

Substrata

Archaeological Geophysical Surveyors

An archaeological magnetometer survey
SPLATFORD BARTON, KENN, DEVON

Centred on NGR SX 91059 85710
Report: 1904SPA-R-1

Mark Edwards BA

02 June 2019

Substrata Ltd
Langstrath
Goodleigh
Barnstaple
Devon EX32 7LZ
Tel: 01271 342721
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

Substrata Limited
Company number: 10348811

Registered office: Units 20 & 21, 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. Standards	2
7. Aims and objectives.....	2
8. Methodology.....	2
9. Survey Area	2
10. Archaeological background	3
11. Results	4
12. Discussion.....	4
13. Conclusions	5
14. Disclaimer.....	5
15. Archive	5
16. Acknowledgements.....	6
17. Bibliography	6
Appendix 1 Figures	7
Appendix 2 Tables.....	13
Appendix 3 Project archive contents	18

Figures

Figure 1: location map	8
Figure 2: survey interpretation.....	9
Figure 3: shade plot of processed data	10
Figure 4: shade plot of minimally processed data.....	11
Figure 5: 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 magnetometer survey at the proposed development site listed in Section 4.

The survey was commissioned by AC Archaeology Ltd on behalf of clients in advance of a planning application. 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 (Substrata Ltd, 2019).

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. This report or sections thereof 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 Ltd 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 2019

4 Survey type and location

4.1 Survey

Method:	shallow depth magnetometer survey
Instrument:	twin-sensor fluxgate gradiometer
Date:	18th April 2019
Area:	0.5ha
Investigation level:	Level 2 (prospection and delineation)
Survey resolution:	1m by 0.25m

4.2 Location

Name:	Splatford Barton
Town:	Kenn
Civil Parish:	Kenn
District:	Teignbridge
County:	Devon
Nearest Postcode:	EX6 7YN
Survey centre NGR:	SX 91059 85710 (point)
Survey centre NGR (E/N):	291059, 085710(point)
Historic environment designation:	None
OASIS ID:	substrat1-349888

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 7.

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.

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

6 Standards

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

7 Survey aims and objectives

7.1 Aims

1. Within the framework set out in Chartered Institute for Archaeologists (2014b) and Europae Archaeologiae Consilium (undated), 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.

7.2 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 is sufficiently detailed to inform any subsequent development on the survey area about the location and possible archaeological character of the recorded anomalies.

8 Methodology

The magnetometer survey was undertaken in accordance a Survey Method Statement (Substrata Ltd, 2018) using the standards specified in Section 6 to achieve the aims and objectives set out 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 (Chartered Institute for Archaeologists, 2014b) and Europae Archaeologiae Consilium (undated).

9 Survey Area

9.1 Location and description

The site is situated on the west side of a valley containing a stream, on an east-facing slope at around 50m aOD. In a wider context the site is situated on farmland between the River Exe to the north and the higher ridge of the Haldon Hills to the south

9.2 Geology and sub-surface deposits

The underlying solid geology comprises Permian breccia of the Alphington and Heavitree Breccia Formations; there are no overlying superficial deposits. (British Geological Survey, undated).

9.3 Soils

The topsoils in the vicinity are freely draining, slightly acid and loamy. (LandIS, undated).

10 Archaeological background

10.1 Historic landscape characterisation

‘Medieval enclosures’

This area was probably first enclosed with hedge-banks during the later middle ages. (Devon County Council, undated)

10.2 Summary of the archaeological background

This section summarises heritage assets that are thought relevant to the survey data analysis and is not designed to be a comprehensive description of the archaeological background.

A Heritage Desk-based Assessment and WSI for a site including the current Survey Area was completed by AC Archaeology (2019). The Assessment included an analysis of the recorded heritage assets, cartographic evidence, other documentary evidence and field name evidence within the site and an study area extending to 1000m around the site. The following is taken from the Assessment and an examination of the Devon County Council Historic Environment Record (HER) via Devon County Council (undated) and Historic England (undated). Historic maps were consulted using AC Archaeology (2018) and Old-Maps (undated). Whilst providing a useful context for the data analysis, the on-line HER information is not necessarily complete or up-to-date. Publication in commercial reports of both the HER information and the on-line historic maps is not permitted without a licence.

There are no designated or undesignated heritage assets within the Survey Area.

