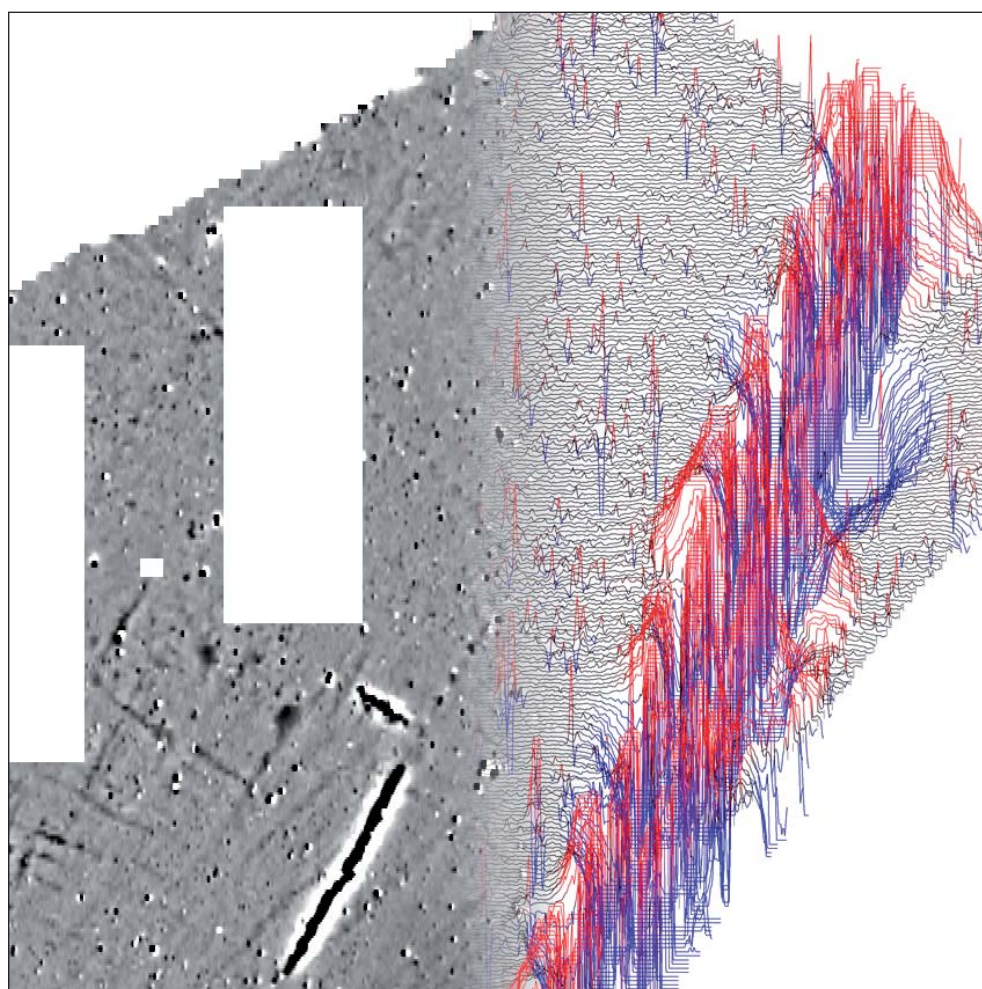




making sense of heritage

Land at Forest Farm Chippenham, Wiltshire

Detailed Gradiometer Survey Report



Ref: 109920.03
October 2015



**Land at Forest Farm
Chippenham, Wiltshire**

Detailed Gradiometer Survey Report

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Land at Forest Farm Chippenham, Wiltshire

Detailed Gradiometer Survey Report

Summary

A detailed gradiometer survey was conducted over land at Forest Farm, Chippenham, Wiltshire (centred on NGR 393737, 171840). The project was commissioned by Terence O'Rourke Limited on behalf of Gleeson Strategic Land. The aim was to establish the presence, or otherwise, and nature of detectable archaeological features in support of a planning application for the development of the site.

The site comprises five arable and pasture fields located to the south of London Road, approximately 2.9 km to the south-east of Chippenham. The site covers an area of approximately 11.9 ha, with 2.6 ha of this area having already been surveyed during an earlier phase of works (Wessex Archaeology 2015a). This second phase of detailed gradiometer survey covered the remaining area of 9.3 ha..

The geophysical survey was undertaken between 28th September and 2nd October 2015 and, along with the results of the first phase, has demonstrated the presence of a number of anomalies of definite, probable and possible archaeological interest, along with regions of increased magnetic response and areas of ridge and furrow.

The anomalies identified as being of archaeological interest are primarily ditch-like features with two distinct morphologies visible suggesting distinct phases of activity and use. These comprise either curvilinear and smaller rectangular enclosure ditches or distinct 'ladder' form ditches, the latter mainly located in the south-western part of the site. Areas of ridge and furrow have also been identified within these areas. The most complex areas of definite and potential archaeology are located in the south of the large central field and in the western most corner of the site.

The remaining features detected include modern ploughing trends, field drains, areas of ferrous debris and at least two modern services.



Land at Forest Farm Chippenham, Wiltshire

Detailed Gradiometer Survey Report

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Wessex Archaeology would like to thank Terence O'Rourke Limited for commissioning the geophysical survey on behalf of their client Gleeson Strategic Land. The assistance of John Trehy is gratefully acknowledged in this regard.

The fieldwork was undertaken by Jen Smith and Rebecca Hall. Jen Smith processed and interpreted the geophysical data and wrote the report. The geophysical work was quality controlled by Elizabeth Richley and Lucy Learmonth whilst Quality Assurance was undertaken by Naomi Brennan. Illustrations were prepared by Richard Milwain. The project was managed on behalf of Wessex Archaeology by Lucy Learmonth.



