

East Devon Local Plan 2020-2042

Site Selection report Addendum – Historic Environment Site Assessment Darts Farm and Business Park Employment sites



October 2025

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1 Introduction

- 1.1 East Devon District Council is preparing a Local Plan covering the period 2020 to 2042 that will allocate sites for development. The site selection process is a judgement that balances top-down strategic issues relating to the Local Plan district-wide housing and employment requirements and the spatial strategy for the distribution of development, with the specific factors in the site assessments. For each settlement, a Site Selection report¹ contains the assessment of sites and identifies those which will be allocated, alongside those that will not, with reasons why.
- 1.2 The Regulation 19 Publication Draft Local Plan consultation took place from February to March 2025. Historic England and Devon County Council identified major concerns for some sites, relating to the impact upon the historic environment. This report is an addendum to the Historic Environment Site Assessment prepared for the sites at Darts Farm and Business Park Employment Site (Clge_25a) where Historic England and Devon County Council comments required further assessment.

¹ Site Selection reports are available at: [Evidence and Examination Library - Site Allocations \(SAL\) - East Devon](#)

2 Site Reference Clge_25a

Site details

Settlement: Clyst St George-NE of Darts Farm

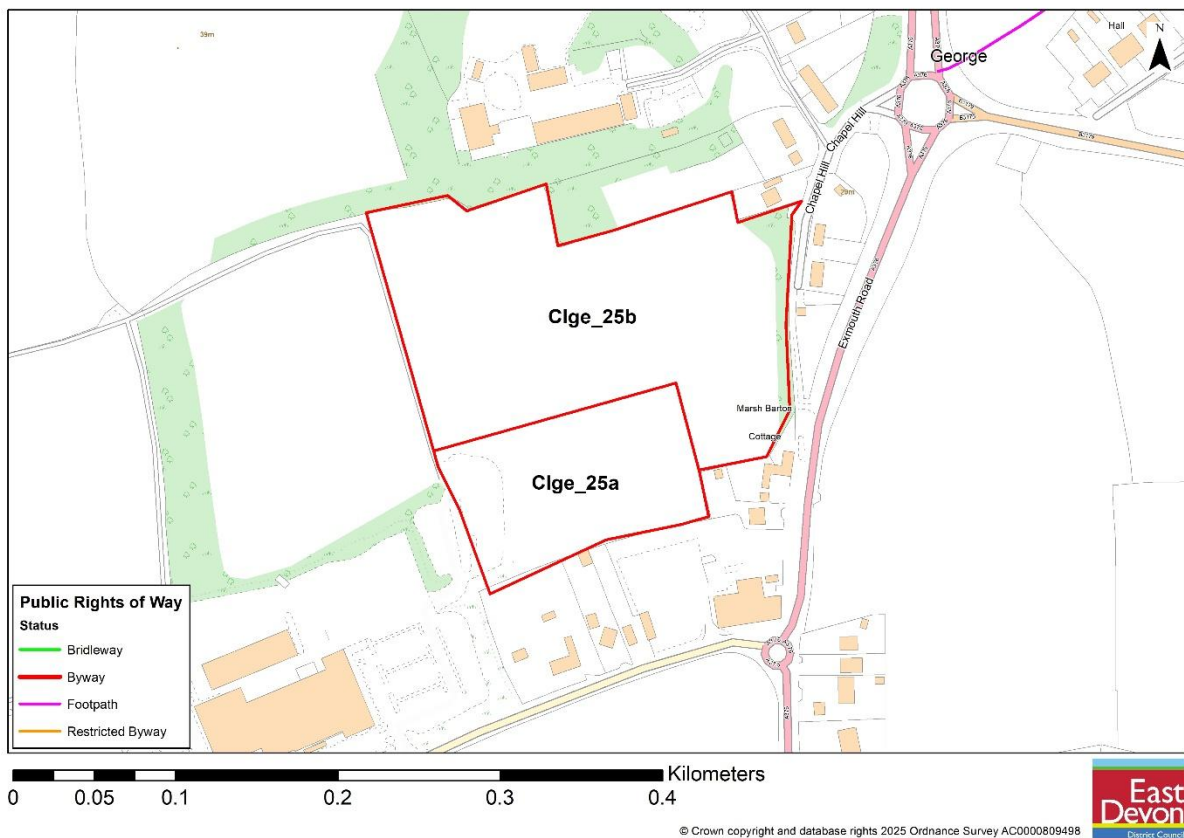
Reference number: Clge_25a

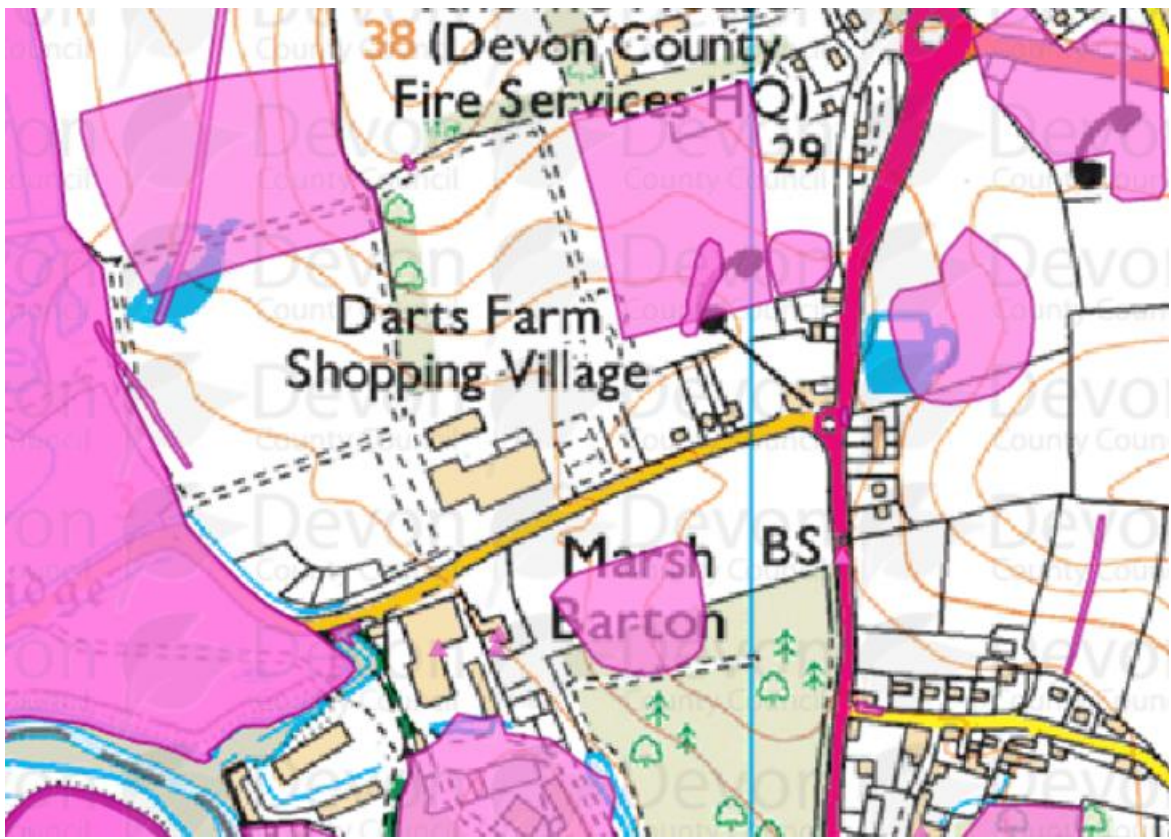
Site area (ha): 1.5

Address: Land adjoining Darts Farm, EX30QH

Proposed use: Mixed use

Site map





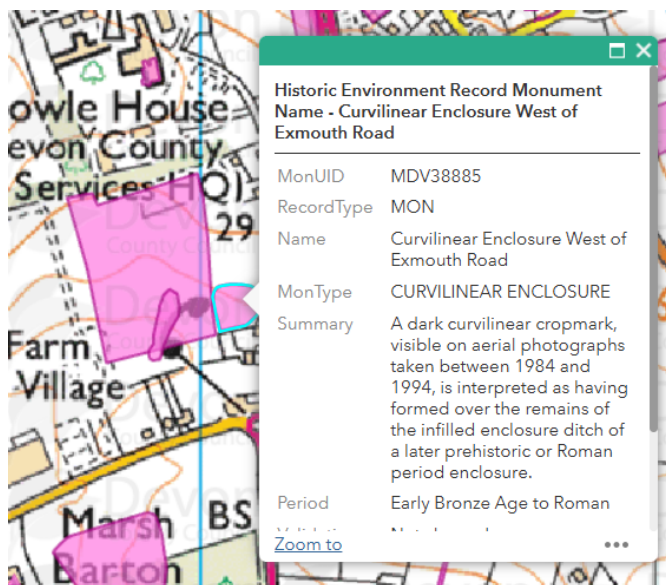
Map showing location of items on the Historic Environment Record and detailed descriptions from the HER

Historic Environment Record Monument
Name - Field Name, Clay Pit Langdon, Clyst St George

