledgements

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

## 17 Bibliography

Archaeology Data Service (undated). *Archaeology Data Service/Digital Antiquity Guides to Good Practice: Geophysical Data in Archaeology, 2nd Edition* [online]. Available at: [http://guides.archaeologydataservice.ac.uk/g2gp/Geophysics\\_Toc](http://guides.archaeologydataservice.ac.uk/g2gp/Geophysics_Toc) [Accessed 13 Jul. 2018].

British Geological Survey (undated). *Geology of Britain viewer, 1:50000 scale data* [online]. Available at: [http://www.bgs.ac.uk/discovering\\_Geology/geologyOfBritain/viewer.html](http://www.bgs.ac.uk/discovering_Geology/geologyOfBritain/viewer.html) [Accessed 1 Aug. 2018].

Chartered Institute for Archaeologists (2014a). *Standard and guidance archaeological geophysical survey* [online]. Available at: [http://www.archaeologists.net/sites/default/files/CIfAS&GGeophysics\\_1.pdf](http://www.archaeologists.net/sites/default/files/CIfAS&GGeophysics_1.pdf) [Accessed 13 Jul. 2018].

Chartered Institute for Archaeologists (2014b). *Code of conduct* [online]. Available at <http://www.archaeologists.net/sites/default/files/CodesofConduct.pdf> [Accessed 13 Jul. 2018].

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

Cornwall Council (undated). Cornwall Council Interactive Maps [online]. Available at <https://map.cornwall.gov.uk/website/ccmap/?zoomlevel=1&xcoord=162690&ycoord=64380&wsName=ccmap&layerName=> [Accessed 1 Aug. 2018].

Dean, R. (2018). *Magnetometer survey method statement. Land at Madron, Cornwall, Centred on NGR 145415,032000*. Substrata Ltd unpublished document 1806MAD-M-1.

Historic England (undated). *Heritage Gateway* [online]. Available at: <http://www.heritagegateway.org.uk/gateway/> [Accessed 1 Aug. 2018]

Historic England (2008). *Geophysical Survey in Archaeological Field Evaluation* [online]. Available at: <https://content.historicengland.org.uk/images-books/publications/geophysical-survey-in-archaeological-field-evaluation/geophysics-guidelines.pdf/> [Accessed 13 Jul. 2018].

LandIS (undated) *Cranfield Soils and Agrifood Institute Soilscales* [online]. Available: <http://www.landis.org.uk/soilscales/> [Accessed 1 Aug. 2018].

Ministry of Housing, Communities & Local Government (2018). *National Planning Policy Framework* [online]. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/728643/Revised\\_NPPF\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728643/Revised_NPPF_2018.pdf) [Accessed 3 Aug. 2018].