The archaeological interest in the site is, based on the geography of the area, the potential for as yet unrecorded evidence for prehistoric and Romano-British activity on the northern slopes of the Haldon Hills. Within the historic parish of Kenn for example there is a number of enclosures of potential late prehistoric or Romano-British date on the higher ground (e.g. Devon County Historic Environment Record (HER) MDV52103 and MDV37566). The northern slopes of the Haldon Hills also contain evidence for (presumably Bronze Age) funerary activity. Within the parish of Kenn there is a number of possible barrows identified from aerial photographs (e.g. MDV112471, MDV37370, MDV112469 and MDV112472, all located to the west of the present development site).

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 buried archaeology 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.

Figure 3 is the plot of the processed data as specified in Table 3. Figure 4 is a plot of minimally processed data as specified in Table 4. Figure 5 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 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 well defined in the data, 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.

Data trends

Parallel, linear anomalies following the approximately north-south trend of the extant field boundaries (Figures 3 to 5) and not otherwise discussed below are likely to represent relatively recent ploughing disturbance.

12.2 Data relating to historic maps and other records

No anomaly groups were assessed as representing previously recorded heritage assets.

12.3 Data with no previous archaeological provenance

No anomaly groups were characterised as representing potential buried archaeology.

Anomaly groups 1, 2, 3 and 4 were included in Figure 2 to make it clear that they did not represent potential 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.

No anomaly groups were characterised as representing potential buried archaeology.

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)

substrat1-349888

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

AC Archaeology (2019) Land at Splatford Barton, Kenn. Written scheme of investigation, Unpublished document.

Archaeology Data Service (undated) *Archaeology Data Service/Digital Antiquity Guides to Good Practice: Geophysical Data in Archaeology*. 2nd Edition. Available at: http://guides.archaeologydataservice.ac.uk/g2gp/Geophysics_Toc (Accessed 5 Oct. 2018).

British Geological Survey (undated) *Geology of Britain viewer, 1:50000 scale data*. Available at: http://www.bgs.ac.uk/discovering_Geology/geologyOfBritain/viewer.html (Accessed 19 Oct. 2018).

Chartered Institute for Archaeologists (2014) *Code of conduct*. Available at: <https://www.archaeologists.net/sites/default/files/CodesofConduct.pdf> (Accessed 5 Oct. 2018).

Chartered Institute for Archaeologists (2014b) *Standard and guidance archaeological geophysical survey*. Available at: https://www.archaeologists.net/sites/default/files/CifAS%26GGeophysics_2.pdf (Accessed 5 Oct. 2018).

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

Cotswold Archaeology (2018) *Land off Bloody Corner, Northam, Devon, Heritage Desk-Based Assessment*. Unpublished report 18030, project 882283.

Devon County Council (undated) *Historic environment*. Available at: <https://new.devon.gov.uk/historicenvironment/> (Accessed 22 Oct. 2018).

Europae Archaeologiae Consilium (undated) *EAC Guidelines for the Use of Geophysics in Archaeology, Questions to Ask and Points to Consider*. EAC Guidelines 2. Available at: http://old.european-archaeological-council.org/files/eac_guidelines_2_final.pdf (Accessed 5 Oct. 2018).

Historic England (undated) *Heritage Gateway*. Available at: <http://www.heritagegateway.org.uk/Gateway/> (Accessed 19 Oct. 2018).

LandIS (undated) *Cranfield Soils and Agrifood Institute Soilscales*. Available at: <http://www.landis.org.uk/soilscales/> (Accessed 19 Oct. 2018).

Ministry of Housing, Communities & Local Government (2018) *National Planning Policy Framework*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728643/Revised_NPPF_2018.pdf (Accessed 5 Oct. 2018).