MonUID	MDV110563
RecordType	MON
Name	Field Name, Clay Pit Langdon, Clyst St George
MonType	CLAY PIT
Summary	The possible location of a clay pit is indicated by two field names on the 19th century Tithe Map.
Period	Unknown
Validation	Cleaned
Heritage Gateway URL	More info
Zoom to	

(1 of 2)

RecordType	MON
Name	Archaeological Features, land at Darts Farm, Clyst St George, East Devon
MonType	ARCHAEOLOGICAL FEATURE
Summary	An archaeological investigation recorded a large, complex group of anomalies containing many discontinuous elements and may represent archaeological deposits, although features caused by natural runoff processes are equally plausible.
Period	Unknown
Validation	Cleaned
Heritage Gateway URL	More info
Zoom to	



Photos



Site seen from Chapel Hill looking west



Site seen from Exmouth Road looking southwest



View into the site from Darts Farm at the south western corner, looking north east

Historic Environment Site Assessment

Notes on history of area

One of 6 villages on, and named after, the river Clyst. Historic links to the seaport of Topsham, Dutch influenced architecture and bricks (used as ballast)

Overall conclusion

Low-Medium: no concerns identified on current evidence, although archaeological mitigation measures will be required if further investigation at the planning application stage reveals anything of note.



The site allocation area excludes the prehistoric/Romano-British enclosure which archaeological investigation has demonstrated does exist in the vicinity (but located on land to the east of the allocation area). Survey work indicates that part of the western-most ditch of the enclosure may extend slightly into the allocation area but the extent of this limited to the most easterly edge of the allocation area. This area could be buffered and the site use (as car parking or landscaping rather than built development) and layout could ensure that harm is avoided.