Land at Forest Farm Chippenham, Wiltshire

Detailed Gradiometer Survey Report

1 INTRODUCTION

1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by Terence O'Rourke Limited on behalf of Gleeson Strategic Land to carry out a geophysical survey at Forest Farm, Chippenham, Wiltshire (hereafter "the Site", centred on NGR 393737, 171840) (**Figure 1**). The survey forms part of an ongoing programme of informative archaeological evaluation in support of a future planning application for the development of the Site.
- 1.1.2 The desk-based assessment (DBA) had identified a low potential for archaeological sites but qualified that this conclusion was limited by the extent and quality of existing information. Further archaeological work in the form of geophysical survey was deemed the most appropriate and effective strategy in the first instance in order to inform the need for and location of any future archaeological investigations (Terence O'Rourke 2015).
- 1.1.3 The aim of the geophysical survey was to establish the presence/absence, extent and character of detectable archaeological remains within the Site.
- 1.1.4 Following Historic England guidelines (English Heritage 2008), initially the entire development area (42.9 ha) was subject to a recorded scanning gradiometer survey. Transects spaced at 10 m were able to highlight possible features and areas of archaeological potential. This was followed by a detailed phase of survey covering 25% of the development, which targeted a number of these potential archaeological anomalies as well as a 'blank' area identified through the initial scanning phase (Wessex Archaeology 2015a). Due to a reduction in the application site boundary to approximately 11.9 ha, the County Archaeologist for Wiltshire, Melanie Pomeroy-Kellinger, advised that a full detailed gradiometer survey should be carried out over the full revised area.
- 1.1.5 This report presents a brief description of the methodology followed, the detailed survey results and the archaeological interpretation of the geophysical data from both phases of work within the revised Site boundary.

1.2 Site location and topography

- 1.2.1 The Site is located c1.4 km to the south-east of the village of Pewsham and approximately 2.9km to the south-east of Chippenham, it lies to the south of London Road (A4).
- 1.2.2 The Site surrounds the northern half of Forest Farm and its associated outbuildings, occupying an area of approximately 11.9 ha of agricultural land currently under mixed pasture and arable use. The Site is bounded by London Road (A4) to the north and east, Pewsham Way to the north-west, a wooded area to the west and south-west, and further agricultural land (and Forest Farm) to the south.



1.2.3 The centre of the Site lies at approximately 63 m above Ordnance Datum (aOD) and inclines gently upwards to approximately 65 m aOD towards the northern edge of the Site.

1.3 Soils and geology

1.3.1 The solid geology comprises the mudstone, siltstone and sandstone of the Oxford Clay Formation and Kellaways Formation with no overlying superficial geological deposits recorded within the Site (BGS 2015). However, superficial alluvial fan deposits of clay and silt are recorded in the vicinity.

1.3.2 The soils underlying the Site are consist of the pelo-stagnogley soils of the 712b (Denchworth) association with some areas to the west thought to consist of typical stagnogley soils of the 711g (Wickham 3) association (SSEW SE Sheet 5-2 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.



2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The archaeological and historical background was assessed in detail within the previous desk-based assessment (Terence O'Rourke 2015) which considered the recorded historic environment resource within a 1 km Study Area around the larger development area. The results of this assessment and relevant entries from the Wiltshire Historic Environmental Record (WHER), PastScape (PS; which is derived from the National Record of the Historic Environment) and the National Heritage List for England (NHLE) are summarised below.

2.2 Prehistoric

2.2.1 The earliest recorded activity within the vicinity of the Site is a Mesolithic arrowhead found in Foxcroft Walk (WHER MWI64451). Further prehistoric activity in the area is indicated by an assemblage of Neolithic flint tools found in Pewsham (WHER MWI3655).

2.2.2 While these records seem to indicate little activity in the prehistoric period it should be noted that earlier activity is often ephemeral and difficult to identify within the archaeological record and that with few archaeological investigations in the immediate area the archaeological resource may well be underrepresented.

2.3 Romano-British

2.3.1 A number of small-scale Romano-British settlements have been identified in the vicinity of Chippenham including Lodge Farm, Heywood located c10 km to the north of the Site and Chequers Farm located to the south of the town. Two Roman coins have been found to the north-west of the site (WHER MWI5227).

2.4 Medieval, post-medieval and modern

2.4.1 Chippenham is recorded in the 1086 Domesday Survey as a very large settlement of 177 households and it is suspected that the Church of St Andrew in the south-eastern part of the current settlement may have been the site of a Saxon minster church

2.4.2 Pewsham Forest (WHER MWI5236) is recorded a deer park in the medieval period. It formed a part of the larger royal forest of Chippenham which was probably established in the Saxon period. Gate Farm and Hanger Farm Park provide further evidence for aspects of the forest and deer park (WHER MWI5026 and MWI5196). Areas of the forest would have been gradually taken into arable cultivation within the medieval period and by the early 17th century the forest had been largely cleared and enclosed. Areas of medieval or post-medieval ridge and furrow identified from 1951 aerial photographs within the Site (PS 1580044 and 1579987) suggest that it formed part of the wider agricultural hinterland of Chippenham at this time.

2.4.3 Chippenham experienced a decline in its prosperity in the earlier post-medieval period but then experienced a period of growth and expansion in the 18th century and 19th century. This was partly due to an expansion of the cloth industry and the rise in engineering industries facilitated by the construction of the Wiltshire and Berkshire Canal (WHER MWI9472) and the railway.

2.4.4 The Grade II Listed Pewsham House, which lies c1.25 km to the south-east of the Site, was built in 1892 (NHLE 1239933).



- 2.4.5 Map regression (Terence O'Rourke 2015) indicates that the Site area has been in use as pasture and/or arable fields from at least the 19th century to present, however field boundaries have changed with internal field boundaries being removed over time. Beneath what is now the wooded area along the south-western edge of the Site was a clay extraction pit and brickworks which is depicted on the 1886 edition Ordnance Survey (OS) map on the north-eastern bank of the canal. Both the canal and brickworks are marked as disused by the 1924 OS edition. Forest Farm can also be seen on the 1886 OS edition and is likely to date from at least the later post-medieval period.



