Substrata
Archaeological Geophysical Surveyors

An archaeological magnetometer survey

Land at Hartnoll's Farm, Tiverton, Devon, NGR: (299044, 112904)

Document 2011HAR-R-1

Mark Edwards BA
Dr Steven Trick

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Substrata Limited
Unit 6, Creative Court
Clovelly Road Ind EST
Devon
EX39 3HN
markedwards@substrata.co.uk
Web: substrata.co.uk

Client:
Cotswold Archaeology Ltd
Stanley House,
Walworth Road,
Andover
Hampshire,
SP10 5LH

Substrata Limited
Company number: 10348811
Registered office: Units 20 & 21, Bude Business Centre, Kings Hill Industrial Estate, Bude, Cornwall, England EX23 8QN

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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 Cotswold Archaeology on behalf of clients in support 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, 2019). The survey and report were completed in compliance with a Survey Method Statement (Substrata Ltd, 2021).

The total site area covers approximately c.10.7ha consisting of agricultural fields and an area of farm/ industrial buildings which are not suitable for geophysical survey.

2 Client

Cotswold Archaeology Ltd, Client: Stanley House, Walworth Road, Andover, Hampshire, SP10 5LH.

3 Copyright

4 Survey type and location

4.1 Survey

Method:	shallow depth magnetometer survey
Instrument:	twin-sensor fluxgate gradiometer
Date:	Jan –Feb 2021
Area:	10.7ha hectares
Investigation level:	Level 2 (prospection and delineation)
Survey resolution:	1m by 0.25m

4.2 Location

Location:	Land at Hartnoll's Farm
Town:	Tiverton
Civil Parish:	Tiverton
County:	Devon
Nearest Postcode:	EX16 4NG
NGR:	SS 99044 12904 (point)
NGR (E/N):	299044 , 112904 (point)
Historic environment designation:	None
Oasis ID:	substrat1-411474

5 Summary

A magnetometer survey was selected to provide a relatively fast and cost-effective evaluation of any buried archaeology across the Survey Area. 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.

A magnetic gradiometer survey was carried out on land east of Tiverton. 22 anomaly groups were identified of which 21 were characterised as representing possible buried archaeological deposits. A known, and previously excavated ring ditch of prehistoric date (MDV 79309) was successfully located at the eastern end of the Survey Area. A number of strongly geometric rectilinear anomalies may be ditches marking out an early field system. Two clusters of irregularly-shaped positive anomalies may be concentrations of cut features, possibly post-hole alignments. Two parallel narrow sinuous anomalies may be a former trackway of uncertain date. Four very similar curvilinear groups are likely to be former field boundaries visible on historic mapping. Elsewhere there are a few isolated pit and ditch-like anomalies of undetermined date and function.

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, 2019) 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 land designated for survey, hereafter referred to as the 'Survey Area', comprises four fields (parts of) to the east of the town of Tiverton, Mid Devon. The Survey Area borders Manley Lane to the west, Post Hill to the north and agricultural fields to the east and south.

The Survey Area slopes from approximately 96m aOD in the northwest to approximately 87m aOD in the southeast. For the purposes of this report the Survey Area has been split into three areas, 1-3, see fig 2.

9.2 Geology and sub-surface deposits

9.2 Geology and sub-surface deposits

The solid geology of the Survey Area is the Tidcombe Sand Member: sedimentary sandstone bedrock formed approximately 252 to 299 million years ago in the Permian Period in a local environment previously dominated by rivers.

In terms of superficial geology, Area 2 is predominantly covered with river terrace deposits of sand and gravel formed up to 3 million years ago in the Quaternary Period. At the border between Areas 2 and 3 is a patch of colluvium deposits of diamicton: superficial deposits formed up to 2 million years ago in the Quaternary Period (BGS viewer, undated).

Magnetometer survey can be recommended over any sedimentary geology. There are few significant distorting factors although a wide range of magnetic susceptibility in the parent rock results in a very variable background response to survey (English Heritage 2008, Table 4).

9.3 Soils

Soils across the Survey Area are described as freely draining slightly acid soils with a loamy texture. (www.landis.org.uk, undated).