Step 1. Identify any heritage assets potentially affected	
Is the site within 100 metres of a designated heritage asset?	No
Could development of the site affect any heritage asset (designated or non-designated) or its setting?	Yes As well as the possible cropmark, the field name suggests it may once have been a claypit but there is no physical evidence identified to support this
List any heritage assets potentially affected.	Cropmark suggesting enclosure

Step 2. Existing contribution of site to significance of heritage asset	
Heritage asset 1	
Description of asset	Curvilinear cropmark MDV38885 A dark curvilinear cropmark, visible on aerial photographs taken between 1984 and 1994, is interpreted as having formed over the remains of the infilled enclosure ditch of a later prehistoric or Roman period enclosure.
Significance of asset and setting	Medium The cropmark is located to the east of the site. The allocation boundary has been drawn to exclude its known extent.
Relationship of site with heritage asset	The allocation has been drawn to exclude the known extent of the enclosure, however if further investigation finds that it extends into the eastern part of the site then it is possible to design a layout which buffers it. The use and design of the layout could ensure that less intrusive uses are located to the east of the site, eg landscaping and car parking so that any groundworks are minimised.
Level of contribution (site to heritage asset)	Moderate
Further assessment required?	Yes, as part of the planning application process

Step 3. Identifying potential impact on significance of heritage asset	
Heritage asset 1	
What impact would development have on the heritage asset and its setting?	Moderate The impact could potentially be significant but this is dependent upon further investigation as to its extent, as part of the planning application process
Could the site be developed in a way that minimised potential impact?	Potentially through considered design and layout appropriate to the asset.
Would the development affect the heritage asset in other ways?	Development could destroy physical traces of the asset

Step 4. How to maximise enhancements and avoid harm	
Heritage asset 1 maximising enhancement	
Could the development improve public access to and interpretation of the heritage asset?	Yes
Would development enable further research and recording of the heritage asset?	Yes
Would development enable better revealing of the significance of the heritage asset?	No
Would development enable the asset to be removed from the at risk register?	No
Heritage asset 1 avoiding harm	
Are there reasonable alternative sites?	Yes
Could the site boundary be changed to avoid harm?	Yes
Could the amount of development be reduced to avoid harm?	Yes
Would a different type of development (use) avoid harm?	No, although car parking/landscaping associated with the retail/employment use could be located closer to the asset
Could design avoid harm?	Yes
Notes	If development is restricted to the western part of the site then no harm will occur.

Information from the Landowner

The Potential for Development of the Land to Affect Archaeological Remains

EDDC indicated that this was the primary issue of concern, following DCC's concerns about the potential for the allocation land to contain prehistoric or Romano-British remains. It was DCC's comments that this issue should be investigated further prior to any allocation being confirmed. In response, my client has instructed AC Archaeology to carry out an archaeological assessment of the land and we attach a copy of their report on their findings.



In summary, geophysical surveys have been undertaken to secure the evidence needed and the results of these have been considered by AC Archaeology. Their analysis confirms that a prehistoric/Romano-British enclosure does exist in the vicinity but that this is located on land immediately to the east of allocation area. The survey indicates that there is a possibility that part of the western-most ditch of the enclosure may extend slightly into the allocation area but the extent of this limited to the most easterly edge of the allocation area. Any such presence could be addressed through the use of a buffer zone as part of any development (so that no development takes place on the eastern edge) or through the use of target archaeological investigations. Either measure can be employed in the usual way as part of detailed scheme development in due course. AC Archaeology make it clear that there are no archaeological remains of any value on any other part of the site.

This evidence provides the comfort needed that there is no archaeological sensitivity associated with the land which might prevent the land from being allocated for development. Further work can be done on this issue in support of any future planning application and in the usual way.

Please see Appendices for the technical assessment.

Feedback from the Senior Historic Environment Officer at Devon County Council

Allocation ref: Clge_25a - Land adjoining Darts Farm

My ref: ARCH/DM/ED/40379

Thanks for the email and the additional heritage information. I think in the light of these results the Historic Environment Team would advise that any impact upon any heritage assets with archaeological interest can be mitigated by a programme of archaeological work either secured either (i) by the submission of a written scheme of investigation submitted in support of any future planning application or (ii) by the application of the two usual archaeological conditions to any consent that may be granted. The preferred wording of these conditions is set out below:

'No development shall take place until the developer has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation (WSI) which has been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out at all times in accordance with the approved scheme as agreed in writing by the Local Planning Authority.'



Reason

'To ensure, in accordance with Policy EN6 (Nationally and Locally Important Archaeological Sites) of the East Devon Local Plan and paragraph 218 of the National Planning Policy Framework (2024), that an appropriate record is made of archaeological evidence that may be affected by the development.'

This pre-commencement condition is required to ensure that the archaeological works are agreed and implemented prior to any disturbance of archaeological deposits by the commencement of preparatory and/or construction works.

In addition, the Historic Environment Team would advise that the following condition is applied to ensure that the required post-excavation works are undertaken and completed to an agreed timeframe:

'The development shall not be brought into its intended use until the post investigation assessment has been completed in accordance with the approved Written Scheme of Investigation. The provision made for analysis, publication and dissemination of results, and archive deposition, shall be confirmed in writing to, and approved by, the Local Planning Authority.'

Reason

'To comply with Paragraph 218 of the National Planning Policy Framework (2024), which requires the developer to record and advance understanding of the significance of heritage assets, and to ensure that the information gathered becomes publicly accessible.'

I would envisage a suitable programme of work as taking the form of a staged programme of archaeological works, commencing with the excavation of a series of trial trenches to determine the presence and significance of any heritage assets with archaeological interest that will be affected by the development. Based on the results of this initial stage of works the requirement and scope of any further archaeological mitigation can be determined and implemented either in advance of or during construction works. This archaeological mitigation work may take the form of full area excavation of all or targeted part(s) of the development site in advance of construction works commencing. The results of the fieldwork and any post-excavation analysis undertaken would need to be presented in an



appropriately detailed and illustrated report, and the finds and archive deposited in accordance with relevant national and local guidelines.

