

Substrata

Archaeological Geophysical Surveyors

An archaeological magnetometer survey
Land near Town Farm, Bulkworthy

Centred on NGR: 240444, 114768

Report: 1809BUL-R-1

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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	18
Appendix 3 Project archive contents	23

Figures

Figure 1: location map	8
Figure 2,3,4: survey interpretation	9, 10, 11
Figure 5,6,7: shade plot of processed data	12,13,14
Figure 8: shade plot of minimally processed data	15
Figure 9: grid plan and location	16
Figure 10: Grid ID	17

Tables

Table 1: data analysis	19
Table 2: methodology information	20
Table 3: processed data metadata	21
Table 4: minimally processed data metadata	22

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 (Ecotricity) 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

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3 Copyright

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4 Survey type and location

4.1 Survey

Method:	shallow depth magnetometer survey
Instrument:	twin-sensor fluxgate gradiometer
Date:	28, 29, 30, 31, January & 1, 4,5 February 2019
Area:	14.7 ha
Investigation level:	Level 2 (prospection and delineation)
Survey resolution:	1m by 0.25m

4.2 Location

Name:	Nr Town Farm, Bulkworthy, Torridge
Civil Parish:	Bulkworthy
County:	Devon
Nearest Postcode:	EX38 8LZ
Survey centre NGR:	SS404147
Survey centre NGR (E/N):	240444, 114768
Historic environment designation:	none
Survey area:	14.7 hectares
OASIS ID:	substrat1-343104

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.

Twenty five magnetic anomaly groups were characterised as reflecting potential buried archaeology. Five groups likely represent former field boundaries with the same trends as the current field boundaries and which were recorded on the tithe map and OS first edition. Two other groups may also represent Historic field boundaries but do not entirely spatially correlate to known maps. Two groups have characteristics of an enclosure ditch. To the East of the site three groups of positive linear and curvilinear anomalies may also relate to an enclosure type feature. The remaining magnetic anomaly groups likely represent natural, ploughing and historic field systems.

The far eastern area was extremely wet and as a result the magnetic response in this area was very limited.

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 with 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 Survey Area comprises two fields bound by Devon banks. A public road borders the northern boundary, woodland and a disused quarry borders the south western part of the site. A stream borders the south with a mix of woodland in the south west. The Survey Area slopes from approximately 156m aOD on the northern side to approximately 135m aOD at the lowest point on the southern side. The fields were under grass and low crop at the time of the survey.

9.2 Geology and sub-surface deposits

The solid geology across the site is mudstone and sandstone of the Carboniferous Ashton Mudstone Member and Crackington Formation (undifferentiated). The superficial geology is not recorded in the source used (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

Modern enclosures.

Modern enclosures that have been created by adapting earlier fields of probable post-medieval date (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. In July 2015 Cotswold Archaeology was commissioned by Ecotricity (Next Generation) Ltd. to carry out a heritage desk-based assessment of Bulkworthy Solar Park, Torridge District, Devon.

No designated assets are located within the Site. There are two designated assets within the immediate environs of the Site; the Grade II* Listed Church of St Michael lies c.670m southwest of the Site and Three Bowl Barrows 250m West of Bower Scheduled Monument lies c.780m northwest of the Site. (Cotswold archaeology, 2018)

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

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, 3, 4 and Table 1 comprise the analysis of the survey data.

Figures 5, 6 and 7 are plots of the processed data as specified in Table 3. Figure 8 is a plot of minimally processed data as specified in Table 4. Figure 9 shows the location of the survey grid and figure 10 shows the 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 and east west trend of the extant field boundaries (Figures 2 to 4) and not otherwise discussed below are likely to represent relatively recent ploughing disturbance.

12.2 Data relating to historic maps and other records

Magnetic anomaly groups 3,4,5,6,7 likely represent former field boundaries recorded on several maps from the tithe map onwards which have been slowly removed over time. Groups 8 and 14 may also represent former boundaries although they do not entirely spatially correlate.

12.3 Data with no previous archaeological provenance

Group 1 may represent an enclosure ditch due to its shape and form, positive linear anomaly group 2 may relate to the possible enclosure as an earlier or later phase. Anomaly group 9 may represent the ditch of the current field boundary, running along the northern boundary. Positive linear anomaly groups 22,24 and 27 may relate to an earlier enclosure or field management, and could relate to group 6 due to the proximity. Positive anomaly group 21 may represent a natural deposit. Positive anomaly groups 15 and 16 may represent an archaeological deposit although they do not follow the ploughing trend in western section so agricultural origins cannot be ruled out.