10 Archaeological background

10.1 Historic landscape characterisation

Barton fields

These relatively large, regular enclosures seem likely to have been laid out between C15th-C18th. Some curving boundaries may be following earlier divisions in the pre-existing medieval fields. In Cornwall these are sometimes called Barton fields

Modern

Modern enclosures

Modern enclosures that have been created by adapting earlier fields of probable post-medieval date

10.2 Summary of the archaeological background

Cotswold Archaeology are currently compiling an Historic Environmental Desk-Based Assessment which includes a comprehensive breakdown of all known heritage assets withing 1km of the application area.

There are no known designated heritage assets within the are to be surveyed, however, Hartnoll's Farm (MDV73970) itself possibly dates to the 17th century. A known ring ditch (MDV79309) detected by geophysical survey and subsequently excavated borders the south eastern corner. The modern road of Post Hill may run on the alignment of a Roman Road (MDV73973).

Palaeolithic hand axes have been discovered in the locale, likely redeposited by alluvial movement around the river Lowman. Concentrations of flint and chert lithics have been found in the locale most likely utilised by communities occupying and exploiting the river terrace landscapes between what is now the Grand Western Canal and the Lowman river (MDV59714). An apparent Neolithic long barrow is located in the back gardens of properties to the north west of the Survey Area (MDV1364). Circa 900m north of the Survey Area is the Craze Lowman barrow, a bowl-barrow (MDV12370) and the subject of a relatively recent geophysical survey (Dean 2017). Target geophysical survey in 2009 as part of the Tiverton Eastern Urban Expansion discovered a ring-shaped anomaly 470m northwest of the Survey Area, which was subsequently excavated and found to be Neolithic in date and interpreted as a prehistoric barrow.

A comprehensive geophysical survey by Stratascan in 2014 (Richardson 2014) to the west of the Survey Area discovered many anomalies including a ring ditch of possible prehistoric date, many linear anomalies, ridge-and-furrow patterns, and various other anomalies some of which are suspected to be prehistoric. Subsequent excavation by Cotswold Archaeology found archaeology across a broad date range (Cotswold Archaeology 2015). A concentration of post holes contained a Neolithic fill. An almost complete pot of Middle Bronze Age date was

excavated in what appears to be a cremation context. These discoveries suggest the locale was a focus for later prehistoric occupation. A group of cellular, loosely rectilinear anomalies close to Pool Anthony were found to be ditches containing 3rd and 4th century roman pottery, possibly suggestive of roadside occupation. A network of rigidly-rectilinear geophysical anomalies spread across the site were determined to be shallow cut ditches. Other linear anomalies were land drains.

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 a 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

A number of anomaly groups that could be interpreted as relating to large postholes or pits will be visible on most magnetometer surveys, 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

12.2 Data relating to historic maps and other records

Anomaly Groups 1 & 2 probably represent a former field boundary visible on the tithe map. Data suggests a bank and ditch arrangement. The same is suggested for Groups 7 & 8 and 20 & 21. Again this interpretation is forwarded for Groups 14 & 15 however this appears to be a more substantial Devon Hedgebank arrangement of a bank with flaking ditches.

Anomaly Group 17 is almost certainly a known ring ditch that was excavated during an evaluation in 2009, DCC HER Mon. No. 79309. Group 18 may be the remains of an in filled pond depicted on historic maps.

12.3 Data with no previous archaeological provenance

Anomaly Groups 3 and 16 may be archaeological pits but may also be natural magnetisation of the soil.

Anomaly Group 4 is an apparent pair of narrow, negative sinuous anomalies running in parallel. Possibly a former trackway of uncertain date which may extend further south.

Anomaly Groups 5, 6, 9 and 11 are linear and rectilinear positive anomalies manifest in strongly geometric forms similar to anomalies previously detected and excavated in this locale (Cotswold Archaeology 2015). Probably manifest as shallow ditches, possibly marking out an early field system.

Anomaly Groups 12 and 13 are clusters of small irregularly-shaped positive anomalies that may be concentrations of cut features. There is possibly some regularity to their distribution which may indicate they are post hole alignments, possibly a structural framework *Potential Services and Modern*

Anomaly Group 101 is a possible in filled service ditch. Evidence of this can be seen on the ground which shows it has been recently excavated.

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13 Conclusions

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

21 anomaly groups were identified of which 20 were characterised as representing possible buried archaeological deposits. A known ring ditch, and three/ four lost field boundaries from the tithe mapping were successfully detected. In addition several other anomaly groups of less obvious interpretation were identified. A number of rigidly-rectlinear groups are thought to be of the same genre as archaeological features previously detected and excavated previously in the locality: excavation revealing shallow cut ditches without dating evidence. Clusters of positive anomalies with some regularity may relate to pits or possibly modern agricultural creations. Elsewhere are a possible trackway, and divers isolated pit and ditch-like anomalies of uncertain chronology and function.