LAND AT DARTS FARM, CLYST ST GEORGE

Heritage Technical Note

Prepared by:
Andrew Passmore

On behalf of:
Darts Farm Ltd

Document No: ACA0374/1/0

Date: August 2025



AC archaeology



LAND AT DARTS FARM, CLYST ST GEORGE

Heritage Technical Note

1. Introduction

This heritage technical note has been prepared by AC archaeology in August 2025 to consider the archaeological implications of the proposal within East Devon's *Emerging Local Plan 2020-2042* for the allocation of site Clge-25a as employment land at Darts Farm. Under policy WS15 within the *Regulation 19 Publication Draft* site Clge-25a is one of two parcels of land located at Darts Farm. The policy notes that 'archaeological assessment will be required prior to development commencing', and that 'Development proposals must be based on further environmental, heritage, and traffic assessments, with appropriate mitigation undertaken if required.'

Site Clge-25a covers an area of approximately 1.8ha, centred on NGR SX 9794 8853 and located to the northeast of Darts Farm. It occupies the southwest part of a larger field, with its southwest corner being utilised as an overflow car park for Darts Farm. The topography of the area is a south-facing hillslope although within the centre of the field (and the proposed land allocation) is a shallow, narrow dry valley; this is more pronounced to the north than to the south.

The archaeological interest in site Clge-25a relates to two entries in the Devon Historic Environment Record – one for placename evidence of a quarry (MDV110563), and the other for a cropmark enclosure (MDV38885) of likely later prehistoric or Romano-British date.

The document is supported by a geophysical survey (Trick and Edwards 2025) that encompassed site Clge-25a and also included a further part of the field to the east where the cropmark enclosure is located.

2. Archaeological Background

Entry MDV38885 in the Devon Historic Environment Record is for a likely later prehistoric or Romano-British enclosure recorded from cropmarks on aerial photographs. The geophysical survey has confirmed the presence of the north and west sides of the enclosure and has also identified part of what might be a second, external ditch on the western side (although another interpretation of this group of anomalies is possible – see below). This feature is also visible on some modern aerial photographic imagery, and straddles the eastern edge of the proposed land allocation. Such enclosures are the 'dominant tradition across the South-West Peninsula throughout the Roman period' (Rippon and Gould 2021, 58, which is the most recent assessment of the Roman-British landscape in the county, and which also discusses the patterns of settlement including single and multi-ditched enclosures). As the majority of the enclosure is situated outside the boundary of the proposed land allocation it would not be impacted by any future development within site Clge-25a. Only the newly-identified possible western external ditch falls along the edge of the proposed land allocation and has the



potential to be affected by any future development. Due to this location this feature could be protected by incorporating an undeveloped buffer along the eastern boundary of any future scheme. Alternatively, in accordance with paragraph 218 of the *National Planning Policy Framework* any impact could be mitigated by a targeted archaeological excavation. Such excavations have previously taken place on single- and multi-ditched enclosures in Devon such as at Uffculme, Land Southwest of Exeter, and on the South Devon Link Road.

Entry MDV110563 in the Devon Historic Environment Record relates to a possible clay extraction pit based on placename evidence from the tithe survey of Clyst St George. Neither the Clyst St George tithe map of 1839 or later Ordnance Survey maps record the presence of a pit (either active or disused) here. A possible large, infilled pit has been identified by the geophysical survey (anomaly group 2). Rural extraction pits of post-medieval date in lowland Devon are rarely considered to be non-designated heritage assets, and this feature is unlikely to represent an archaeological constraint.

The geophysical survey has identified a small number of other anomaly groups that do not (or do not clearly) relate to the existing archaeological data, and which may represent further buried archaeological remains. Anomaly group 1 corresponds with the slight valley within the field, and the author agrees with the interpretation that these anomalies are likely to represent natural fluvial deposits. Anomaly group 3 is the possible outer ditch to the enclosure discussed above. The location of the feature also broadly correlates with the line of a removed field boundary that is recorded on the Clyst St George tithe map of 1839 but not on the later Ordnance Survey maps. There were four former field boundaries within the survey area shown on these maps, but only this feature was identified; due to this the surveyors have interpreted this feature as relating to the early enclosure rather than the historic field system.

3. Comments

The archaeological potential of site Clge-25a is recognised within policy WS15 for land allocation at Darts Farm, but this is not considered by East Devon District Council to be a constraint to the proposed land allocation (or therefore to any future development here).

The principal archaeological interest is an enclosure, of likely late prehistoric or Romano-British date, which is located immediately to the east of, and outside, the boundary of the proposed land allocation. However, a new geophysical survey has identified a possible additional external ditch to the enclosure whose location corresponds with the eastern edge of the proposed land allocation. This enclosure is not considered to be a constraint, and due to the position of the newly identified probable external ditch there is potential for its location to be scoped out of any future development or for it to be mitigated through targeted excavation.

The geophysical survey has not identified any other potential buried archaeological remains that would be a constraint to either the proposed land allocation or to any future development here.



4. Sources Consulted

Devon County Historic Environment Record:
<https://map.devon.gov.uk/portal/apps/webappviewer/>

East Devon District Council, 2025. *East Devon Local Plan 2020 to 2042 Regulation 19 Publication Draft February 2025.*

Edwards, M., and Trick, S., 2025. *An Archaeological Magnetometer Survey, Land at Darts Farm, Clyst St George, Devon*, Substrata Report: 2507DAR-R-1.

Ministry of Housing, Communities & Local Government, 2024. *National Planning Policy Framework.*

Rippon, S., and Gould, D., 2021. 'Regional identities in the Roman Period: Dumnonia and the Wider South-West of Britain', in Rippon, S., and Holbrook, N. (eds), 2021. *Roman and Medieval Exeter and their Hinterlands: From Isca to Excester*. Exeter: A Place in Time **1**, 45-102.

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Substrata

Archaeological Geophysical Surveyors

An archaeological magnetometer survey

**Land at Darts Farm, Clyst St. George,
Devon**

Centred on NGR: 297951,088563

Report: 2507DAR-R-1

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1 Introduction

This report presents the results of an archaeological magnetometer survey of land proposed for inclusive within the emerging East Devon Local Plan for employment use (site Clge-25a) as listed in Section 4.