Magnetic anomaly groups 10, 11 and 12 are represented as a large ditch with channel like features, a build up of stony material flanks either side. The anomalies follow the slope of the land towards the river valley, taking this in account, natural origins cannot be ruled out. Positive linear anomaly group 13 also follows the slope, but, has a different magnetic signature to 10,11,and 12, this may represent a drainage channel or enclosure/ land management.

Magnetic anomaly group 17 has archaeological potential but has similar characteristics to a modern service, possibly even ploughing activity. Group 26 likely represent ploughing activity on the edge of the field.

Group 25 represents a very weak negative response that does not follow the plough trend.

Group 20 represents a negative magnetic response that follows a similar trend to plough activity and runs adjacent to the stream.

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.

Twenty five magnetic anomaly groups were characterised as reflecting potential buried archaeology. Five groups (3,4,5,6,7) likely represent former field boundaries with the same trends as the current field boundaries and which are recorded on the tithe map and OS first edition. Three other groups (9,8,7) may also represent Historic field boundaries but do not all entirely spatially correlate to known maps. Two groups (1,2) have characteristics of an enclosure ditch. To the East of the site three groups (22,24,27) of positive linear and curvilinear anomalies may relate to a enclosure/ land management.

Magnetic anomaly groups 10, 11 and 12 are represented as a large ditch with channel like features, a build up of stoney material flanks either side, natural origins cannot be ruled out due to the orientation on the slope.

The remaining positive and negative magnetic linear anomaly groups are of unknown origins which will include natural deposits and ploughing activity.

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)

substrat1-343104

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

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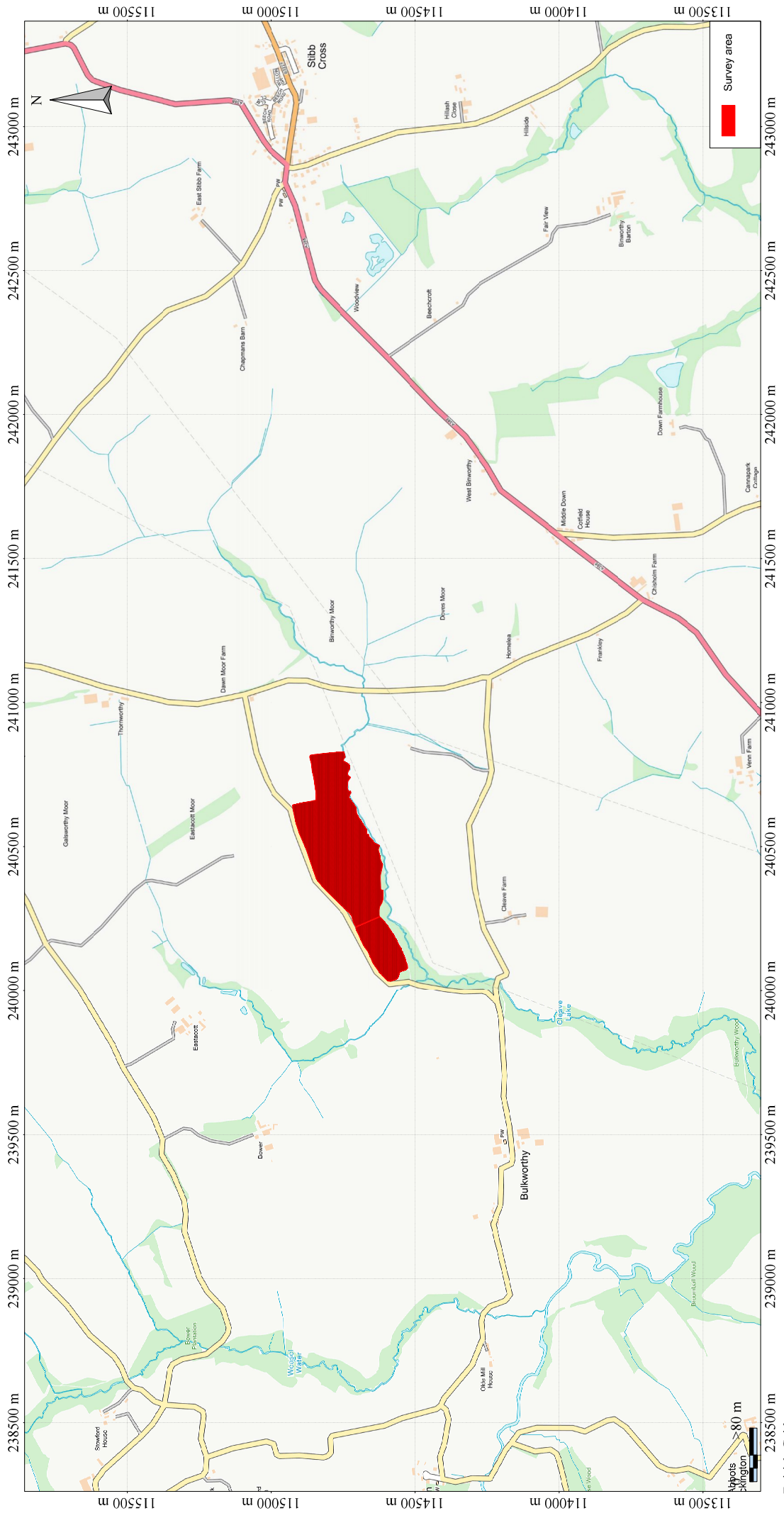
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Appendix 1 Figures