Should further investigations be required such as trial trenching then it is recommended that the anomalies identified as possible archaeology should be investigated. The cluster of anomalies in the southwest corner of Area 1 may be an area of potential with Groups 10,12,13 possibly being of a less prosaic nature and hence more archaeological interest.

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)
substrat1-411474
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 Richard Morton of Cotswold Archeology for commissioning us to complete this survey.

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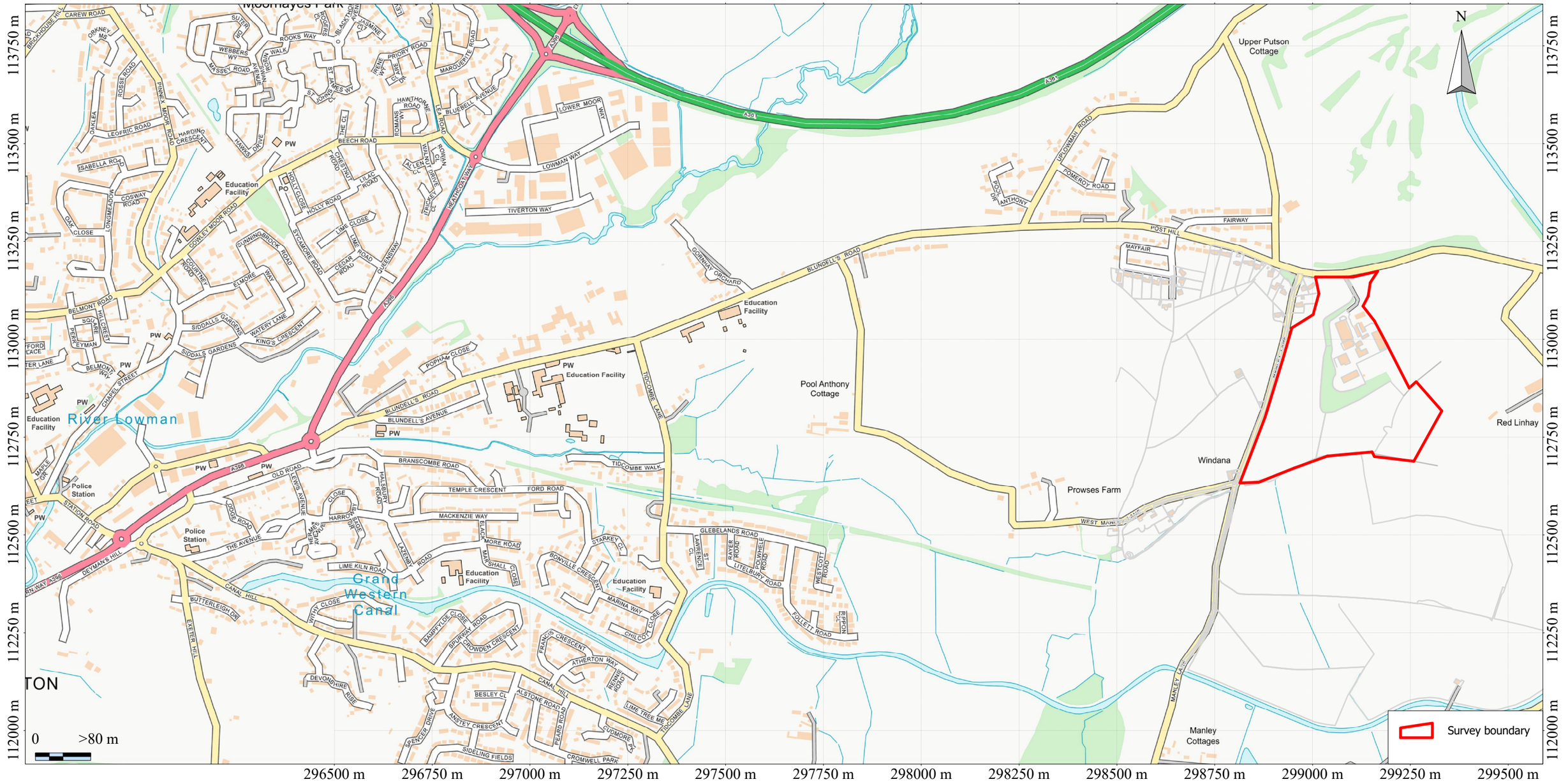
Appendix 1 Figures