3 METHODOLOGY

3.1 Introduction

- 3.1.1 The detailed gradiometer survey was conducted using a Bartington Grad 601-2 dual fluxgate gradiometer system. The detailed gradiometer survey was conducted in accordance with Historic England guidelines (English Heritage 2008).
- 3.1.2 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between the 28th September and 2nd October 2015. Field conditions at the time of the survey were good, with dry conditions throughout the period of survey. An overall coverage of 9.3 ha was achieved, the overall Site being 11.9 ha with 2.6 ha covered during the previous geophysical survey (Wessex Archaeology 2015a).

3.2 Method

- 3.2.1 Individual survey grid nodes were established at 30 m x 30 m intervals using a Leica Viva RTK GNSS instrument, which is precise to approximately 0.02 m and therefore exceeds Historic England recommendations (English Heritage 2008).
- 3.2.2 The detailed gradiometer survey was conducted using a Bartington Grad601-2 fluxgate gradiometer instrument, which has a vertical separation of 1 m between sensors. Data were collected at 0.25 m intervals along transects spaced 1 m apart with an effective sensitivity of 0.03 nT, in accordance with Historic England guidelines (English Heritage 2008). Data were collected in the zigzag method.
- 3.2.3 Data from the survey was subject to minimal data correction processes. These comprise a zero mean traverse function (± 5 nT thresholds) applied to correct for any variation between the two Bartington sensors used, and a de-step function to account for variations in traverse position due to varying ground cover and topography. These two steps were applied throughout the survey area, with no interpolation applied.
- 3.2.4 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.



4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

4.1 Introduction

- 4.1.1 The detailed gradiometer survey has identified anomalies of likely, probable and possible archaeological interest across the Site, along with areas of increased magnetic response, ridge and furrow and numerous ferrous signals. Results within the Site from both phases of the survey are presented as a series of greyscale plots, XY plots and archaeological interpretations at a scale of 1:2000 (**Figures 2 to 4**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale image and ± 25 nT at 25 nT per cm for the XY trace plots.
- 4.1.2 The interpretation of the datasets highlights the presence of definite, probable and possible archaeological anomalies, ferrous/burnt or fired objects, and magnetic trends (**Figure 4**). Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.
- 4.1.3 Detailed gradiometer data is presented from both the geophysical surveys in August and October 2015. The anomalies from the previous phase retain their numbering from the previous report (Wessex Archaeology 2015a) and anomalies identified within this survey begin at **4500**.
- 4.1.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 4.1.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.

4.2 Gradiometer survey results and interpretation

- 4.2.1 At the westernmost extent of the Site several interconnecting positive linear anomalies at **4500** have been identified which have been characterised as archaeology. These form part of a larger 'ladder' shaped feature **4019**, which was identified in the previous phase of detailed survey (Wessex Archaeology 2015a).
- 4.2.2 Adjoining **4019** there are further ditch-like anomalies visible at **4020** and **4021** but these are weaker in response and therefore have a lower confidence rating. A similar anomaly has been identified on a perpendicular alignment adjoining the south end of **4021** at **4501** and is also interpreted as possible archaeology.
- 4.2.3 To the north of **4501** there are three more linear anomalies which do not appear to be adjoining any of the other previously mentioned ditch-like features (**4019**, **4020**, **4021**, **4500**, **4501**). However, their form, shape and orientations are similar to those of **4501**, **4020** and **4021** which suggests that these anomalies might be a part of the same 'ladder' shaped feature identified at **4019**. A group of linear ditch-like anomalies identified at **4018** in the field immediately to the south of "ladder" feature surrounding **4019** is also likely to represent a continuation of this potential sub-rectangular enclosure.
- 4.2.4 At **4503** there is a weak positive curvilinear anomaly that similar to other ditch-like anomalies, predominately identified around **4019**. It is orientated on the same alignment as **4501** and **4502** but differs as it 'branches' out in two different directions at the



north-eastern end. Although it is possible that **4503** is a part of the 'ladder' shaped feature at **4019**, the curving 'branches' suggest that it may be a continuation of a feature seen at **4029** in the field to the north-east.

- 4.2.5 Further sections of this overall 'ladder' feature (**4019**) may be difficult to distinguish from the south-west to north-east oriented ditches on the same alignment as the surrounding ridge and furrow trends (PS1579987).
- 4.2.6 In the central field at **4505** there are three weakly positive curvilinear anomalies that have been interpreted as possible archaeology and could represent further ditch features. It is possible that the central feature is part of an inner, round ditch feature whilst the remaining two features may represent part of a surrounding outer ditch or enclosure.
- 4.2.7 Several more anomalies of archaeological interest have been identified to add to those revealed by the previous detailed survey (Wessex Archaeology 2015a). These had been interpreted as an area of small enclosures and possible driveway (Wessex Archaeology 2015a). A strong positive rectilinear anomaly at **4506** is very similar to the potential rectilinear enclosure identified at **4030** and is orientated on a comparable north-east to south-west alignment.
- 4.2.8 There are several more anomalies forming rectilinear patterns directly to the south-east at **4507** and **4508** that are of similar form and shape. This may suggest a further phase of occupation or use. Within these possible enclosures are several very weak positive linear and curvilinear anomalies which may represent internal ditch or pit features.
- 4.2.9 Further to the north at **4509** is a small group of linear anomalies orientated north-west to south-east and north-east to south-west. All four have been identified as utilities despite their magnetic responses and orientations differing, all are highly likely to represent modern utility disturbance. A further anomaly on a similar north-east to south-west alignment above **4032** demonstrates a probable extension of this feature, which is on an alignment that would lead this modern feature to current residential dwellings. The variation in response indicates that the two probable utilities to the south-east are likely composed of a more ferrous material and that the two to the north-west are more likely to be ceramic due to the weaker responses.
- 4.2.10 A ditch-like feature at **4511** currently interpreted as possible archaeology due to its distance and division from other possibly related linear anomalies at **4509** may also represent a further extension of this modern feature. A weak positive linear anomaly similar to those at **4509** can be seen at **4510** and this is most likely another field drain composed of a similar material.
- 4.2.11 Several small groupings of strong positive anomalies identified at **4512**, **4513** and **4515** have been interpreted as possible archaeology and may represent pit-like features.
- 4.2.12 Three areas of increased magnetic response at **4504**, **4514** and **4516** may represent areas of former burning or containing magnetically enhanced debris. However, **4514** represents modern disturbance from the residential dwellings to the west, whilst the anomaly identified at **4516** is likely to relate to the modern service identified as **4005**.
- 4.2.13 Numerous linear and other curvilinear trends can be seen cross the Site. Most of these are thought to be ridge and furrow or the result of modern ploughing. These are orientated predominately north-east to south-west and north-west to south-east (e.g. at **4001** or **4036**).