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 .

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: 240813.30 m, centre Y: 114578.12 m
 Geophysical survey: Copyright Substrata Limited.

Scale: 1:13000 @ 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.

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 Report: 1809BUL-R-1

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Figure 1: Survey location



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British Grid
 centre X: 240548.79 m, centre Y: 114758.45 m

Scale: 1:1700 @ A3. Spatial Units: Meter. Do not scale off this drawing

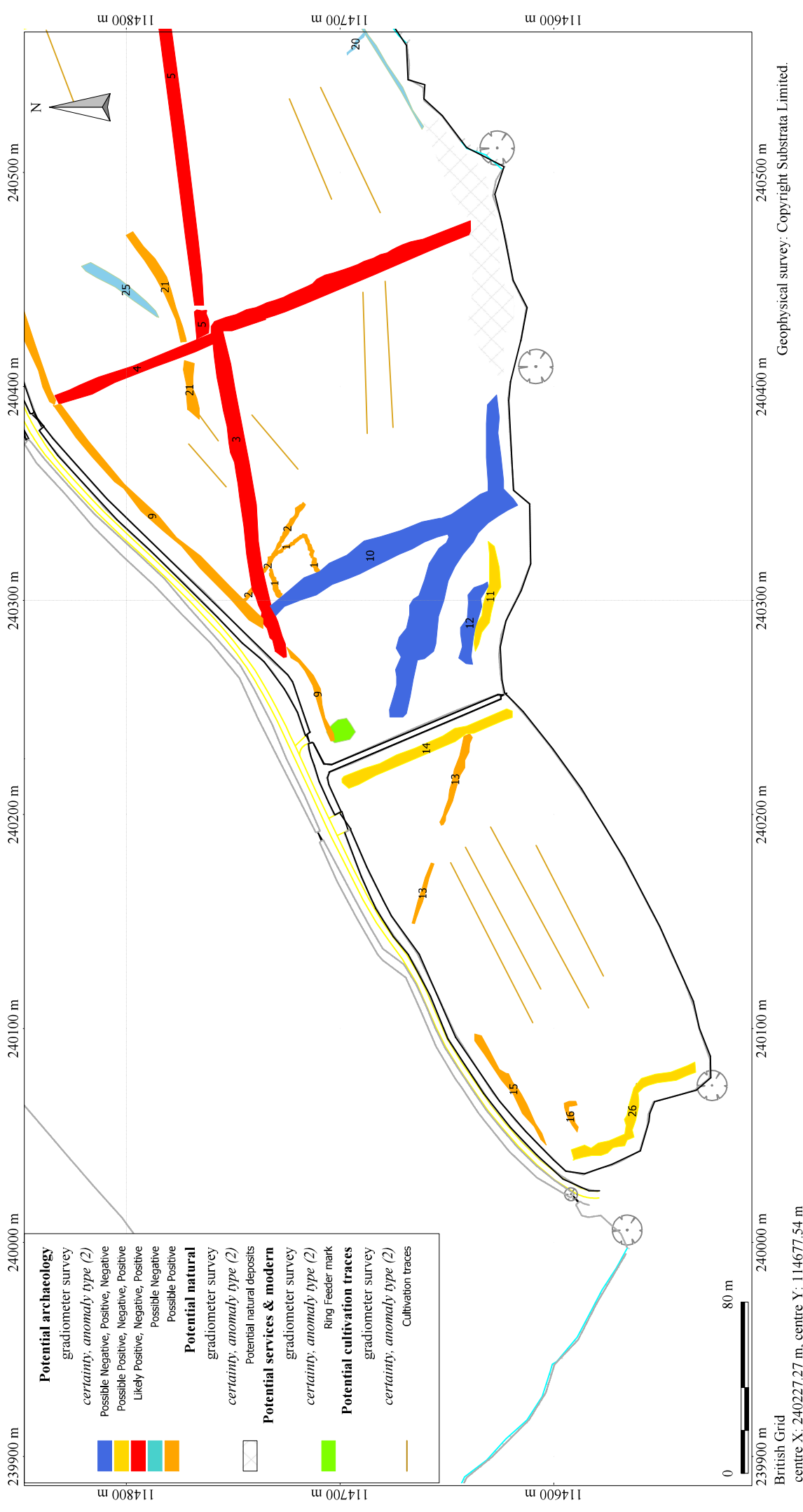
Geophysical survey: Copyright Substrata Limited.