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: 297649.28 m, centre Y: 112885.62 m

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

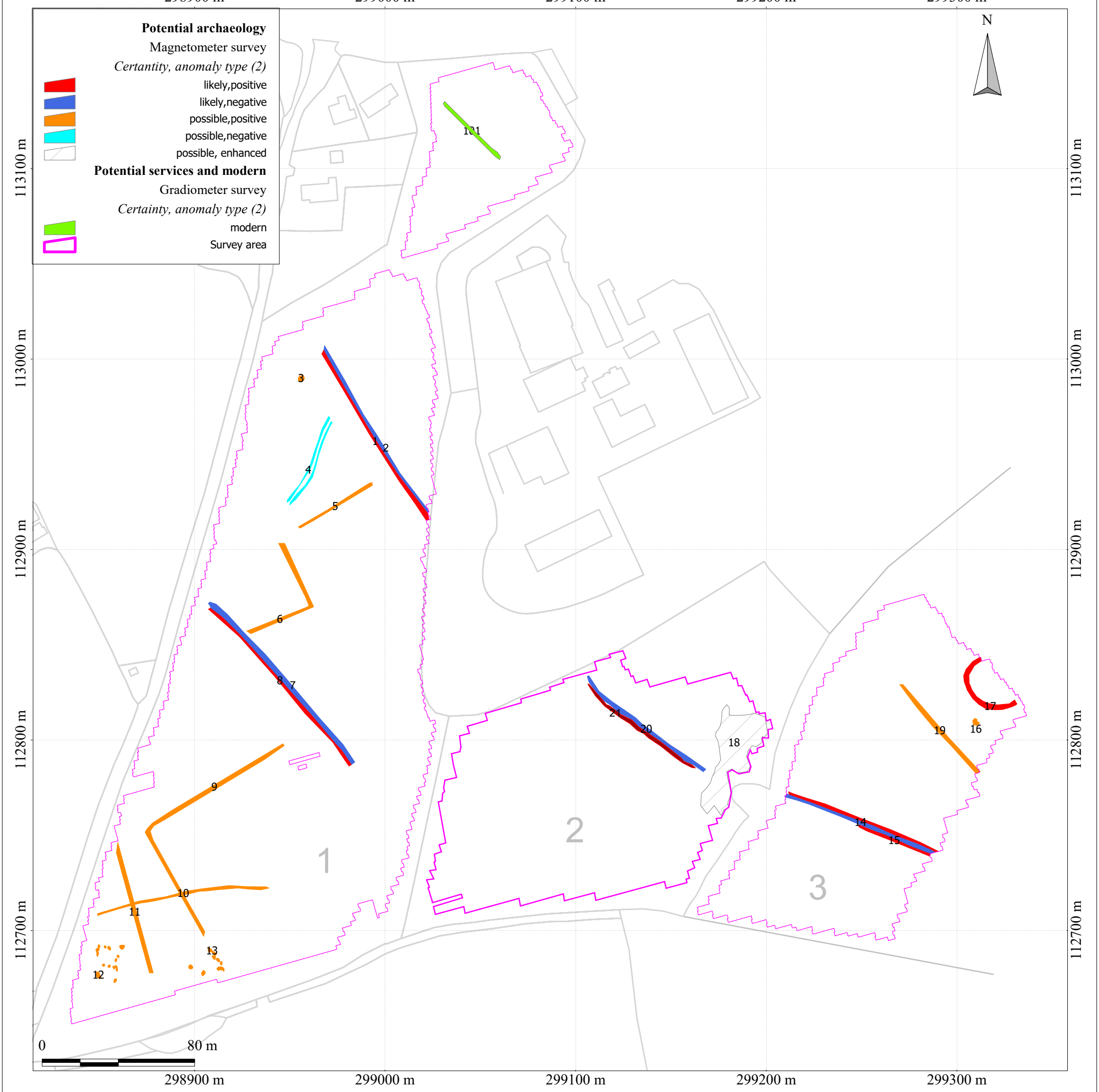
Notes:

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 Hartnoll's Farm, Tiverton
Centred on NGR: 299044 , 112904
Report: 2011HAR-R-1