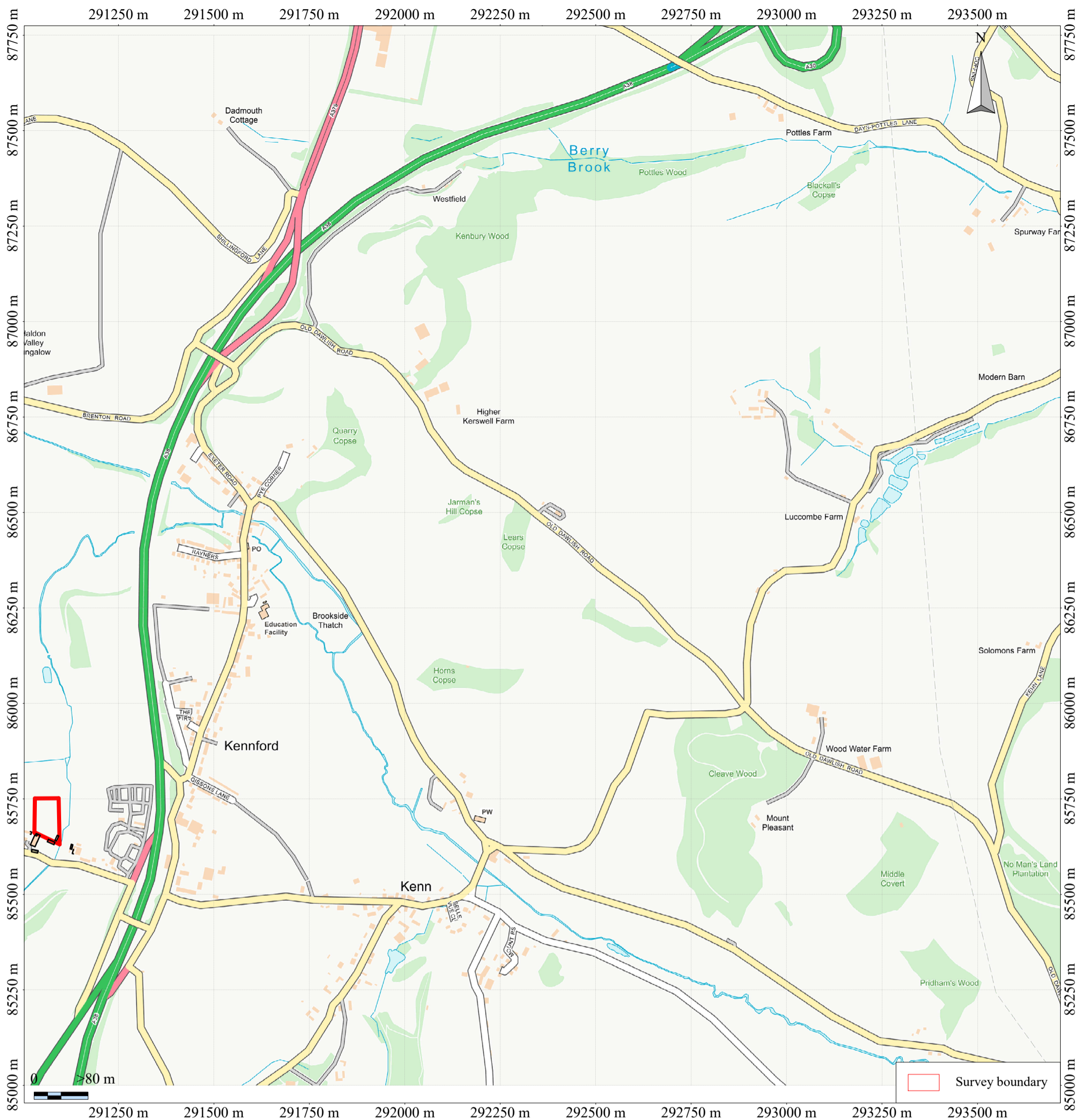
Old-Maps (undated) *old-maps.co.uk*. Available at: <https://www.old-maps.co.uk/#/> (Accessed 19 Oct. 2018).

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: 292360.16 m, centre Y: 86364.18 m

Geophysical survey: Copyright Substrata Limited.
 Base map: Ordnance Survey (c) Crown Copyright 2018.
 All rights reserved. Licence number 100053143

Scale: 1:10000 @ 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 Splatford Barton, Kenn, Devon
 Centred on NGR: 291059, 085710
 Report: 1904SPA-R

Substrata Limited
 Langstrath, Goodleigh
 Barnstaple, Devon EX32 7LZ
 Tel: 07504688135
 Email: enquiries@substrata.co.uk
 Web: substrata.co.uk

Figure 1: Location map



British Grid
centre X: 291082.12 m, centre Y: 85697.99 m

Geophysical survey: Copyright Substrata Limited.
Base map: Ordnance Survey (c) Crown Copyright 2018.
All rights reserved. Licence number 100053143