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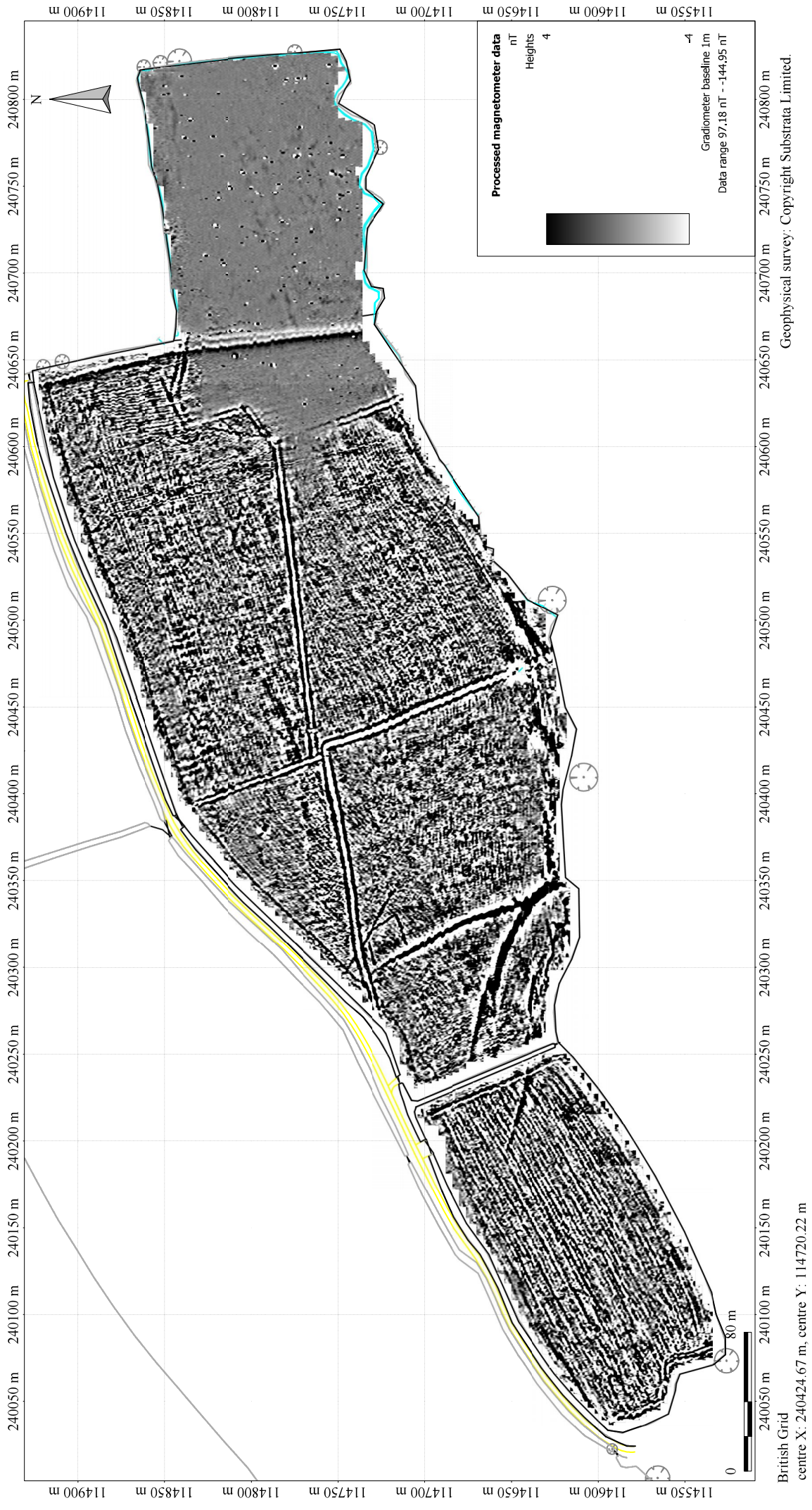
Figure 3: Survey interpretation, east



Scale: 1:1800 @ A3. Spatial Units: Meter. Do not scale off this drawing

- Notes:
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 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.
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 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.