Figure 1: survey location

Substrata Limited
Unit 6, Creative Court
Clovelly Road Ind EST, Devon
EX39 3HN
markedwards@substrata.co.uk
07504688135



British Grid
centre X: 299086.28 m, centre Y: 11290:

Scale: 1:2000 @ 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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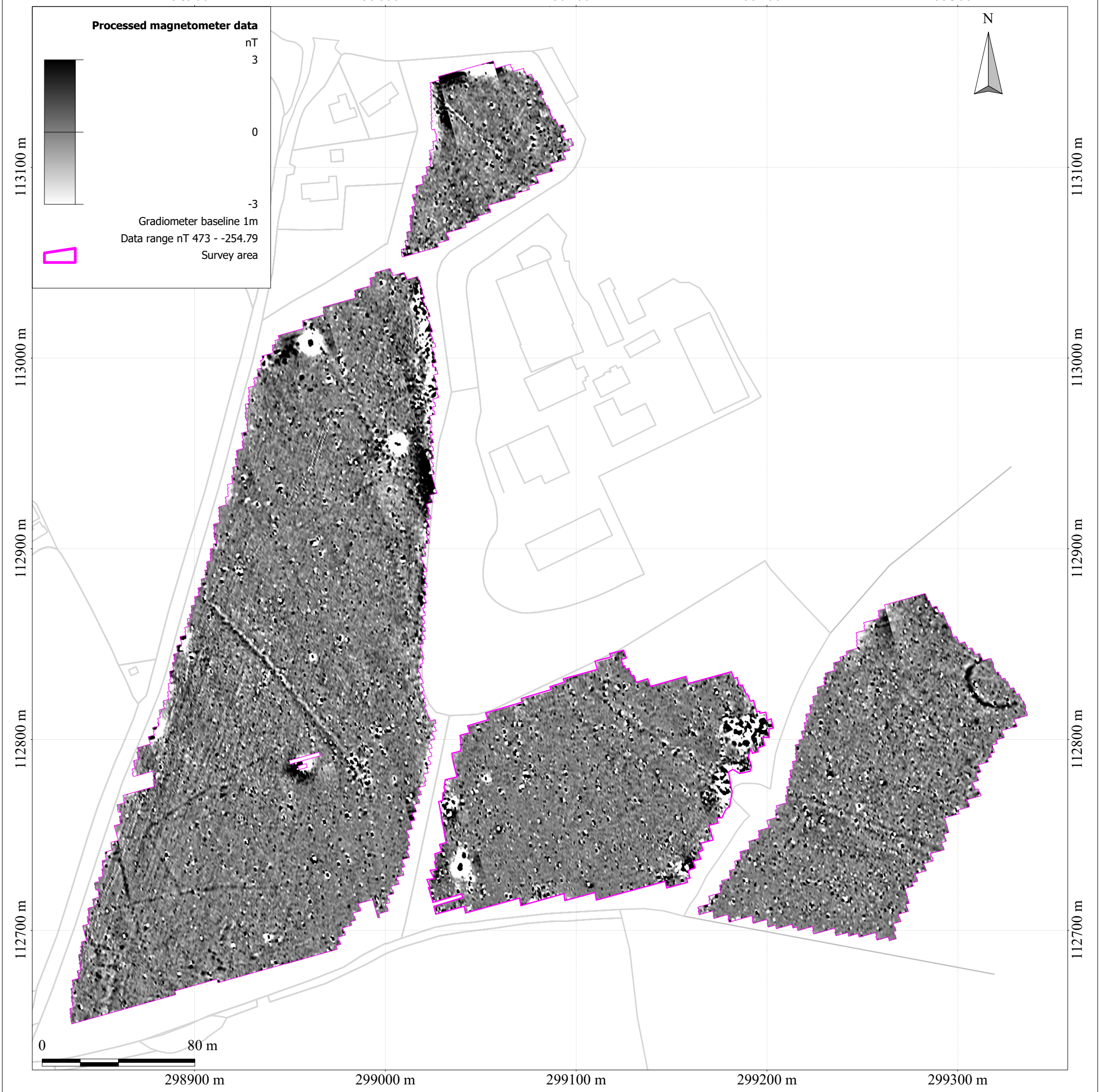
Clovelly Road Ind EST,
EX39 3HN
markedwards@substrata.
07504688135

Figure 3: processed magnetometer data



British Grid
centre X: 299086.28 m, centre Y: 11290:

Scale: 1:2000 @ 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.
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EX39 3HN
markedwards@substrata.
07504688135

Figure 3: processed magnetometer data

British Grid
centre X: 299086.28 m, centre Y: 11290:

Scale: 1:2000 @ 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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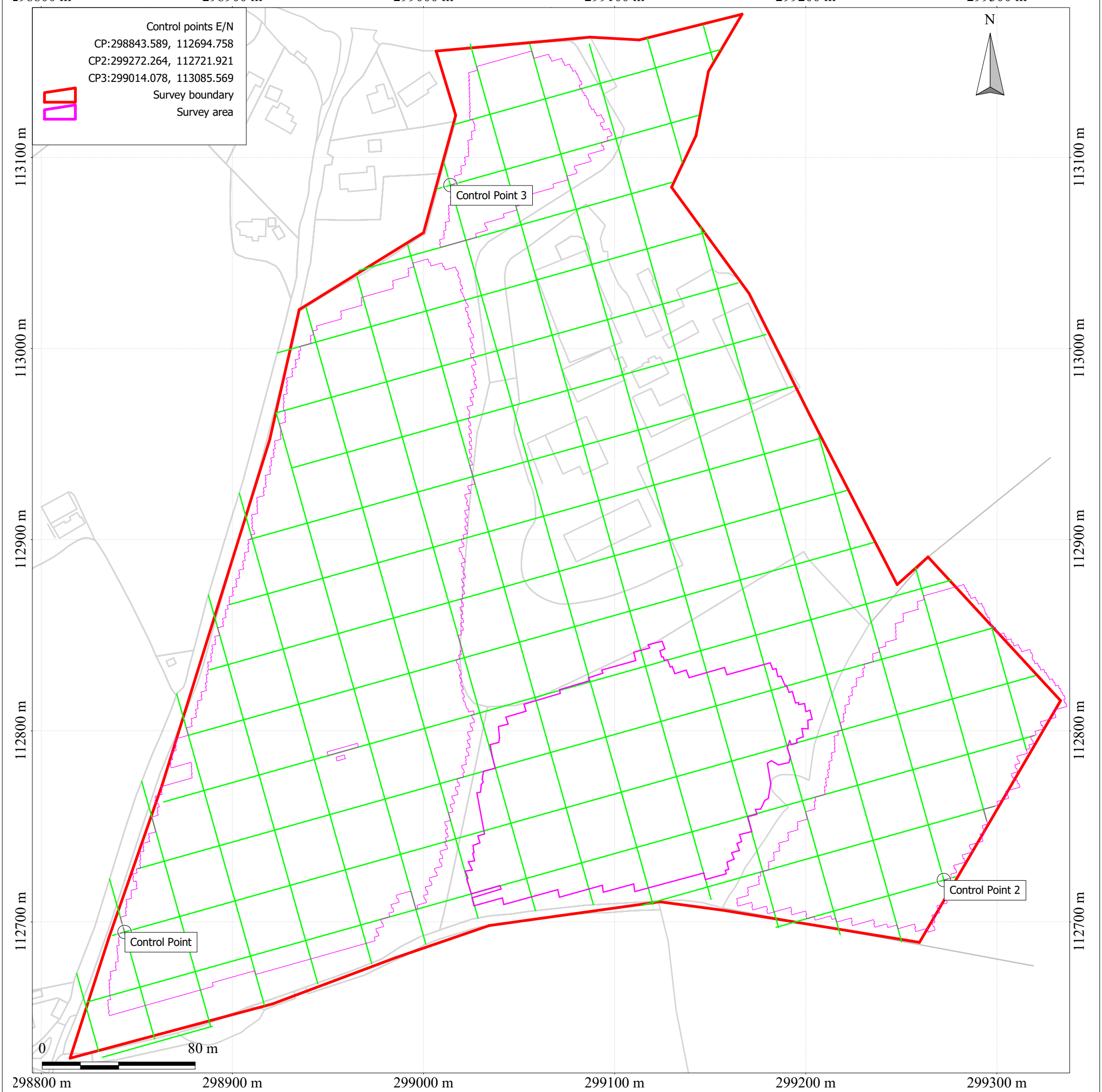
EX39 3HN
markedwards@substrata.
07504688135

Figure 4: unprocessed magnetometer data



British Grid
centre X: 299066.70 m, centre Y: 11289

Scale: 1:2000 @ 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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Clovelly Road Ind EST,
EX39 3HN
markedwards@substrata.
07504688135