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

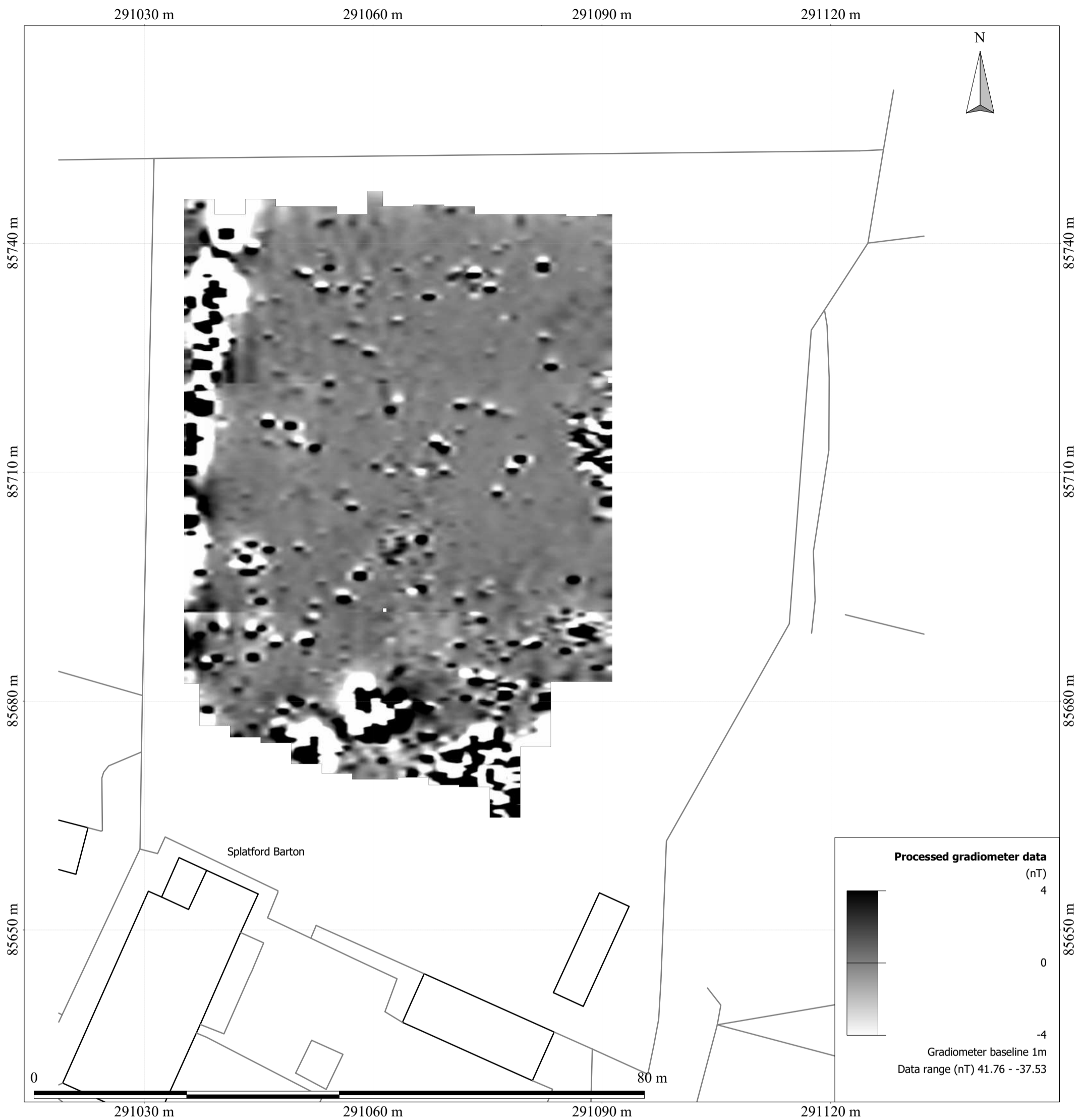
Notes:

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 Splatford Barton, Kenn, Devon
Centred on NGR: 291059, 085710
Report: 1904SPA-R

Substrata Limited
Langstrath, Goodleigh
Barnstaple, Devon EX32 7LZ
Tel: 07504688135
Email: enquiries@substrata.co.uk
Web: substrata.co.uk