Geophysical survey. Copyright Substrata Limited.



British Grid
 centre X: 240424.67 m, centre Y: 114720.22 m

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

Geophysical survey: Copyright Substrata Limited.

- 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.
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Figure 5: Processed magnetometer data



British Grid
 centre X: 240548.79 m, centre Y: 114758.45 m

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.

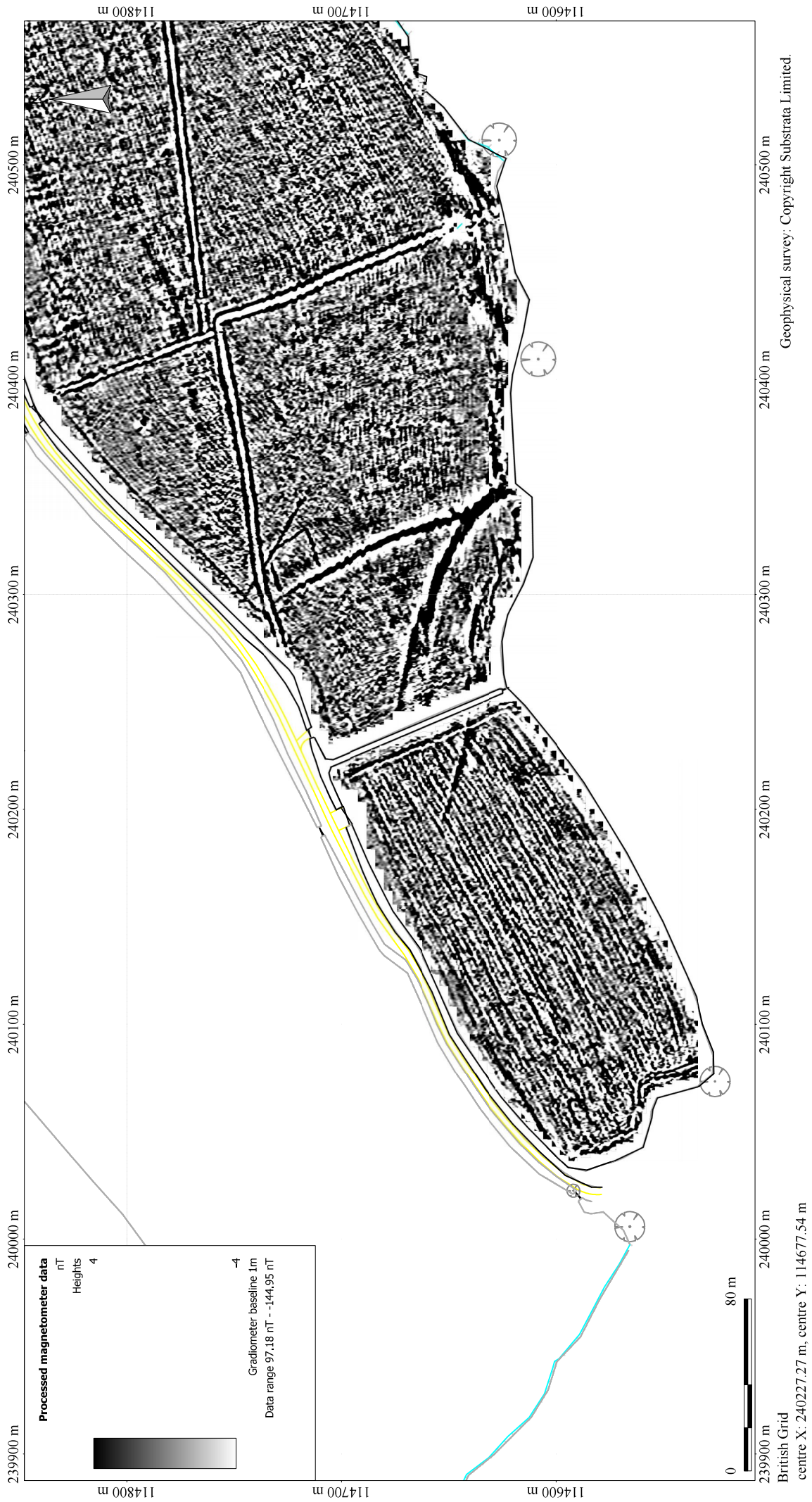
Scale: 1:1700 @ A3. Spatial Units: Meter. Do not scale off this drawing

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Figure 6: Survey interpretation, east



Geophysical survey. Copyright Substrata Limited.