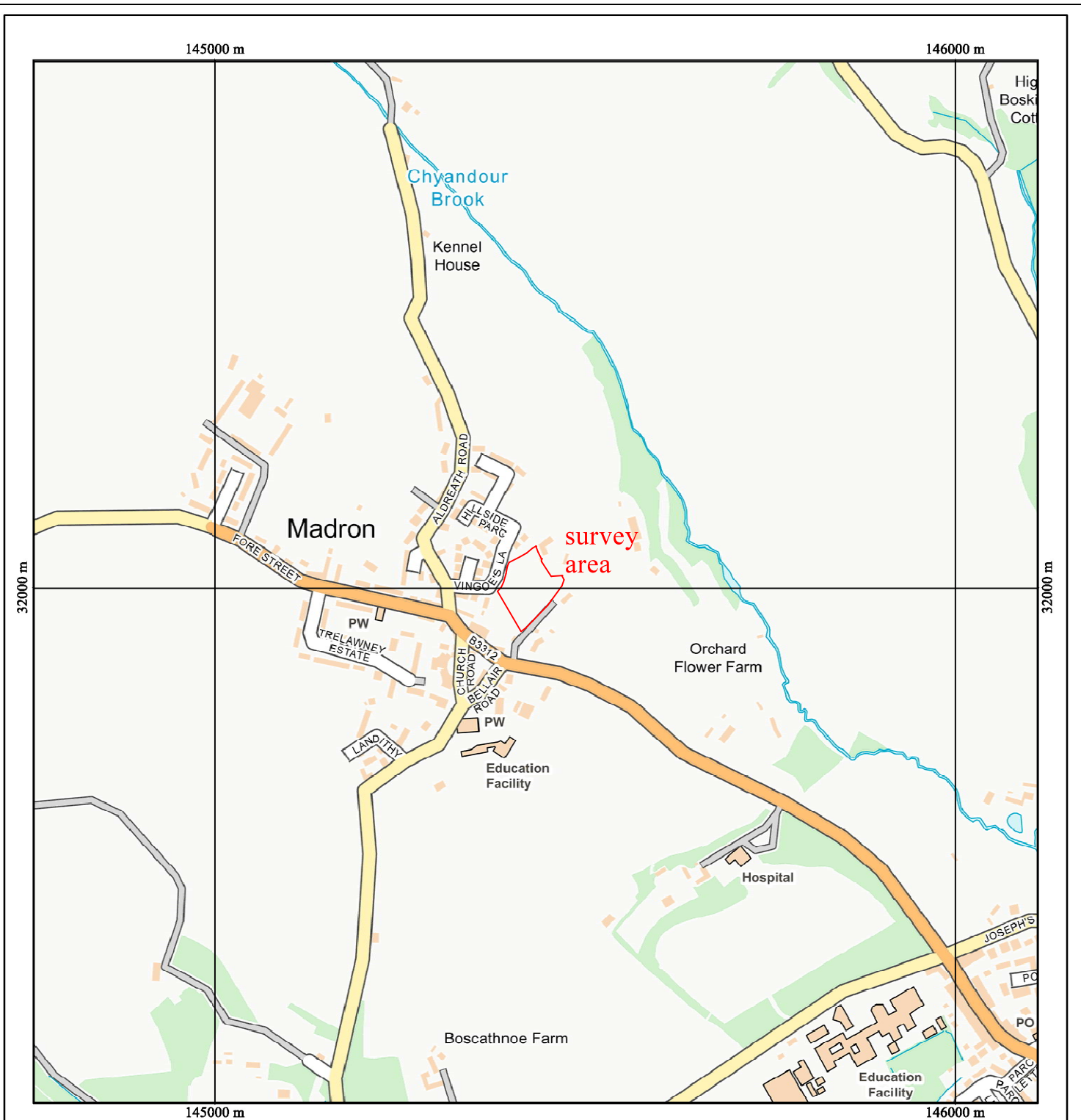
## Appendix 1     Figures

### 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.





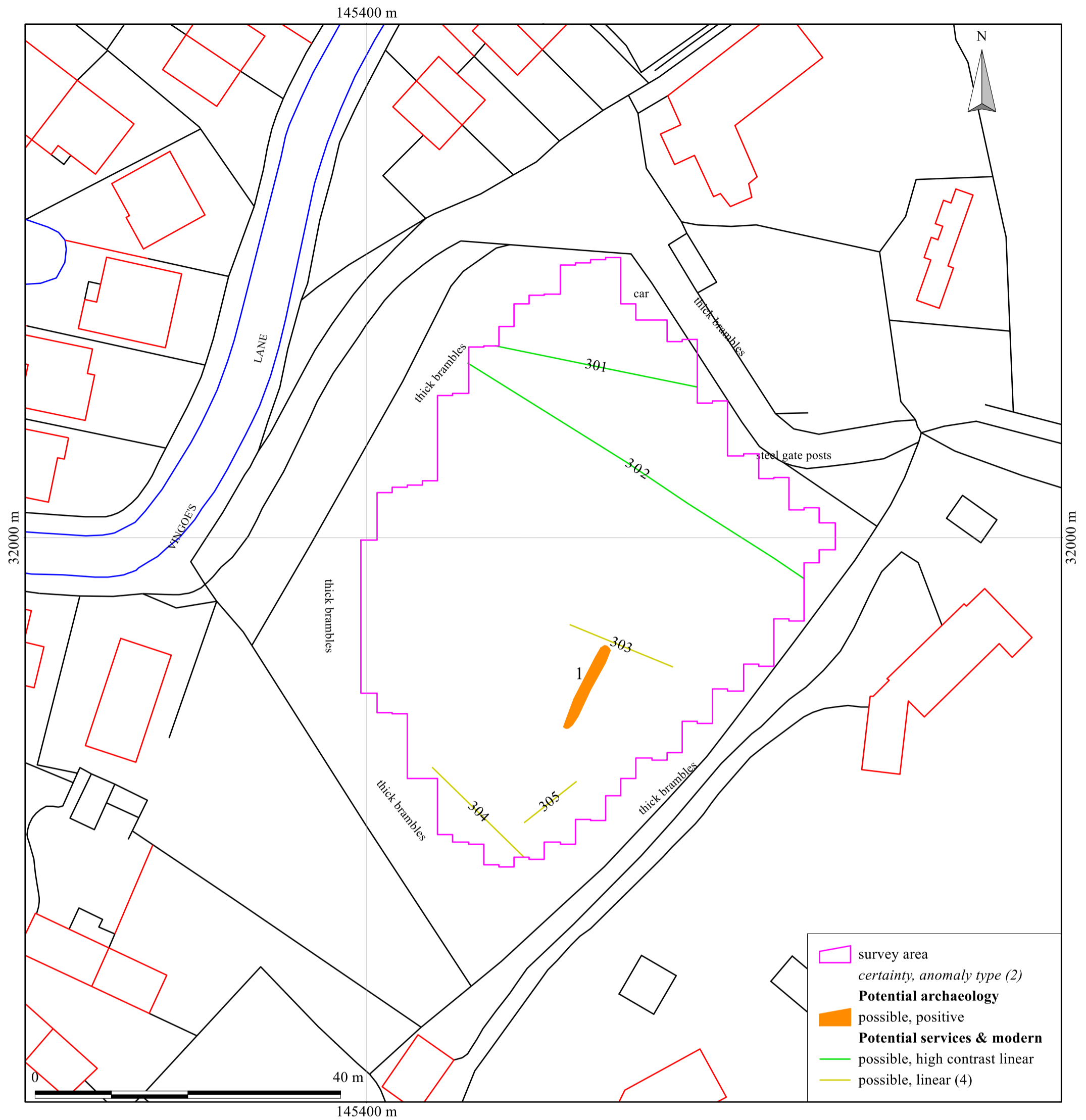
British Grid  
 centre X: 145433.30 m, centre Y: 32008.18 m

Geophysical survey: Copyright Substrata Limited.  
 Base map: Contains Ordnance Survey data  
 © Crown copyright and database right 2017

An archaeological magnetometer survey  
 Land at Tregoddick, Madron, Cornwall  
 Centred on NGR: 145415,032000  
 Report: 1806MAD-R-1

Substrata Limited  
 Langstrath, Goodleigh  
 Barnstaple, Devon EX32 7LZ  
 Tel: 01271 342721  
 Email: [enquiries@substrata.co.uk](mailto:enquiries@substrata.co.uk)  
 Web: [substrata.co.uk](http://substrata.co.uk)