Figure 2: Survey interpretation



British Grid
 centre X: 291082.12 m, centre Y: 85697.99 m

Geophysical survey: Copyright Substrata Limited.
 Base map: Ordnance Survey (c) Crown Copyright 2018.
 All rights reserved. Licence number 100053143

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

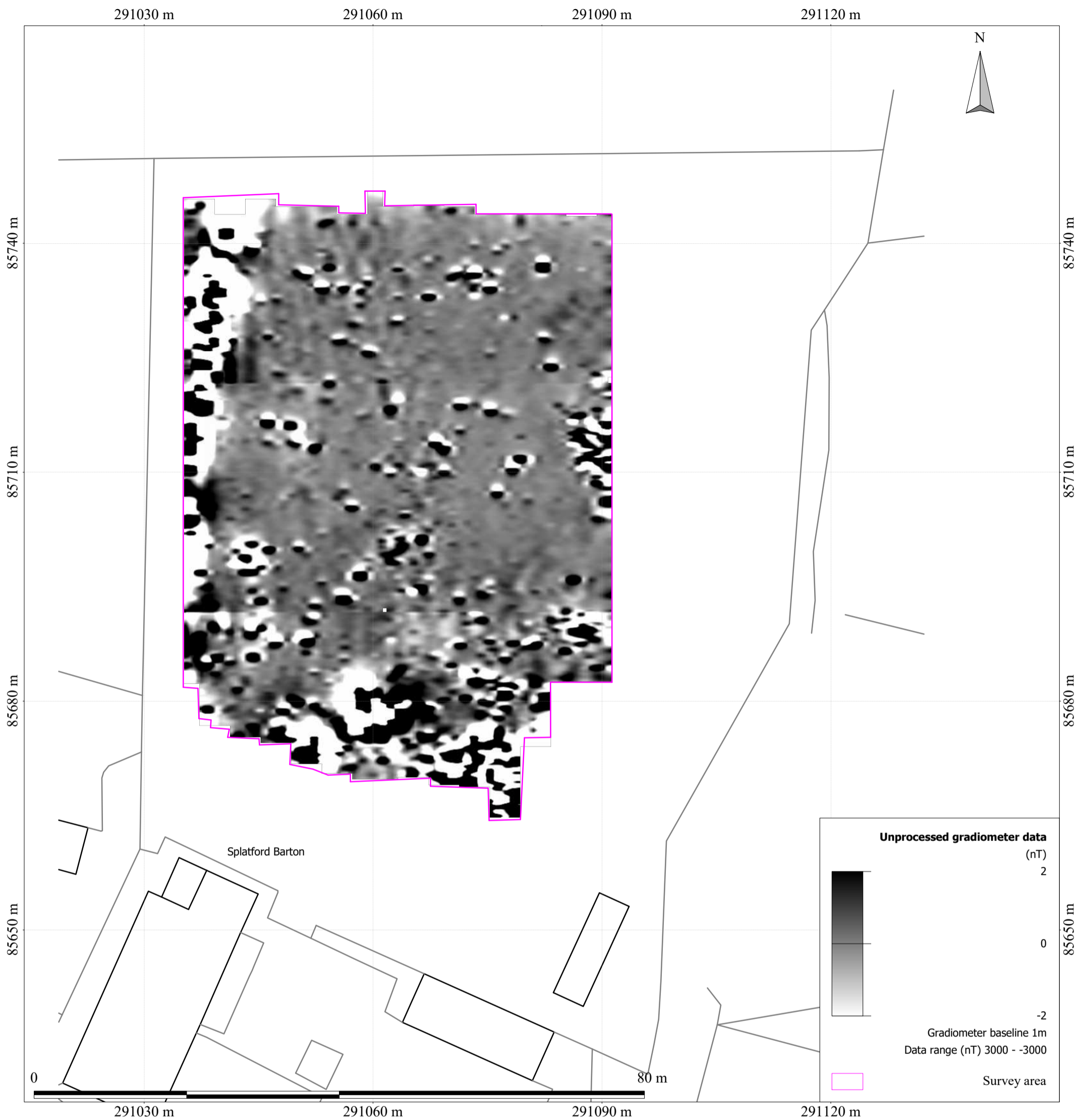
Notes:

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 Splatford Barton, Kenn, Devon
 Centred on NGR: 291059, 085710
 Report: 1904SPA-R