4.3 Modern Services

- 4.3.1 There are at least two modern services at **4005** running parallel to each other through the three northernmost fields of the Site. Both services appear to be ferrous metal pipes and are oriented roughly WNW to ESE and continue beyond the limits of the geophysical survey area.
- 4.3.2 It is not clear from the geophysical data whether the services identified are in active use. The gradiometer data cannot locate and identify all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.



5 CONCLUSION

- 5.1.1 The detailed gradiometer survey has detected anomalies of archaeological interest within the Site. In addition to these, anomalies interpreted as ridge and furrow, ploughing trends, areas of increased magnetic response, a former field boundary and two modern services have also been identified. The vast majority of the anomalies identified are likely pit-like and ditch-like features.
- 5.1.2 The most complex areas of potential archaeology are located in the southern part of the central field (**4022 to 4033** and **4506 to 4508**). Within this area, numerous ditch-like features potentially indicate different phases of settlement or activity within a series of a curvilinear and several rectangular enclosures. Also in this area is a strongly enhanced ditch feature at **4028** which is set apart from the main concentration of features and may represent a different phase and activity area.
- 5.1.3 To the west is an area of distinct interconnecting ditches described as 'ladder' features at **4018 to 4021, 4500** and **4501**. Such ladder systems are often associated with the Iron Age and Romano-British period. They are however on the same orientation as the presumed later ridge and furrow. Also in this area are three other ditch-like features that are on the same orientation as parts of the 'ladder' feature. The features at **4502** are more than likely associated with the 'ladder' feature than the feature at **4503** which 'branches' out to the north-east. It is this 'branching' out which suggests the possibility that **4503** is a continuation of one of the ditch features seen at **4029** in the adjacent field.
- 5.1.4 Within the north-western area of the central field, three ditch features at **4505** may represent a small enclosure. It is set more than 60 m apart from the main enclosures area to the south-east (centred around **4024**), and as such any relationship cannot be ascertained by geophysical survey alone.
- 5.1.5 The northernmost field contains a number of ditch and pit features at **4511**. Although broadly on the same alignment as the present field system, at least one of these may relate to modern utilities leading to current residential dwellings.
- 5.1.6 Ridge and furrow has been identified in all but one of the fields within the gradiometer survey extents. The ridge and furrow to the west of the Site corresponds to an area of recorded ridge and furrow identified by historic aerial photography (PS 1579987).
- 5.1.7 The areas of increased magnetic responses at **4504, 4517** and **4519** are more difficult to define. These may represent areas of former burning or contain magnetically enhanced debris. Due to survey boundaries, it is not possible to view the full extent of these areas in context, it is likely that at least two of these relate to modern disturbance.
- 5.1.8 Frequent ploughing trends are visible across the Site on differing alignments. This is likely due to variable boundaries and different farming processes but these are likely to be post-medieval and modern in provenance.



6 REFERENCES

6.1 Bibliography

English Heritage, 2008. *Geophysical Survey in Archaeological Field Evaluation*. Research and Professional Service Guideline No 1, 2nd edition

Terence O'Rourke, 2015. *Land at Forest Farm, Chippenham: Desk-Based Heritage Assessment*. Unpublished Client Report ref: 227610

Wessex Archaeology, 2015a. *Land at Forest Farm, Chippenham, Wiltshire: Recorded Scanning and Detailed Gradiometer Survey Report*. Unpublished Client Report ref: 109920.02

6.2 Cartographic and documentary sources

1886 Ordnance Survey 25 inch map / 1:2,500 (Sheet LXXXV.10)

1900 Ordnance Survey 25 inch map / 1:2,500 (Sheet LXXXV.10)

1924 Ordnance Survey 25 inch map / 1:2,500 (Sheet LXXXV.10)

Soil Survey of England and Wales, 1983. *Sheet 5, Soils of South West England*. Ordnance Survey: Southampton.

6.3 Online resources

British Geological Survey, <http://www.bgs.ac.uk> [accessed October 2015]



APPENDIX 1: SURVEY EQUIPMENT AND DATA PROCESSING

Survey methods and equipment

The magnetic data for this project was acquired using a Bartington 601-2 dual magnetic gradiometer system. This instrument has two sensor assemblies fixed horizontally 1m apart allowing two traverses to be recorded simultaneously. Each sensor contains two fluxgate magnetometers arranged vertically with a 1m separation, and measures the difference between the vertical components of the total magnetic field within each sensor array. This arrangement of magnetometers suppresses any diurnal or low frequency effects.