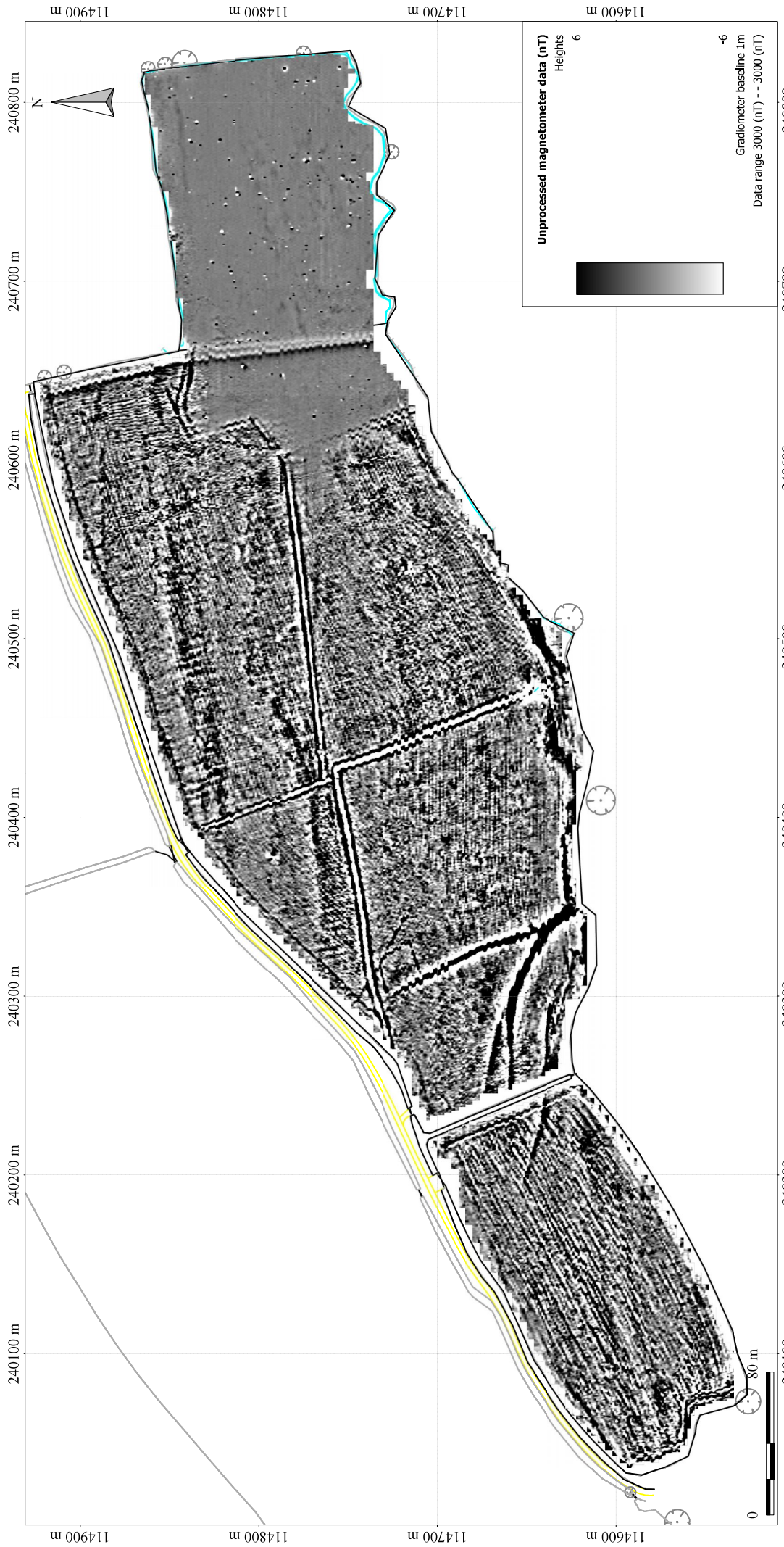
Scale: 1:1800 @ A3. Spatial Units: Meter. Do not scale off this drawing

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Figure 7: Survey interpretation, west



British Grid
 centre X: 240424.67 m, centre Y: 114720.22 m

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

Notes:

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Figure 8: minimally processed data



British Grid
 centre X: 240424.67 m, centre Y: 114720.22 m
 Geophysical survey: Copyright Substrata Limited.