Figure 1: location map



British Grid  
centre X: 145423.12 m, centre Y: 31996.67 m

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

Scale: 1:500 @ A3. Spatial Units: Meter. Do not scale off this drawing

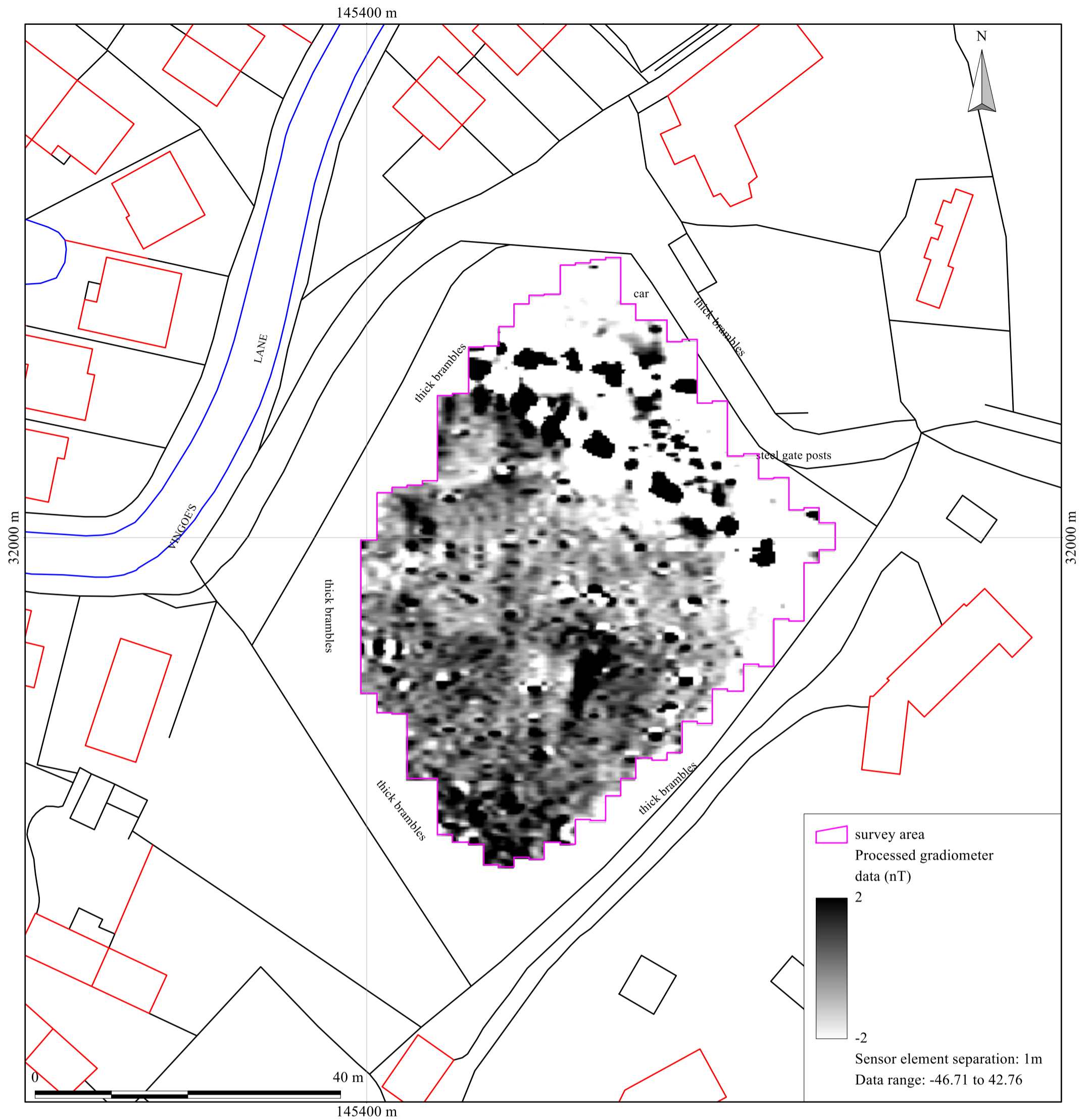
Notes:

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 deposits or ground disturbance, or geological and other natural deposits are not mapped unless relevant to potential buried archaeology.

An archaeological magnetometer survey  
Land at Tregoddick, Madron, Cornwall  
Centred on NGR: 145415,032000  
Report: 1806MAD-R-1

