

# GEOPHYSICAL SURVEY

## Geophysical survey of land at Yardley Road

ARS Report N°: ARS23-48  
OASIS ID: archaeol5-517099



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# Geophysical survey of land at Yardley Road

ARS LTD REPORT 2023/48



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**Prepared on behalf of:** Atmos Consulting Ltd.  
**Date of compilation:** 5/11/2023  
**Compiled by:** Jonathan Lester and Joel Goodchild  
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**Approved for issue by:** Dr Roger Doonan  
**Local Authority:** West Northamptonshire Council  
**Site central NGR:** SP 76516 44030  
**OASIS ID:** archaeol5-517099

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## EXECUTIVE SUMMARY

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**Project Name:** Geophysical survey of land at Yardley Road  
**Site Code:** ARS23-32  
**Planning Authority:** West Northamptonshire Council  
**Location:** Yardley Road, Potterspury, West Northamptonshire, England, NN12 7PX  
**Parish:** Potterspury  
**Hard Geology:** Blisworth Limestone Formation  
**Superficial Geology:** Oadby Member – Diamicton  
**Soil Type:** Lime-rich loamy and clayey soils with impeded drainage  
**NGR:** SP 76516 44030  
**Date of Fieldwork:** 13<sup>th</sup> March – 7<sup>th</sup> April  
**Date of Report:** 15/05/2023

Archaeological Research Services was commissioned by Atmos Consulting to undertake a magnetometry survey of Land at Yardley Road to gather sufficient information to establish the presence/absence of potentially significant archaeological anomalies and the character and extent of those anomalies within the survey area.

The survey was undertaken between 13/03/2023 and 07/04/2023 accordance with a written scheme of works across a total area of ~70ha.

The survey successfully identified magnetic anomalies relating to an enclosed settlement, ring ditch and other features.



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# I INTRODUCTION

## 1.1 Project Background

1.1.1 Archaeological Research Services Ltd (ARS Ltd) was commissioned by Atmos Consulting (the client) to undertake a geophysical survey on land at Yardley Road.

1.1.2 Works were undertaken in compliance with the Written Scheme of Investigation (WSI) and took place between 13/03/2023 and 07/04/2023 Site Location.

1.1.3 The proposed development area (PDA) is indicated in red on Figure 1. The site is located 4km north-west of Milton Keynes and roughly centred on NGR SP 76516 44030. The area suitable for survey covers arable and pasture fields to the north-east of the village of Potterspury (Figure 2) which are detailed in Table 1 Below.

## 1.2 Site Description

1.2.1 The site is positioned between 82m and 97m AOD. It incorporates 9 fields to the north and east of the farm on Beech House Drive, across a landscape of gentle hills.

1.2.2 The area for development extends over an area of ~70 ha bounded by Yardley Gobion to the north, Potterspury to the west and Furtho Manor to the south.

## 1.3 Geology and Soils

1.3.1 The underlying solid geology of the land off Yardley Road site is comprised mostly of Blisworth Limestone Formation – Limestone. Rutland Formation is present along the water courses of Dogsmouth Brook towards the southeast of the site. Further along the watercourse southwards, the bedrock geology transitions into Stamford Member – sandstone and siltstone, interbedded and then further south becomes Stamford Member (sandstone and siltstone, interbedded. An overlying superficial deposit of Oadby Member – Diamicton blankets the site, except a small parcel situated centrally between Furtho Manor and Yardley Road (BGS, 2023).

1.3.2 The soil of the survey site is composed of lime-rich loamy and clayey soils with impeded drainage (Soilscape 9; Soilscape 2023).

Field	Area (m <sup>2</sup> )	Area (ha)
1	72820	7.282
2	97230	9.723
3	9320	9.320
4	67600	6.760
5	115470	11.547
6	68490	6.849
7	90320	9.032
8	29950	2.995
9	62650	6.265

Table 1: Survey areas by field and their respective size.

## 1.4 Archaeological and Historical Background

1.4.1 The following archaeological and historical background has been gathered using the National record of the Historic Environment (NRHE) and local Historic Environment Records (HER).

1.4.2 The survey area was covered by the Northamptonshire NMP aerial mapping project (Deegan, 2017) which revealed a number of prehistoric features in and around the PDA. A circular enclosure is located 130m north-west of the survey area (MNN6835) along with a rectilinear enclosure (MNN140561) 270m north of the survey area. The location of a medieval/post-medieval windmill (MNN143282) is recorded from cartographic sources in the north-west of Field 3, centred at SP7612 4387. Two ring ditches are located c.1.5km south of the survey area along with a rectilinear enclosure in their vicinity (HOB UID: 1587394). Prehistoric finds have been found both on the proposed site and c.2km west. In 1982, an unstratified pebble-hammer (HER Number: 7268/0/0) was found. It is described as being of large and flat and made of brown quartzite. A pre-historic flint axe was recovered around 1904 (HOB UID: 343094).

1.4.3 An evaluation c.3.5km southwest of the proposed site presented potential evidence of an Iron Age roundhouse and a second excavation in Potterspury yielded evidence of a possible Iron Age hut circle (Meek, 1997).

1.4.4 In Briary Wood, c.4.7km west, southwest of the proposed site, a woodland survey revealed some dressed stone blocks. The Whittlewood Survey, conducted in 2001, interpreted these as probably dating to the Roman period. Evidence of Romano-British archaeology is also present in Potterspury. Archaeological investigation yielded potential evidence of a Roman ditch, enclosed settlement and trackway. These features were uncovered in a 1997 evaluation and excavation (Meek, 1997).