The survey was commissioned by AC Archaeology Ltd to provide information on the archaeological potential of land proposed for allocation under reference Clge-25a. The commissioning of this report was in keeping with the National Planning Policy Framework, Chapter 16, Paragraph 207 (Ministry of Housing, Communities and Local Government 2024). The survey and report were completed in compliance with a Survey Method Statement (Substrata Ltd, 2025).

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
Survey Date(s):	July 2025
Investigation level:	Level 2 (prospection and delineation)
Survey resolution:	1m by 0.25m
Survey Size:	1.64 ha

4.2 Location

Name:	Land at Darts Farm, Clyst St. George, Devon
Parish:	Clyst St. George
County:	Devon
Nearest Postcode:	EX3 0QJ
Survey centre NGR:	SX979885
Survey centre NGR (E/N):	297951,088563
Historic environment designation:	None
OASIS ID:	substrat1-536007

5 Summary

Substrata were commissioned by AC Archaeology in 2025 to carry out an archaeological magnetometer survey of c. 1.6 hectares of land at Darts Farm in the parish of Clyst St. George in East Devon. Eight geophysical anomaly groups were detected of which four are characterised as representing potential buried archaeological deposits, with the remainder classed as modern.

The Survey Area contains two entries in the Devon Historic Environment Record—a cropmark in the southeast corner described as a potential enclosure of late prehistoric or Roman date, and field name evidence suggesting the presence of former clay pits. A curvilinear anomaly detected in the southeast corner is likely to represent the potential enclosure, and a large subcircular anomaly to the west is tentatively identified as a former clay pit.

One group is likely to represent a former field boundary recorded on the Clyst St George tithe map. A large complex group containing many discrete elements may be of archaeological origin, although natural water runoff deposits is equally plausible.

Three groups were classified as modern. One group is likely to represent a modern service, while another probably represents ground disturbance and ferrous rubbish associated with the creation of an ad-hoc carpark in the southwest corner of the field. One group probably represents ground disturbance caused by the removal of a former field boundary, and a final group is probably a buried large ferrous object.

6 Standards

The standards that were used to complete this survey are defined by the Chartered Institute for Archaeologists (2014a) and the European Archaeological Council (Schmidt *et al.* 2016). The codes of approved practice to be followed are those of the Chartered Institute for Archaeologists (2014b) and Archaeology Data Service (Schmidt and Ernenwein, undated).

7 Survey aims and objectives

7.1 Aims

1. Within the framework set out in Chartered Institute for Archaeologists (2014a) and European Archaeological Council (Schmidt *et al.* 2016), 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 within the land proposed for allocation within the emerging East Devon Local Plan.

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, 2025) 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.

9 Survey Area

9.1 Location and description

The Survey Area consists of part of an agricultural field adjacent to the Darts Farm Shopping Centre, in the parish of Clyst St. George, Devon, covering c. 1.6 hectares. The Survey Area is bounded by the A376 to the east, to the north by a residential area, and to the south by a public house car park. To the west is another field.

Topographically the ground generally slopes down north to south with elevations in the north of c. 20m above ordnance datum (AOD), and 15m AOD in the south. Amongst this general trend there is north-south ridging visible which appears to follow 19th century field boundaries. Around 425m west of the Survey Area, the mudflats of the River Exe estuary

begin.

9.2 Geology and sub-surface deposits

The solid geology of the Survey Area comprises Dawlish Sandstone Formation - Sandstone. Sedimentary bedrock formed between 298.9 and 252.2 million years ago during the Permian period. No superficial geology is recorded (British Geological Society, undated).

A 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

The soils within the Survey Area are freely draining slightly acid sandy soils (Cranfield Soil and Agrifood Institute, undated).

10 Archaeological background

10.1 Historic landscape characterisation

North Half: Barton fields. These relatively large, regular enclosures seem likely to have been laid out between 15th-18th centuries. Some curving boundaries may be following earlier divisions in the pre-existing medieval fields. In Cornwall these are sometimes called Barton fields.

South Half: Orchard. Orchards planted with fruit trees

10.2 Summary of the archaeological background

This section is not designed to provide a comprehensive understanding of the historic environment of the surrounding area and should not be used as a source for further work.

No prior research materials relating to the archaeological background of the Survey Area were available to Substrata. An initial search of the Heritage Gateway (Heritage Gateway 2012) finds no scheduled monuments, and two non-designated HER entries within the Survey Area.

Of these, the western side of the field features an areal HER record named “Clay Pit Langdon, Clyst St George”. The possible location of a clay pit is indicated by two field names on the 19th century Tithe Map (MDV110563).

The southeast corner of the field has another areal HER record, “Curvilinear Enclosure West of Exmouth Road”. A dark curvilinear cropmark, visible on aerial photographs taken between 1984 and 1994, is interpreted as having formed over the remains of the infilled enclosure ditch of a later prehistoric or Roman period enclosure.(MDV38885).

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 of 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 modern objects such as inspection covers, 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.

Parallel, linear anomalies following the trend of the extant field boundaries (Figures 3 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

Anomaly Group 3 is a linear anomaly that corresponds with a field boundary depicted on the Clyst St George tithe map of c. 1840, and probably represents the remains of this former boundary. Another possible interpretation is that this is an outer ditch of potential enclosure, Group 4, described below. This latter interpretation is supported by the fact that other 19th century boundaries crossing the Survey Area were not detected.

12.3 Data with no previous archaeological provenance

Anomaly Group 1 is a complex group containing many discontinuous, positive anomalies in a variety of shapes, that appear to follow a common, roughly north-south trend. It is uncertain what this group represents. These may be cut features of archaeological origin. Alternatively, as this group runs down a subtle micro-valley it may represent natural fluvial deposits.