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

Figure 2: survey interpretation



British Grid  
centre X: 145423.12 m, centre Y: 31996.67 m

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

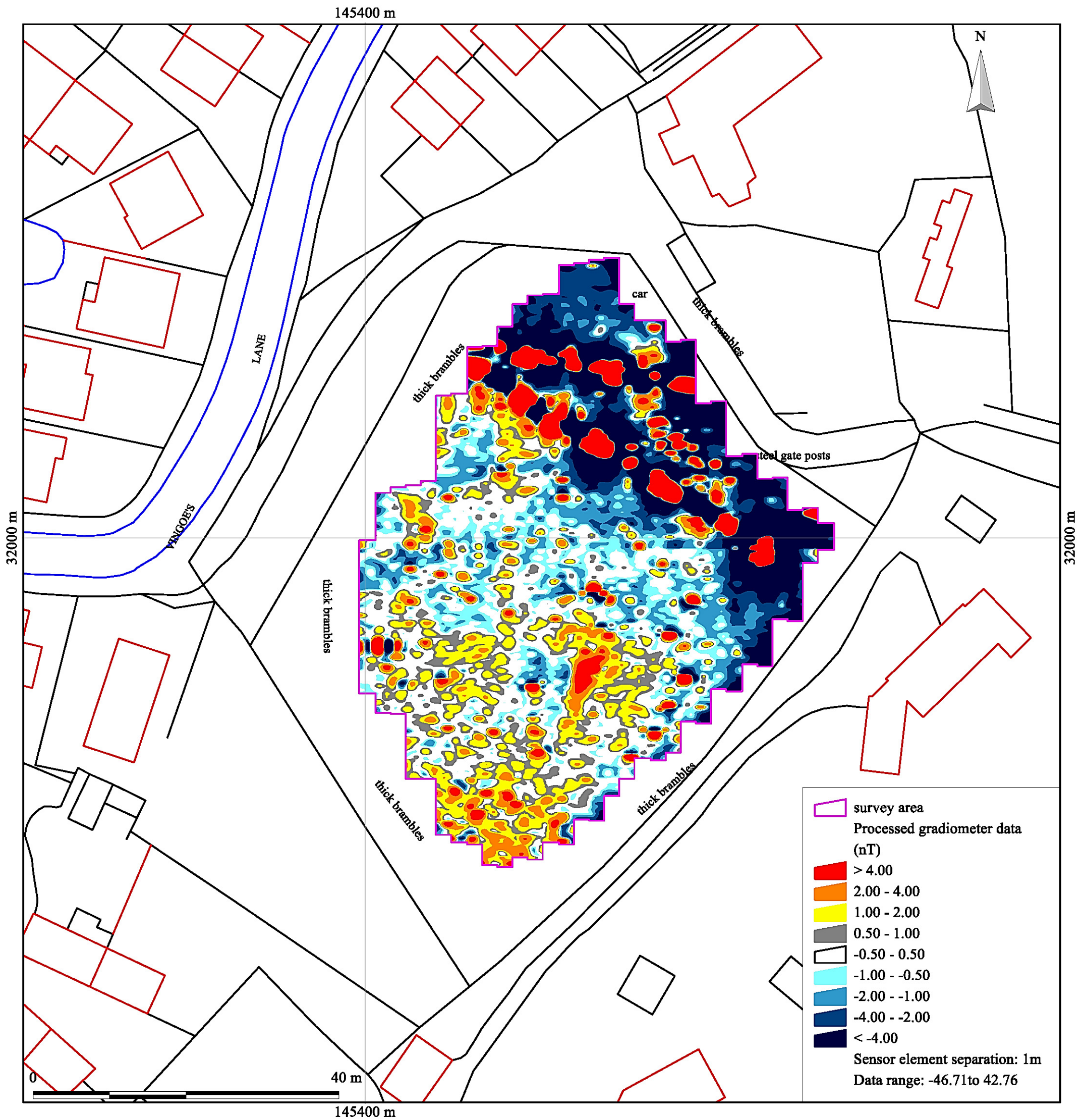
Scale: 1:500 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey  
Land at Tregoddick, Madron, Cornwall  
Centred on NGR: 145415,032000  
Report: 1806MAD-R-1