The gradiometers have an effective resolution of 0.03nT over a ± 100 nT range, and measurements from each sensor are logged at intervals of 0.25m. All of the data are stored on an integrated data logger for subsequent post-processing and analysis.

Wessex Archaeology undertakes two types of magnetic surveys: scanning and detail. Both types depend upon the establishment of an accurate 20m or 30m site grid, which is achieved using a Leica Viva RTK GNSS instrument and then extended using tapes. The Leica Viva system receives corrections from a network of reference stations operated by the Ordnance Survey and Leica Geosystems, allowing positions to be determined with a precision of 0.02m in real-time and therefore exceed the level of accuracy recommended by Historic England (English Heritage 2008) for geophysical surveys.

Scanning surveys consist of recording data at 0.25m intervals along transects spaced 10m apart, acquiring a minimum of 80 data points per transect. Due to the relatively coarse transect interval, scanning surveys should only be expected to detect extended regions of archaeological anomalies, when there is a greater likelihood of distinguishing such responses from the background magnetic field.

The detailed surveys consist of 20m x 20m or 30m x 30m grids, and data are collected at 0.25m intervals along traverses spaced 1m apart. These strategies give 1600 or 3600 measurements per 20m or 30m grid respectively, and are the recommended methodologies for archaeological surveys of this type (EH, 2008).

Data may be collected with a higher sample density where complex archaeological anomalies are encountered, to aid the detection and characterisation of small and ephemeral features. Data may be collected at up to 0.125m intervals along traverses spaced up to 0.25m apart, resulting in a maximum of 28800 readings per 30m grid, exceeding that recommended by Historic England (English Heritage 2008) for characterisation surveys.

Post-processing

The magnetic data collected during the detail survey are downloaded from the Bartington system for processing and analysis using both commercial and in-house software. This software allows for both the data and the images to be processed in order to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

As the scanning data are not as closely distributed as with detailed survey, they are georeferenced using the GPS information and interpolated to highlight similar anomalies in adjacent transects. Directional trends may be removed before interpolation to produce more easily understood images.

Typical data and image processing steps may include:



- Destripe – Applying a zero mean traverse in order to remove differences caused by directional effects inherent in the magnetometer;
- Destagger – Shifting each traverse longitudinally by a number of readings. This corrects for operator errors and is used to enhance linear features;
- Despike – Filtering isolated data points that exceed the mean by a specified amount to reduce the appearance of dominant anomalous readings (generally only used for earth resistance data)

Typical displays of the data used during processing and analysis:

- XY Plot – Presents the data as a trace or graph line for each traverse. Each traverse is displaced down the image to produce a stacked profile effect. This type of image is useful as it shows the full range of individual anomalies.
- Greyscale – Presents the data in plan view using a greyscale to indicate the relative strength of the signal at each measurement point. These plots can be produced in colour to highlight certain features but generally greyscale plots are used during analysis of the data.



APPENDIX 2: GEOPHYSICAL INTERPRETATION

The interpretation methodology used by Wessex Archaeology separates the anomalies into four main categories: archaeological, modern, agricultural and uncertain origin/geological.

The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further sub-divided into three groups, implying a decreasing level of confidence:

- Archaeology – used when there is a clear geophysical response and anthropogenic pattern.
- Probable archaeology – used for features which give a clear response but which form incomplete patterns.
- Possible archaeology – used for features which give a response but which form no discernible pattern or trend.

The modern category is used for anomalies that are presumed to be relatively modern in date:

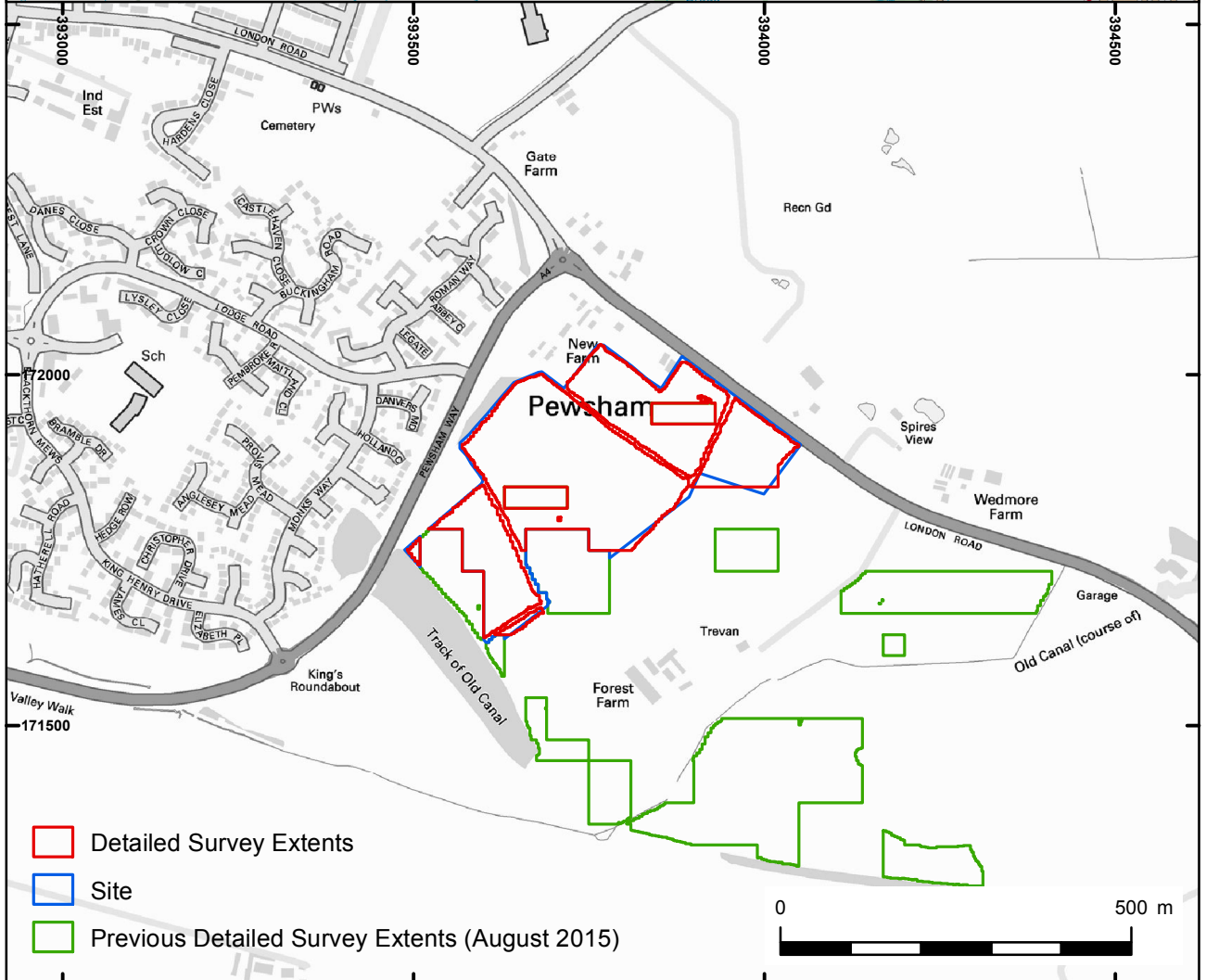
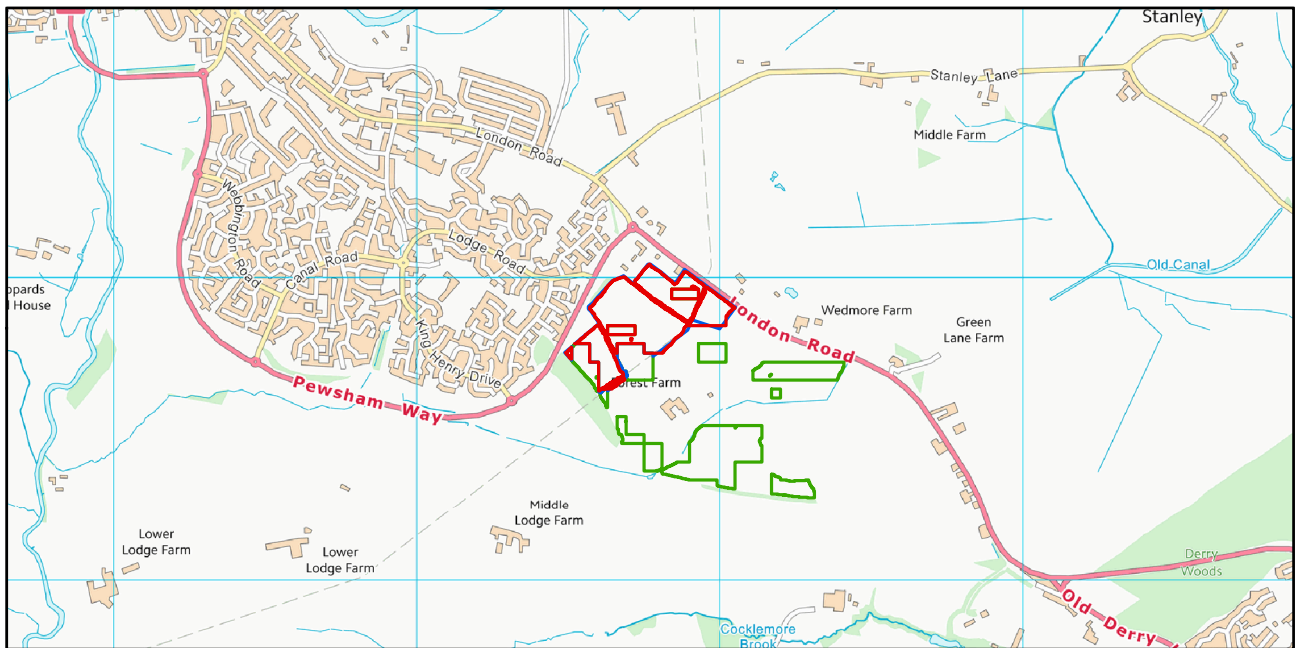
- Ferrous – used for responses caused by ferrous material. These anomalies are likely to be of modern origin.
- Modern service – used for responses considered relating to cables and pipes; most are composed of ferrous/ceramic material although services made from non-magnetic material can sometimes be observed.


The agricultural category is used for the following:

- Former field boundaries – used for ditch sections that correspond to the position of boundaries marked on earlier mapping.
- Agricultural ditches – used for ditch sections that are aligned parallel to existing boundaries and former field boundaries that are not considered to be of archaeological significance.
- Ridge and furrow – used for broad and diffuse linear anomalies that are considered to indicate areas of former ridge and furrow.
- Ploughing – used for well-defined narrow linear responses, usually aligned parallel to existing field boundaries.
- Drainage – used to define the course of ceramic field drains that are visible in the data as a series of repeating bipolar (black and white) responses.