Figure 5: grid plan and control points

Appendix 2 Tables

Site: Land at Hartnoll's Farm, Tiverton
Centred on NGR: 299044 , 112904

plot	anomaly group	associated anomaly groups	anomaly characterisation certainty & class	anomaly form	additional archaeological characterisation	comments	supporting evidence
1	1	2	likely,positive	linear	former field boundary	close to boundary on tithe map. probably ditch	tithe map c 1840
1	2	1	likely,negative	linear	former field boundary	close to boundary on tithe map. probably bank	
1	3		possible,positive	oval	pit?		
1	4		possible,negative	sinuous	uncertain. former trackway	parallel narrow sinuous negative anomalies	
1	4		possible,negative	sinuous	uncertain. former trackway	parallel narrow sinuous negative anomalies	
1	5		possible,positive	linear	uncertain.ditch?	component of early field system?	
1	6		possible,positive	rectilinear	ditches?former field system?		
1	7	8	likely,negative	curvilinear	former field boundary	visible on tithe map. probably a bank	tithe map c 1840
1	8	7	likely,positive	curvilinear	former field boundary	visible on tithe map. probably a ditch	tithe map c 1840
1	9		possible,positive	rectilinear	ditches?former field system?		
1	10		possible,positive	sinuous	uncertain.ditch?		
1	11		possible,positive	linear	ditch? former field system component?		
1	12		possible,positive	irregular	natural?pits?post-holes?	cluster of irregular positive anomalies	
1	13		possible,positive	irregular	natural?pits?post-holes?	cluster of irregular anomalies	
3	14	15	likely,negative	curvilinear	former field boundary	visible on tithe map. probably bank of Devon Hedge construction	tithe map c 1840
3	15	14	likely,positive	curvilinear	former field boundary	visible on tithe map. probably ditches of Devon Hedge bank.	
3	15	14	likely,positive	curvilinear	former field boundary	visible on tithe map. probably ditches of Devon Hedge bank.	
3	16		possible,positive	oval	pit?		
3	17		likely,positive	oval	prehistoric ring-ditch	ring ditch excavated in 2009	DCC HER No MDV79309
2	18		possible, enhanced	random	enhanced dumped ferrous or stoney materials	in filled pond?	
3	19		possible,positive	linear	possible ditch		
2	20	21	likely,negative	curvilinear	former field boundary	visible on tithe map. probably ditches of Devon Hedge bank. similar orentation	tithe map
2	21	20	likely,positive	curvilinear	former field boundary	visible on tithe map. Devon Hedge bank. similar orentation	tithe map
1	101		likely,negative	linear	ditch associated with modern service	recently excavated? Can been seen on the ground	

Table 1: data analysis

<table>
<tr><td colspan="2">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.</td></tr>
<tr><td>Equipment
Instrument: Bartington Instruments grad601-2
Firmware: version 6.1</td><td>Data Capture
Sample Interval: 0.25m
Traverse Interval: 1 metre
Traverse Method: zigzag
Traverse Orientation: GN</td></tr>
<tr><td colspan="2">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</td></tr>
</table>

Table 2: methodology information

Instrument Type: Grad 601 (Magnetometer)
Units: nT
Direction of 1st Traverse: 0 deg
Collection Method: ZigZag
Sensors: 2 @ 1.00 m spacing.
Dummy Value: 32702

Dimensions
Composite Size (readings): 4320 x 1020
Survey Size (meters): 540 m x 510 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: 323.65
Min: -335.98
Std Dev: 6.36
Mean: 0.00
Median: 0.01
PROGRAM
Name: TerraSurveyor
Version: 3.0.34.10
Processes: 7

1 Base Layer
2 Clip at 1.00 SD
3 DeStripe Median Traverse: Grids: All
4 De Stagger: Grids: All Mode: Both By: -1 intervals
5 De Stagger: Grids: c03.xgd d02.xgd d11.xgd c02.xgd d03.xgd d10.xgd Mode: Both By: -1 intervals
6 De Stagger: Grids: d10.xgd Mode: Both By: 2 intervals
7 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: 0 deg
Collection Method: ZigZag
Sensors: 2 @ 1.00 m spacing.
Dummy Value: 32702

Dimensions
Composite Size (readings): 2160 x 510
Survey Size (meters): 540 m x 510 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: 106.67
Mean: 0.03
Median: -0.10

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
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.