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

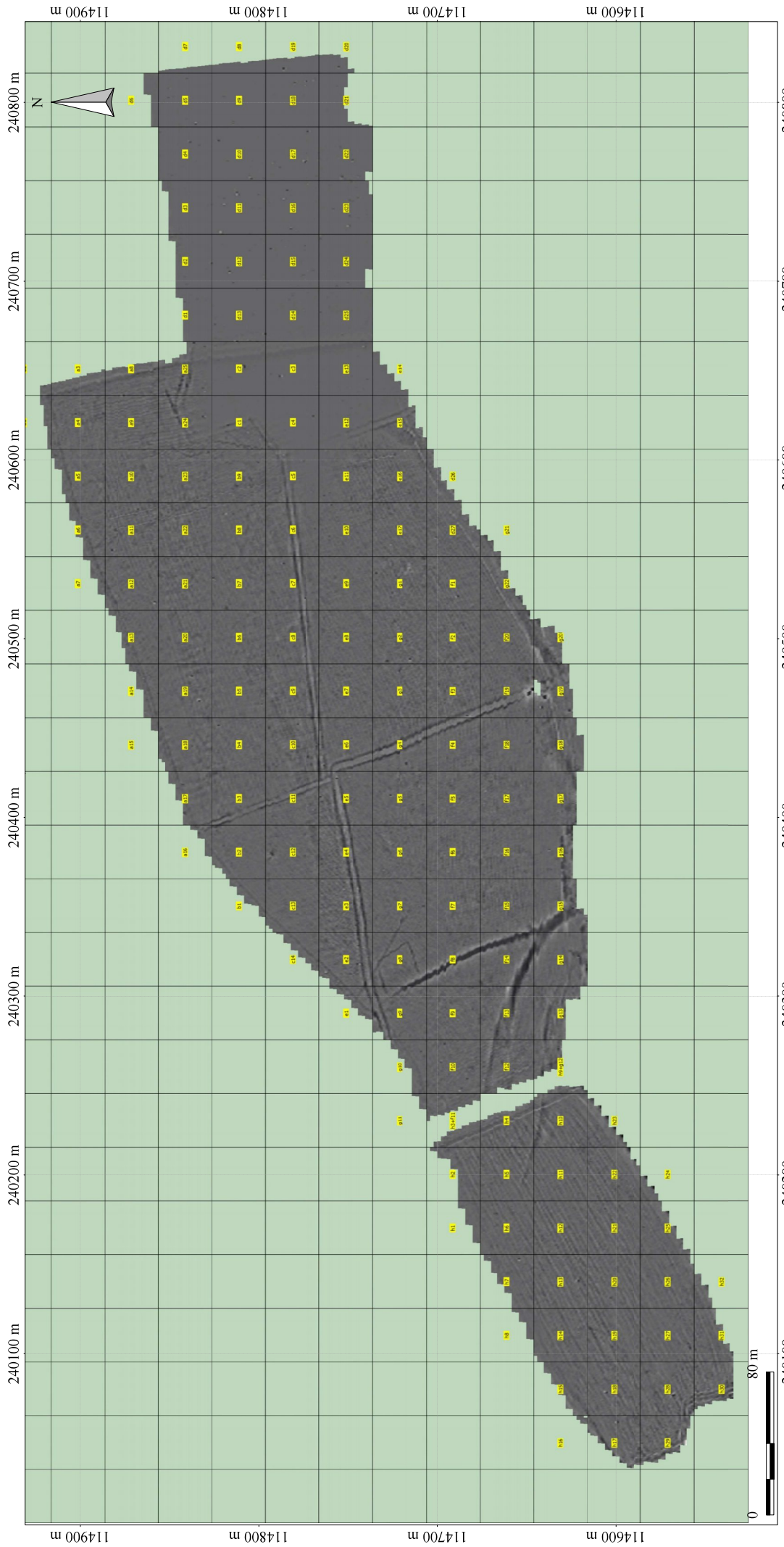
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Figure 9: Control Points



British Grid
 centre X: 240424.67 m, centre Y: 114720.22 m

Geophysical survey: Copyright Substrata Limited.

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

Notes:

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Figure 10: Grid location

Appendix 2 Tables

plot	anomaly group	associated anomaly groups	anomaly characterisation certainty & class	anomaly form	additional archaeological characterisation	comments	supporting evidence
	1		Possible Positive	Rectangular enclosure	ditch		
	1		Possible Positive	Rectangular enclosure	ditch		
	2		Possible Positive	Linear		May relate to group 1	
	2		Possible Positive	Linear		May relate to group 1	
	2		Possible Positive	Linear			
	3		Likely Positive, Negative, Positive	Linear	Devon bank, stoney interior with flanking ditches		Mapped on historic maps OS 1st edition, title map
	4		Likely Positive, Negative, Positive	Linear	Devon bank, stoney interior with flanking ditches		Mapped on historic maps OS 1st edition, title map
	5		Likely Positive, Negative, Positive	Linear	Devon bank, stoney interior with flanking ditches		Mapped on historic maps OS 1st edition, title map
	6		Likely Positive, Negative, Positive	Linear	Devon bank, stoney interior with flanking ditches		Mapped on historic maps OS 1st edition, title map
	7		Likely Positive, Negative, Positive	Linear	Devon bank, stoney interior with flanking ditches		
	8		Possible Positive, Negative, Positive	Linear	Possibly the Devon bank recorded first on the title map		
	9		Possible Positive	Linear	Likely represents a ditch from a field boundary	characteristics of a Devon bank	
	10		Possible Negative, Positive, Negative	Curvilinear	Likely represents a ditch from a field boundary	Possible palaeochannel	
	11		Possible Positive, Negative, Positive	linear	Possible ditch with stoney material either side, natural geological deposits cannot be ruled out	Possible palaeochannel	
	12		Possible Negative, Positive, Negative	Linear	Possible natural deposits, although similarities to a Devon bank	Possible palaeochannel	
	13		Possible Positive	Linear	Possible ditch with stoney material either side, natural geological deposits cannot be ruled out		
	13		Possible Positive	Linear			
	14		Possible Positive, Negative, Positive	Linear			
	14		Possible Positive	Linear	Characteristics of a Devon bank, Doesn't quite spatial correlate to know maps	May be of agricultural origins (plough)	
	15		Possible Positive	Linear			
	16		Possible Positive	Curvilinear			
	17		Possible Positive, Negative, Positive	Linear	may relate to ploughing rather than archaeological origin		
	17		Possible Positive, Negative, Positive	Linear	may relate to ploughing rather than archaeological origin		
	20		Possible Negative	Linear			
	21		Possible Positive	Curvilinear	Possibly a natural deposit as the slope starts to break		
	21		Possible Positive	Curvilinear	Possibly a natural deposit as the slope starts to break		
	22		Possible Positive	Linear		possibly cultivation traces	
	23		Possible Positive	Linear		possibly cultivation traces	
	24		Possible Positive	Linear			
	24		Possible Positive, Negative, Positive	Linear	may relate to ploughing rather than archaeological origin		
	25		Possible Negative	Linear	very weak response		
	25		Possible Positive, Negative, Positive	Curvilinear	Possible ploughing activity around edge of field		
	26		Possible Positive	Curvilinear			
	27		Possible Positive	Curvilinear			

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

Instrument Type:	Bartington Grad 601
Units:	nT
Direction of 1st Traverse:	0 deg
Collection Method:	ZigZag
Sensors:	2 @ 1.00 m spacing.
Dummy Value:	32702
Dimensions	
Composite Size (readings):	6720 x 840
Survey Size (meters):	840 m x 420 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:	97.18
Min:	-144.95
Std Dev:	6.83
Mean:	0.35
Median:	0.01
PROGRAM	
Name:	TerraSurveyor
Version:	3.0.34.10
Processes: 15	
1	Base Layer
2	Clip at 2.00 SD
3	DeStripe Median Traverse: Grids: All
4	De Stagger: Grids: All Mode: Both By: -1 intervals
5	De Stagger: Grids: g4.xgd Mode: Both By: -2 intervals
6	De Stagger: Grids: g8.xgd f8.xgd Mode: Both By: -1 intervals
7	De Stagger: Grids: g4.xgd Mode: Both By: -2 intervals
8	De Stagger: Grids: e15.xgd Mode: Both By: -2 intervals
9	De Stagger: Grids: e12.xgd Mode: Both By: -2 intervals
10	De Stagger: Grids: f4.xgd Mode: Both By: -1 intervals
11	De Stagger: Grids: g4.xgd g3.xgd Mode: Both By: 1 intervals
12	De Stagger: Grids: g8.xgd f8.xgd Mode: Both By: -1 intervals
13	De Stagger: Grids: f8.xgd Mode: Both By: 2 intervals
14	De Stagger: Grids: SubGrid (Area: Top 244, Left 1200, Bottom 259, Right 1319) Mode: Both By: -1 intervals
15	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

Instrument Type:	Bartington Grad 601
Units:	nT
Direction of 1st Traverse:	0 deg
Collection Method:	ZigZag
Sensors:	2 @ 1.00 m spacing.
Dummy Value:	32702
Dimensions	
Composite Size (readings):	3360 x 420
Survey Size (meters):	840 m x 420 m
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:	22.09
Mean:	2.17
Median:	1.80
PROGRAM	
Name:	TerraSurveyor
Version:	3.0.34.10
Processes: 2	
1	Base Layer
2	DeStripe Median Sensors: All
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.