Figure 3: shade plot of processed data

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





British Grid  
 centre X: 145423.12 m, centre Y: 31996.67 m

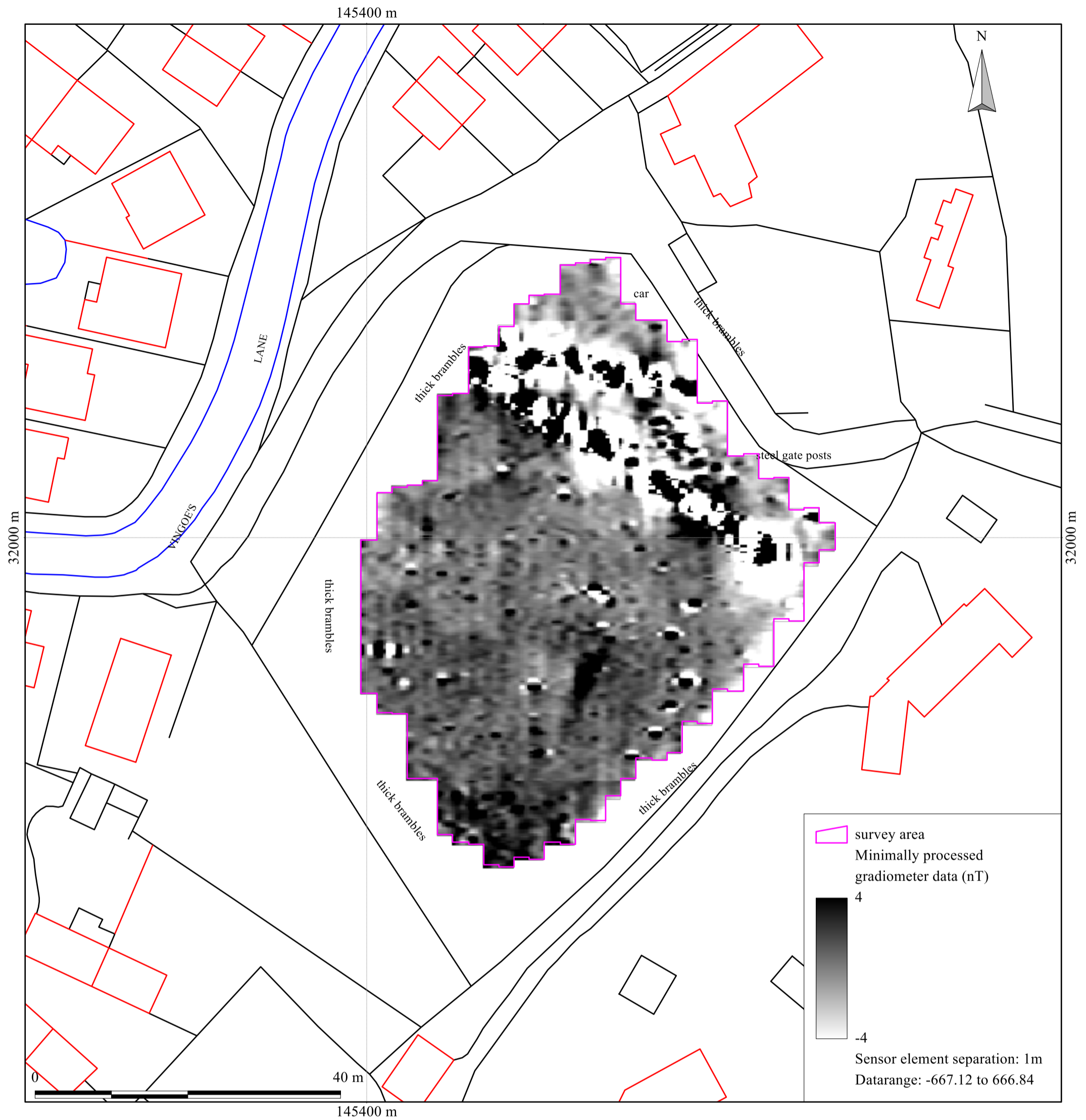
Geophysical survey: Copyright Substrata Limited.  
 Base map: Ordnance Survey (c) Crown Copyright 2018.  
 All rights reserved. Licence number 100022432

Scale: 1:500 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey  
 Land at Tregoddick, Madron, Cornwall  
 Centred on NGR: 145415,032000  
 Report: 1806MAD-R-1