The uncertain origin/geological category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

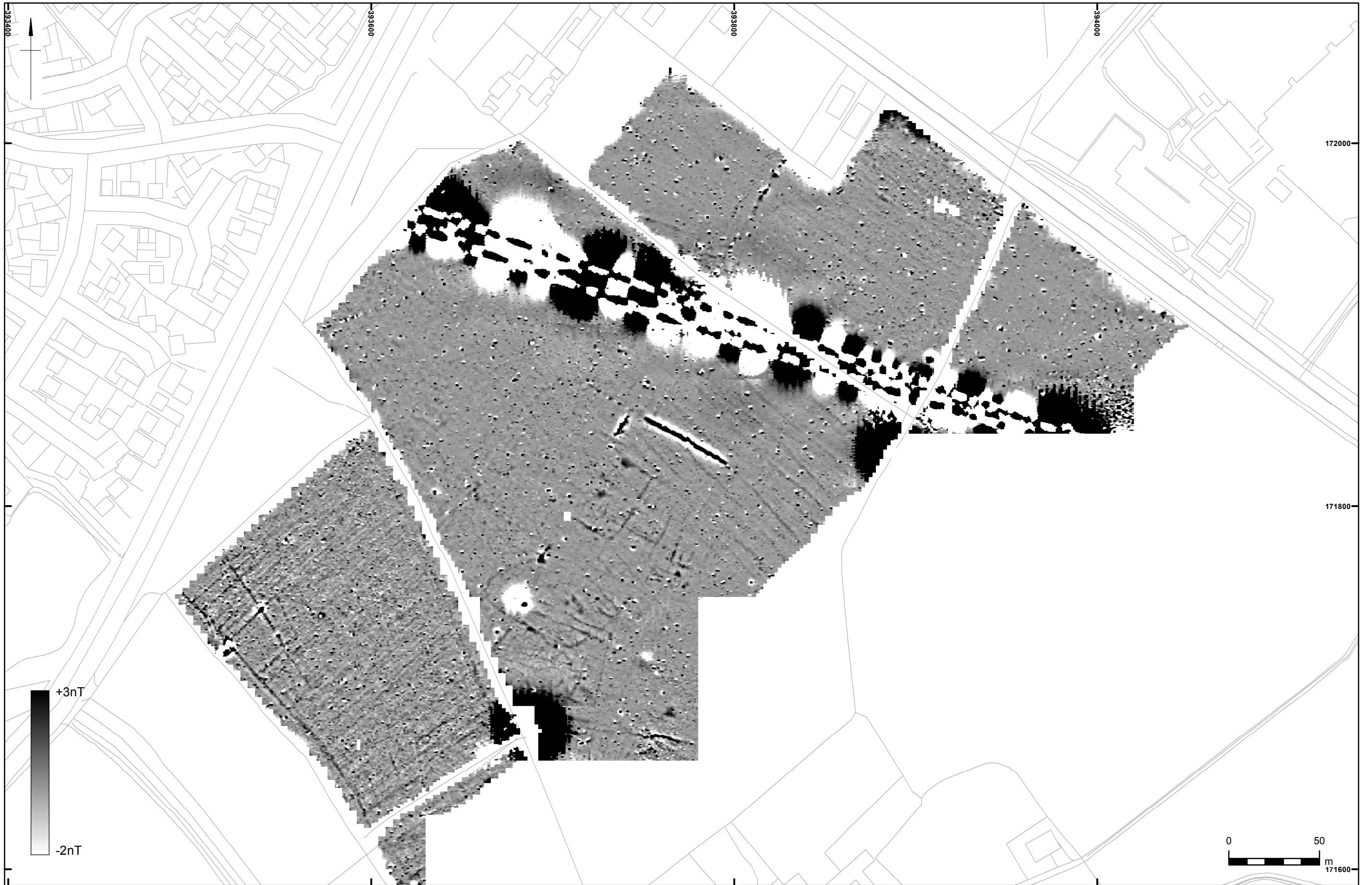
- Increased magnetic response – used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend – used for low amplitude or indistinct linear anomalies.
- Superficial geology – used for diffuse edged spreads considered to relate to shallow geological deposits. They can be distinguished as areas of positive, negative or broad bipolar (positive and negative) anomalies.



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	Scale:	1:25000 and 1:10000 at A4	Illustrator:	RAM
	Path:	X:\PROJECTS\109920\GIS\FigsMXD\2015_10_15\109920_Fig01.mxd		