Anomaly Group 2 is a large irregularly shaped, weakly dipolar anomaly, c. 7-10m in diameter of uncertain origin. It may be a large backfilled pit, possibly a clay pit referenced

by the field name recorded in the tithe apportionment that has been backfilled with mixed materials.

Anomaly Group 4 is a curvilinear anomaly in the southeast corner of the Survey Area which is likely to correspond with a previously recorded cropmark, listed by the Devon HER as “curvilinear Enclosure West of Exmouth Road”, Mon. No. MDV38885. A large portion of the enclosure appears to lie outside the Survey Area.

Potential modern and services

Anomaly Group 101 is likely to be a modern service at the edge of the field.

Anomaly Group 102 is an irregular dipolar anomaly located at the edge of an ad hoc car park. This group is taken to represent disturbed ground that is also contains some modern ferrous objects.

Anomaly Group 103 is a spread of enhanced magnetic response in the southeast corner of the Survey Area, the shape of which appears to broadly correspond with the corner of a former small square field drawn on the tithe map. This small field no longer exists and this anomaly group is interpreted therefore as ground disturbance associated with the removal of this boundary.

Anomaly Group 104 is likely to represent a buried ferrous object(s).

Additionally there are several dipolar spikes spread across the Survey Area, these are considered to represent modern ferrous material, and so have not been formally mapped.

13 Conclusions

The geophysical survey was successful in detecting and locating anomalies of possible and likely archaeological origin. Eight geophysical anomaly groups were detected of which four were characterised as representing potential buried archaeological deposits, with the remainder classed as modern.

Of these, one group (Group 4) is likely to represent a previously recorded cropmark, described by the HER as a potential enclosure of the late prehistoric or Roman period. One group (3) is likely to represent a former field boundary present on the tithe map. One group (2) may represent a extractive pit as alluded to in the tithe apportionment field name although this may be a generic large pit. A large, complex group (1) containing many discontinuous elements may represent archaeological deposits, although features caused by natural runoff processes are equally plausible.

Four groups were classed as modern. One of these (Group 101) is likely to represent a field edge-service while another (104) is likely to represent a buried modern object. One group probably represents disturbed ground and ferrous trash around the edge of an overspill car park in the corner of the field. A final group probably represents disturbance caused by the removal of a rectilinear field boundary in the southeast corner of the field some time in the 20th century.

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: substrat1-536007

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 Archaeology 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.

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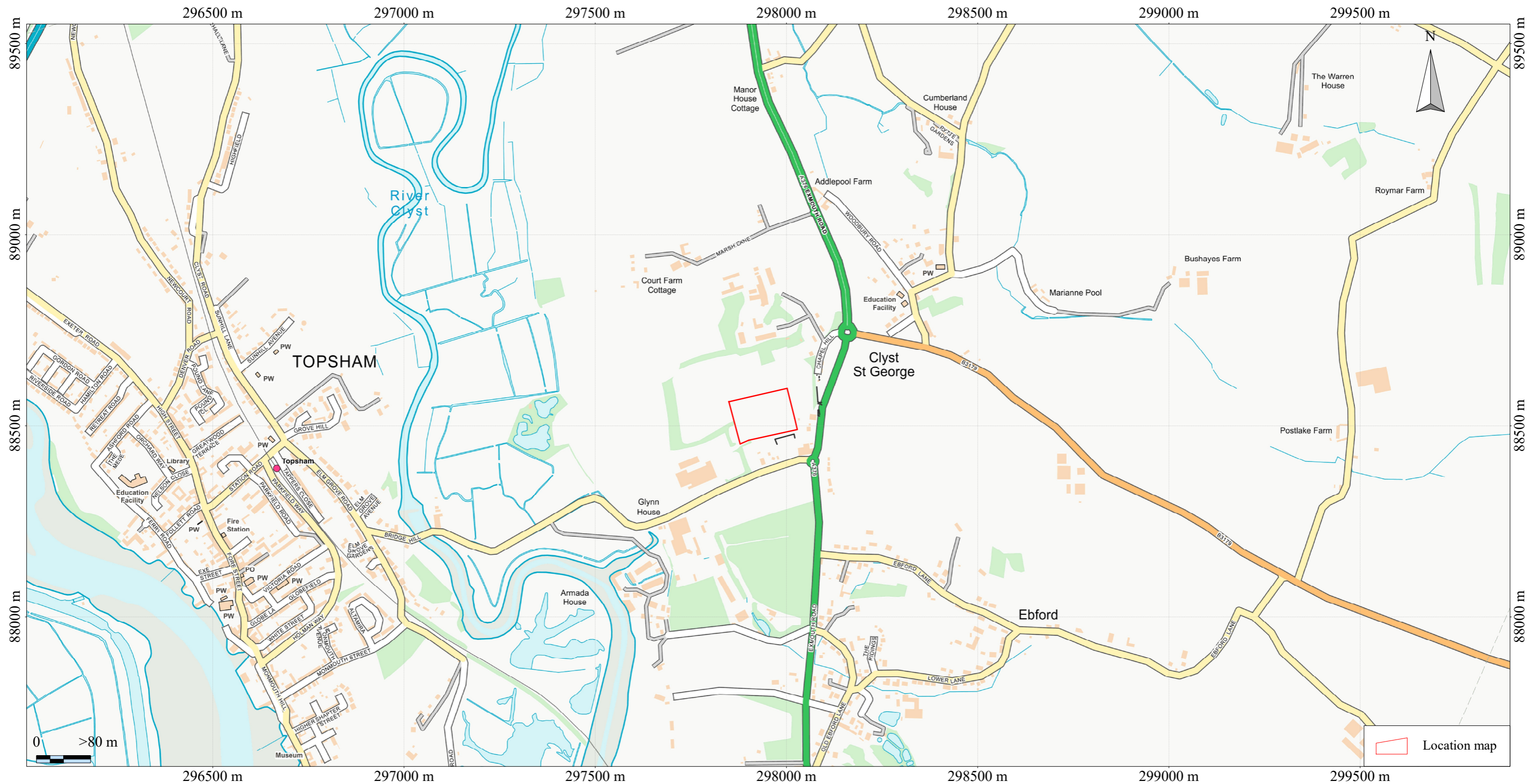
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Appendix 1 Figures