Substrata Limited
 Langstrath, Goodleigh
 Barnstaple, Devon EX32 7LZ
 Tel: 07504688135
 Email: enquiries@substrata.co.uk
 Web: substrata.co.uk

Figure 3: processed gradiometer data



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 Splatford Barton, Kenn, Devon
Centred on NGR: 291059, 085710
Report: 1904SPA-R

Substrata Limited
Langstrath, Goodleigh
Barnstaple, Devon EX32 7LZ
Tel: 07504688135
Email: enquiries@substrata.co.uk
Web: substrata.co.uk

Figure 4: Unprocessed gradiometer data



British Grid
centre X: 291082.12 m, centre Y: 85697.99 m

Geophysical survey: Copyright Substrata Limited.
Base map: Ordnance Survey (c) Crown Copyright 2018.
All rights reserved. Licence number 100053143

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 Splatford Barton, Kenn, Devon
Centred on NGR: 291059, 085710
Report: 1904SPA-R

Substrata Limited
Langstrath, Goodleigh
Barnstaple, Devon EX32 7LZ
Tel: 07504688135
Email: enquiries@substrata.co.uk
Web: substrata.co.uk

Figure 5: Grid plan and location

Appendix 2 Tables

Site: Land at Splatford Barton, Kenn
Centred on NGR: SX 91059 85710

plot	anomaly group	associated anomaly groups	anomaly characterisation certainty & class	anomaly form	additional archaeological characterisation	comments	supporting evidence
1			Modern Service	Linear			
2			Possible enhanced	Ovoid/ random	Modern rubble and ferrous material		
3			Possible enhanced	Ovoid/ random	Modern rubble and ferrous material		
4			Possible enhanced	Ovoid/ random	Modern rubble and ferrous material		

Table 1: data analysis

<p>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.</p>	
<p>Equipment <i>Instrument:</i> Bartington Instruments grad601-2 <i>Firmware:</i> version 6.1</p>	<p>Data Capture <i>Sample Interval:</i> 0.25m <i>Traverse Interval:</i> 1 metre <i>Traverse Method:</i> zigzag <i>Traverse Orientation:</i> GN</p>
<p>Data Processing, Analysis and Presentation Software 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

Description:	
Instrument Type:	Grad 601 (Magnetometer)
Units:	nT
Direction of 1st Traverse:	135 deg
Collection Method:	ZigZag
Sensors:	2 @ 1.00 m spacing.
Dummy Value:	32702
Dimensions	
Composite Size (readings):	720 x 120
Survey Size (meters):	90 m x 60 m
Grid Size:	30 m x 30 m
X Interval:	0.125 m (surveyed @ 0.25 m)
Y Interval:	0.5 m (surveyed @ 1 m)
Stats	
Max:	41.76
Min:	-37.53
Std Dev:	4.14
Mean:	-0.13
Median:	0.01
Processes:	4
1	Base Layer
2	Clip at 1.00 SD
3	DeStripe Median Traverse: Grids: All
4	Interpolate: X & Y Doubled.
Note: Input to the GIS results in slight changes to the stats shown above. The data stored in the archives (Appendix 3) will have the above metadata and the values quoted in the report figures will be those quoted in this metadata table.	

Table 3: processed data metadata

Description:	
Instrument Type:	Grad 601 (Magnetometer)
Units:	nT
Direction of 1st Traverse:	135 deg
Collection Method:	ZigZag
Sensors:	2 @ 1.00 m spacing.
Dummy Value:	32702
Dimensions	
Composite Size (readings):	360 x 60
Survey Size (meters):	90 m x 60 m
Grid Size:	30 m x 30 m
X Interval:	0.25 m
Y Interval:	1 m
Stats	
Max:	98.72
Min:	-100.00
Std Dev:	14.58
Mean:	-0.07
Median:	0.21
Processes: 1	
1 Base Layer	
Note: Input to the GIS results in slight changes to the stats shown above. The data stored in the archives (Appendix 3) will have the above metadata and the values quoted in the report figures will be those quoted in this metadata table.	

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 CSV (.xyz)
Raw data composite files:	CSV (.xyz)
Minimally processed data composite files:	DW Consulting TerraSurveyor 3 (.xgd) and CSV (.xyz)
Final data processing composite files:	DW Consulting TerraSurveyor 3 (.xgd) and CSV (.xyz)
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:	CSV (xyz)
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.