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

Figure 4: contour plot of processed data



British Grid  
centre X: 145423.12 m, centre Y: 31996.67 m

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

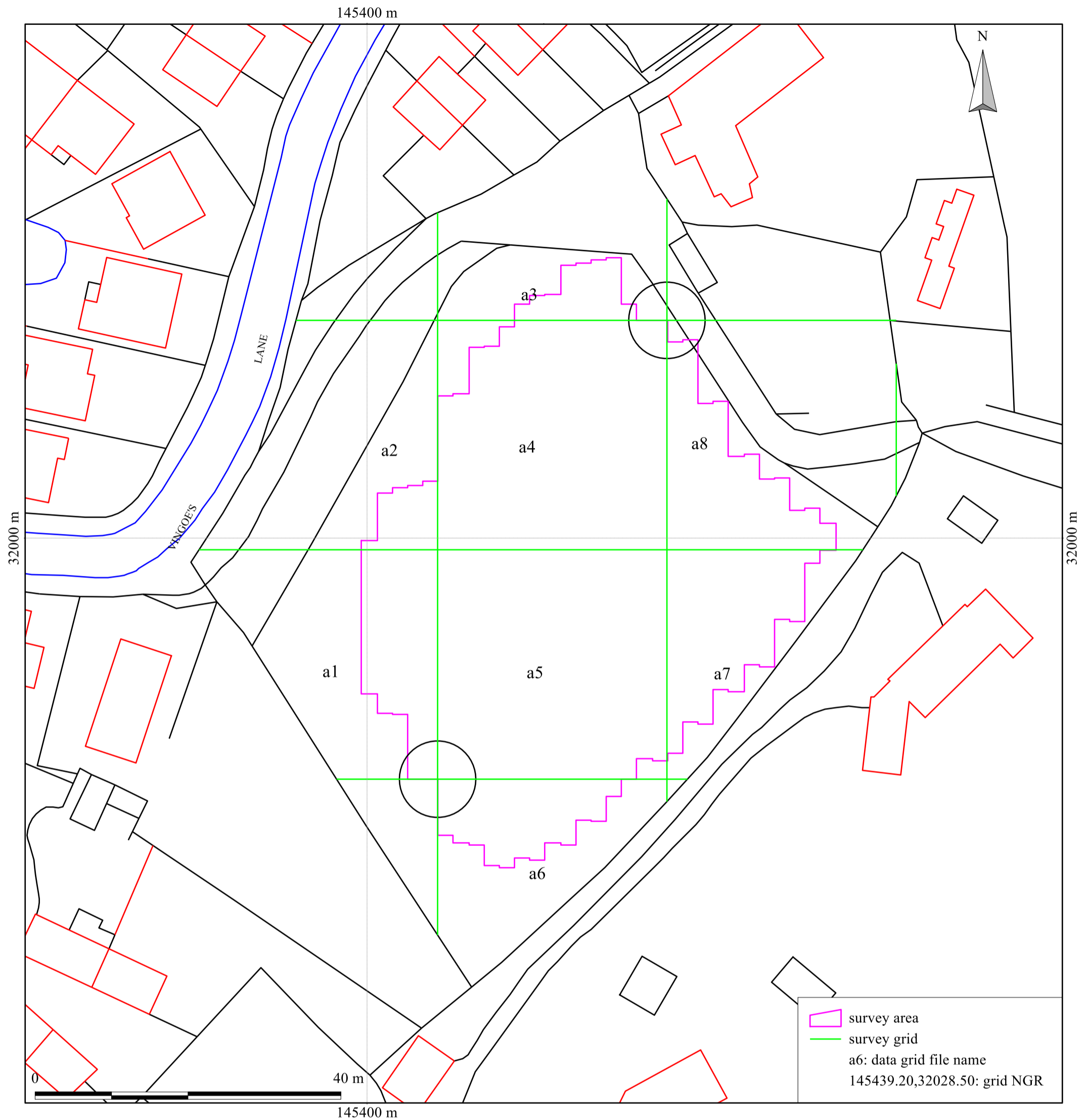
Scale: 1:500 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey  
Land at Tregoddick, Madron, Cornwall  
Centred on NGR: 145415,032000  
Report: 1806MAD-R-1

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

Figure 5: shade plot of minimally processed data





British Grid  
 centre X: 145423.12 m, centre Y: 31996.67 m

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

Scale: 1:500 @ A3. Spatial Units: Meter. Do not scale off this drawing

An archaeological magnetometer survey  
 Land at Tregoddick, Madron, Cornwall  
 Centred on NGR: 145415,032000  
 Report: 1806MAD-R-1

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

Figure 6: survey grid plan and location

## Appendix 2 Tables

Land at Tregoddick, Madron, Cornwall  
Centred on NGR 145415,032000

anomaly group	associated anomalies	anomaly characterisation certainty & class	anomaly form	additional archaeological characterisation	comments	supporting evidence
1		possible, positive	linear	archaeological deposit or recent disturbance		
301		possible, high contrast linear		steel or iron service cable or pipe		
302		possible, high contrast linear		steel or iron service cable or pipe		
303		possible, linear		recent ground disturbance		
304		possible, linear		recent ground disturbance		
305		possible, linear		recent ground disturbance		