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: 297952.60 m, centre Y: 88579.88 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 Darts Farm, Clyst St. George, Devon
 Centred on NGR: 297951,088563
 Report: 2507DAR-R-1

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

Figure 1: Location map



British Grid
 centre X: 297954.40 m, centre Y: 88532.48 m

Geophysical survey: Copyright Substrata Limited.
 Base map: Ordnance Survey (c) Crown Copyright 2018.
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Scale: 1:1000 @ A3. Spatial Units: Meter. Do not scale off this drawing

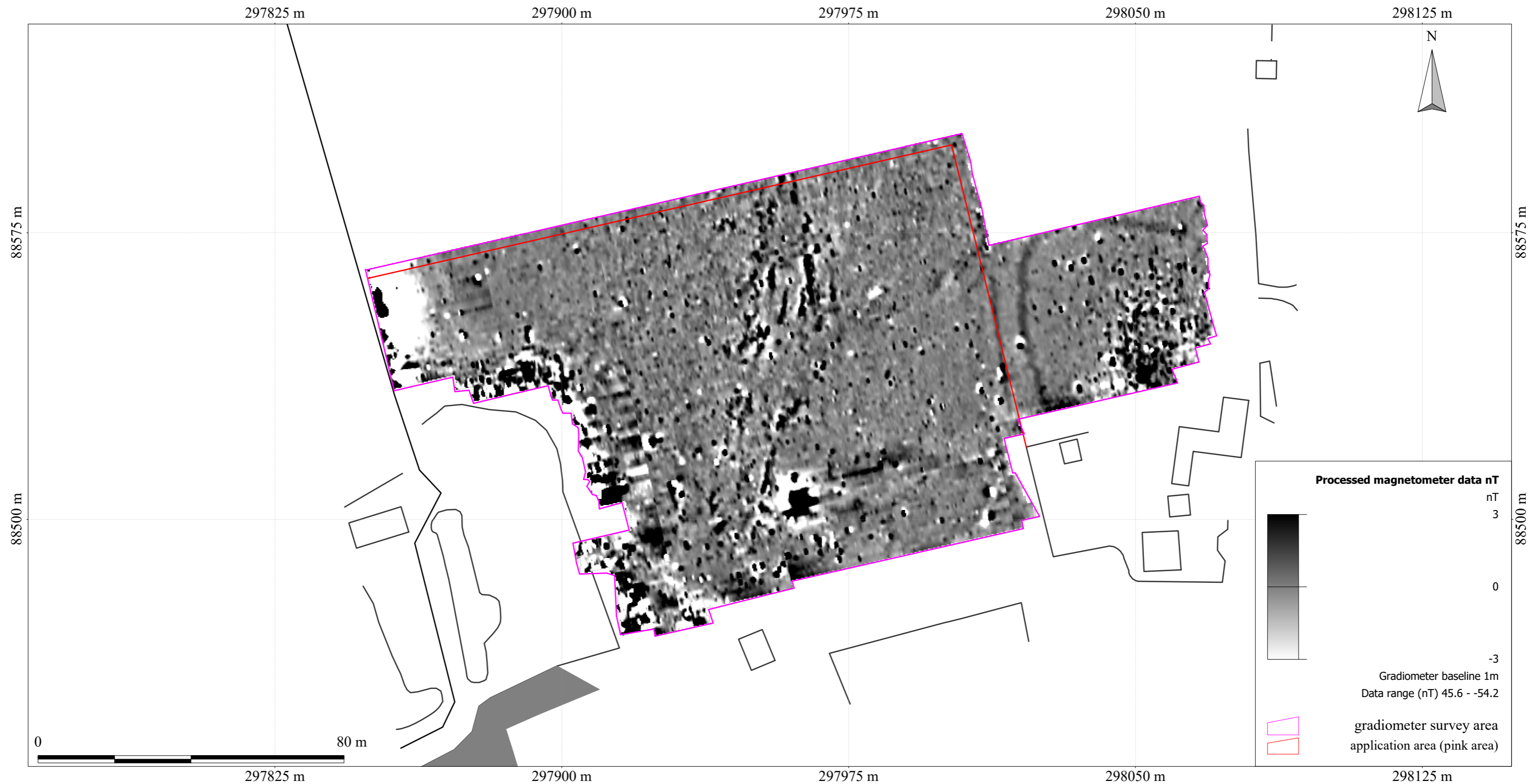
Notes:

1. All interpretations are provisional and represent potential archaeological deposits.
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Figure 2: Survey interpretation



British Grid
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Figure 3: Processed magnetometer data (nT)