Site location and survey extents

Figure 1

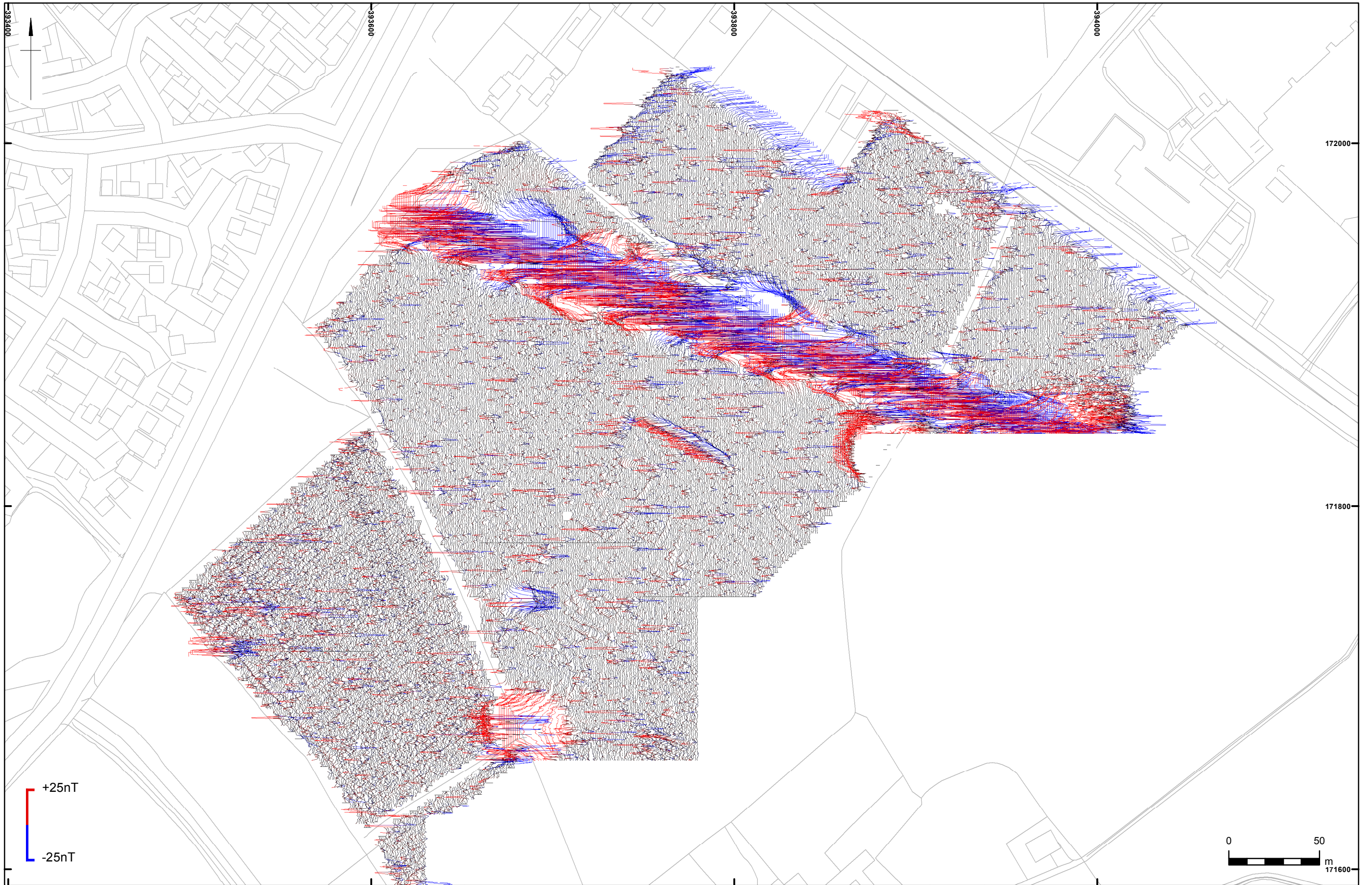


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Greyscale plot

Figure 2

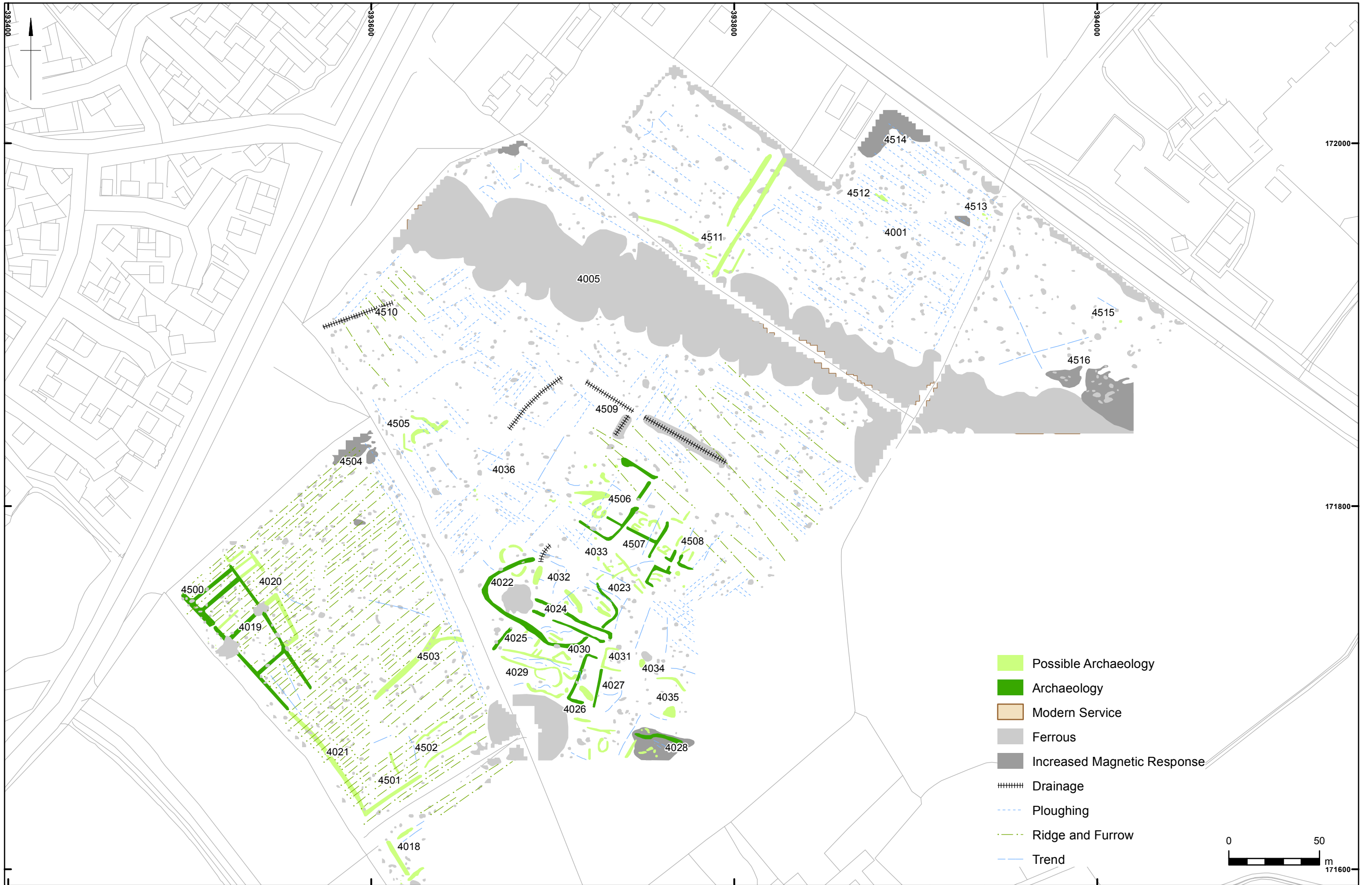


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XY trace plot

Figure 3



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