Table 1: data analysis



<p><b>Grid</b>  <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.</p>	
<p><b>Equipment</b>  <i>Instrument:</i> Bartington Instruments grad601-2  <i>Firmware:</i> version 6.1</p>	<p><b>Data Capture</b>  <i>Sample Interval:</i> 0.25m  <i>Traverse Interval:</i> 1 metre  <i>Traverse Method:</i> zigzag  <i>Traverse Orientation:</i> GN</p>
<p><b>Data Processing, Analysis and Presentation Software</b>                  IntelliCAD 8.4                  DW Consulting TerraSurveyor3                  Manifold System 8 GIS                  Microsoft Corp. Office 365: Excel, Publisher, Word                  Adobe Systems Inc Adobe Acrobat 9 Pro Extended</p>	

Table 2: methodology information

<b>Instrument</b>	
Type:	Bartington Grad-601 gradiometer
Units:	nT
Direction of 1st Traverse:	see below
Collection Method:	ZigZag
Sensors:	2 @ 1.00 m spacing, each with 1m separation
Dummy Value:	32702
<b>Program</b>	
Name:	TerraSurveyor
Version:	3.0.33.6
<u>Statistics</u>	<u>Processing</u>
Max:	42.76
Min:	-46.71
Std Dev:	9.63
Mean:	-1.53
Median:	-0.57
	1 Base Layer
	2 Clip at 1.00 SD
	3 Clip at 1.00 SD
	4 De Stagger: Grids: All By: 0 intervals, 25.00cm
	5 DeStripe Median Sensors: Grids: All
	6 Edge Match (Area: Top 60, Left 120, Bottom 89, Right 239) to Top edge
	7 Edge Match (Area: Top 30, Left 240, Bottom 59, Right 359) to Left edge
	8 Edge Match (Area: Top 60, Left 240, Bottom 89, Right 359) to Left edge
	9 Edge Match (Area: Top 30, Left 360, Bottom 59, Right 479) to Left edge
	10 Edge Match (Area: Top 30, Left 0, Bottom 59, Right 119) to Right edge
	Interpolate match x & y double is imposed on export to the GIS

Table 3: processed data metadata

<b>Instrument</b>	
Type:	Bartington Grad-601 gradiometer
Units:	nT
Direction of 1st Traverse:	see below
Collection Method:	ZigZag
Sensors:	2 @ 1.00 m spacing, each with 1m separation
Dummy Value:	32702
<b>Program</b>	
Name:	TerraSurveyor
Version:	3.0.33.6
<u>Statistics</u>	<u>Processing</u>
Max:	666.84
Min:	-667.12
Std Dev:	80.38
Mean:	0.17
Median:	0.30
	1 Base Layer
	2 Clip at 2.00 SD
	Interpolate match x & y double is imposed on export to the GIS

Table 4: minimally processed data metadata

## Appendix 3 Project archive contents

### A3.1 Substrata Limited archive

A full archive of this survey will be held by Substrata Limited on cloud and local hard drive storage as follows:

Report:	Adobe PDF (.pdf), Microsoft Publisher (.pub)
Raw grid data files:	DW Consulting TerraSurveyor 3 (.xgd) and XYZ (.dat)
Minimally processed data composite files:	DW Consulting TerraSurveyor 3 (.xgd) and ESRI ASCII (.asc)
Final data processing composite files:	DW Consulting TerraSurveyor 3 (.xgd) and ESRI ASCII (.asc)
GIS project:	GIS project Manifold 8 (.map)
Survey interpretation:	ESRI shape files
AutoCAD version of the survey interpretation: (if generated)	AutoCAD (.dwg)
All project working files:	IntelliCAD 8.4 Microsoft Corp. Office 365: Excel, Publisher, Word Adobe Systems Inc Adobe Acrobat 9 Pro Extended

### A3.2 Online Access to the Index of archaeological investigationS (OASIS)

Metadata:	online form
Georeferenced survey boundary file:	ESRI shape file
Report:	Adobe PDF (.pdf)

### A3.3 Archaeological Data Service

Depending on local authority policy, an archive may be deposited with the ADS as follows:

Raw data composite file:	XYZ file
Processed data plot:	rendered images in TIFF format
Survey grid plot:	image in TIFF format
Details of data processing:	image in TIFF format
Interpretation plot:	rendered images in TIFF format
Metadata:	Microsoft Excel format

### A3.4 Historic Environment Record (HER)

Subject to any contractual requirements on confidentiality, a PDF copy of the report will be submitted to the appropriate HER within 6 months of the completion of this report via the OASIS process or by other means, depending on the relevant HER process.