British Grid
centre X: 297954.40 m, centre Y: 88532.48 m

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

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

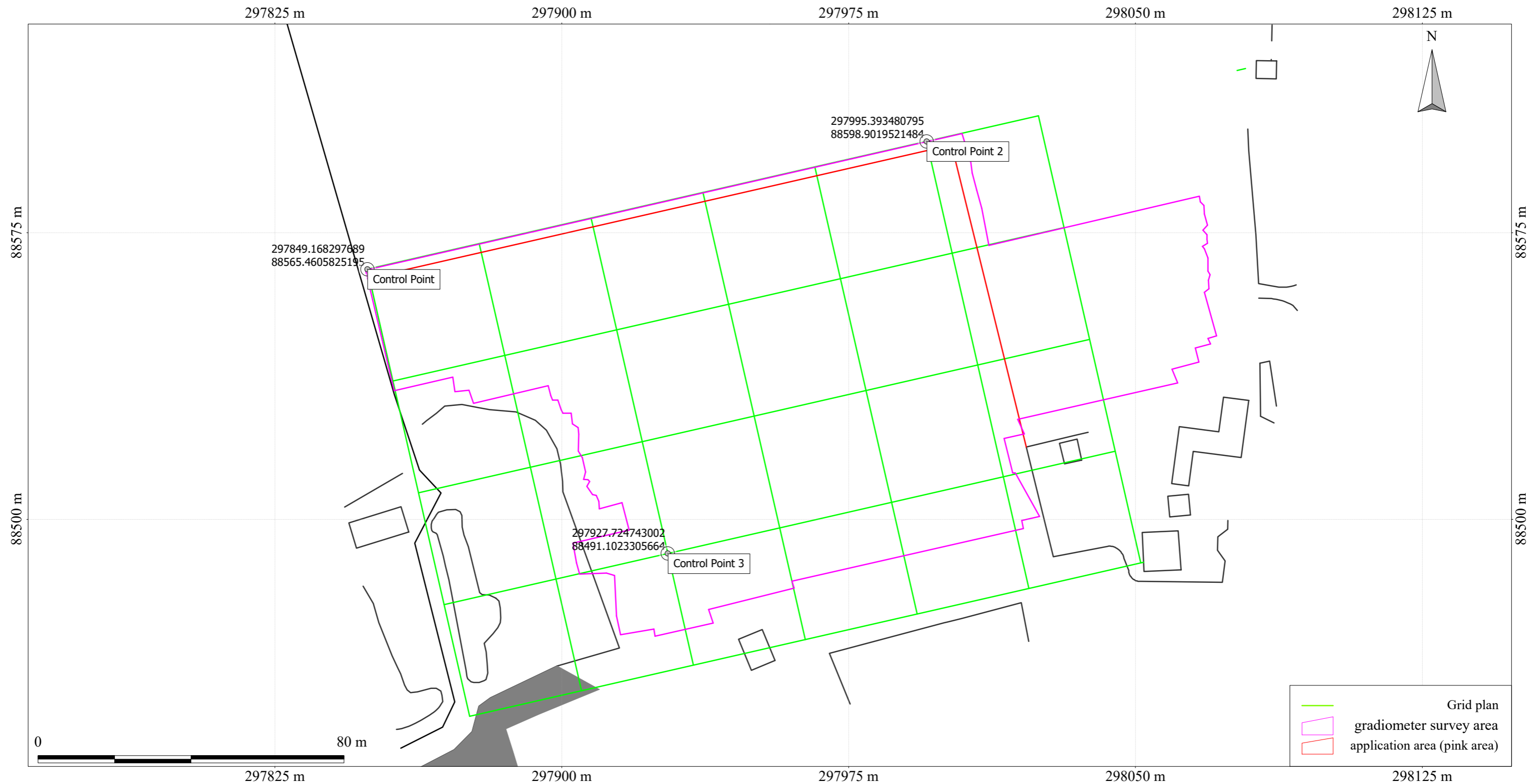
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1. All interpretations are provisional and represent potential archaeological deposits.
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Figure 4: Unprocessed magnetometer data (nT)



British Grid
 centre X: 297954.40 m, centre Y: 88532.48 m

Geophysical survey: Copyright Substrata Limited.
 Base map: Ordnance Survey (c) Crown Copyright 2018.
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Scale: 1:1000 @ A3. Spatial Units: Meter. Do not scale off this drawing

Notes:

1. All interpretations are provisional and represent potential archaeological deposits.
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Figure 5: Grid plan and control points E/N

Appendix 2 Tables

Site: Land at Darts Farm, Clyst St. George
 Centred on NGR: 297951,088563

plot	anomaly group	associated anomaly groups	anomaly characterisation certainty & class	anomaly form	additional archaeological characterisation	comments	supporting evidence
	1		possible,positive	various	uncertain.archaeology? natural runoff?	appears to follow natural topography and runoff visible in satellite imagery	
	2		possible,weak dipolar	irregular	uncertain. pit? dew pond?		
	3		likely,positive	linear	former field boundary		tithe map c. 1840
	4		likely,positive	curvilinear	enclosure?	probable HER entry MDV38885	
	101		likely,dipolar	linear	modern service?		
	102		possible,dipolar				
	102		possible,dipolar				
	103		possible,enhanced	irregular	hedge removal?	small field here until sometime after 1946	
	104		possible,dipolar	round	buried ferrous object?		

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:	0 deg
Collection Method:	ZigZag
Sensors:	2 @ 1.00 m spacing.
Dummy Value:	32702
Dimensions	
Composite Size (readings):	1080 x 390
Survey Size (meters):	270 m x 390 m
Grid Size:	30 m x 30 m
X Interval:	0.25 m
Y Interval:	1 m
Stats	
Max:	13.15
Min:	-14.74
Std Dev:	4.03
Mean:	0.08
Median:	0.00
Processes: 4	
1	Base Layer
2	Clip at 1.00 SD
3	De Stagger: Grids: All Mode: Both By: -2 intervals
4	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 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):	1080 x 390
Survey Size (meters):	270 m x 390 m
Grid Size:	30 m x 30 m
X Interval:	0.25 m
Y Interval:	1 m
Stats	
Max:	98.79
Min:	-100.00
Std Dev:	7.44
Mean:	6.15
Median:	6.05
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: Unprocessed raw 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.