1.4.5 At Oakley Spinney, evidence of possible medieval woodland banks, ditches, trackways and ridge and furrow are visible. Additionally, a watching brief conducted in 2003 in Potterspury, yielded evidence of a potential Medieval waster pit (Byard, 2004). Post-Medieval ridge and furrow was identified by a 2014 magnetometer survey conducted c.1.5km southwest of the proposed site (Webb, 2015).

1.4.6 A deserted medieval village is recorded in the vicinity of Furtho Manor (MNN3987) 250m south of the survey area. This is first recorded in Domesday and as having been enclosed and depopulated by AD 1600.

## 2 METHOD STATEMENT

---

### 2.1 Introduction

2.1.1 Magnetometry is a non-intrusive scientific prospecting technique that is the preferred geophysical technique used to determine the presence or absence of buried archaeological features when site and geological conditions are favorable. It is an efficient and effective method for locating anomalies corresponding with archaeological features. The instrument chosen for this survey was a Bartington Grad 601 dual sensor fluxgate gradiometer which can detect weak changes in the Earth's magnetic field caused by buried features.

2.1.2 All fieldwork and reporting was undertaken following Historic England's (2008) Geophysical Survey in Archaeological Field Evaluation and The Chartered Institute for Archaeologists (CifA) Code of Conduct (CifA 2014a) and Standards and Guidance for Archaeological Geophysical Survey (CifA 2014b) and EAC Guidelines for the use of Geophysics in Archaeology (Schmidt et al. 2015).

2.1.3 The 30m by 30m survey grids were located to cover each field in turn and aligned as shown in Figure 2. In total 770 survey grids (including partial grids) were set out and accurately positioned using a GNSS field controller with antenna cap which was connected to Leica Smartnet to receive corrections resulting in an accuracy of typically 0.5m. Each grid was then surveyed at 1m traverse intervals with the sampling at 0.25m (4 readings per meter) intervals. The survey was carried out in 'zig-zag' mode with each alternate traverse walked in opposite directions. The range of the instrument was set at 100nT (0.01nT resolution).

2.1.4 The survey was carried out by ARS Ltd between 13/03/2023 and 07/04/2023 during which time the weather was mixed.

2.1.5 Prior to commencing the survey the gradiometer was balanced and calibrated to the local conditions and this was repeated regularly throughout the day. At the end of the day, the data was downloaded into a computer, checked and archived on the ARS Ltd server. The data was downloaded using Bartington Instruments' Grad 601 Communication Application.

## **3 GEOPHYSICAL SURVEY RESULTS**

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### **3.1 Introduction**

3.1.1 The data was minimally processed using Geoplot software. The data was "clipped" (clipping parameters selected on the mean and standard deviation data values), and the striping that can often appear in gradiometer data was removed by utilising the "zero mean traverse" function with thresholds applied. To enhance the visibility of subtle features the data was viewed under a number of different clip plotting parameters.

3.1.2 Occasionally processing the data to compensate for directional sensitivity or to remove iron spikes caused by miscellaneous ferrous objects can also inadvertently disguise anomalies that may be of archaeological origin, particularly long linear features in the direction of the traverses. The data has therefore been analysed in a number of different formats and at each stage of processing.

3.1.3 Not all anomalies have been included in the results and discussion. Dipolar anomalies with no clustering or pattern to their distribution are common on most sites and almost certainly relate to natural variations in the soils and geology, agricultural disturbance and miscellaneous ferrous litter on the surface of the field. These anomalies have largely been excluded from further analysis.

3.1.4 The data analysis is presented graphically in figures 3-39.



## 3.2 Results

3.2.1 The survey results are described in Table 2 below.

Field No.	Archaeological Anomalies	Summary	Interpretation
1	Possible	Linear features with ferrous anomalies	<p>A series of faint linear features, four approximately aligned east-west and two south-east to north-west are present in Field 1. These are of potential archaeological significance.</p> <p>A sequence of ferrous results can be dismissed due to the close proximity to pylons, however, other anomalies may be associated with archaeological remnants. Notably, a section of the survey data reveals a cluster of 'noisy' anomalies situated within the central south-west region of field 1.</p>
2	Probable	2 curvilinear features with suspected ridge and furrow	<p>Two curvilinear features are identified running north-south, potentially representing the continuation of the probable linear archaeological features observed in Field 1.</p> <p>Linear anomalies in the west of the field likely represent cultivation marks.</p>
3	Probable	Linear ditching and possible pitting alongside a number of identified ferrous anomalies with suspected historical ridge and furrow	<p>A number of discrete enhanced ferrous anomalies are recorded throughout Field 3, these anomalies predominantly appear at the periphery of the field, indicating a probable association with modern disturbance and the presence of ferrous material commonly associated with agricultural activities and green waste disposal. There is some evidence of magnetic disturbance in the north-west of the field which may be associated with the site of a medieval/post-medieval windmill.</p> <p>Linear features traverse the landscape orientated north-south and are indicative of ditches, possibly field boundaries/trackways. Accompanying these linear ditches, a distinct cluster of strong magnetically enhanced anomalies has been observed. These anomalies suggest the potential presence of postholes or pitting that may have been associated with past human activities or structural elements of suspected prehistoric date.</p> <p>A probable drainage pipe is observed running from a drainage ditch halfway through Field 3 running north-east to south-west.</p>
4	Possible?	Identified natural and ferrous anomalies with suspected historical ridge and furrow	<p>Natural geological features are noted in the northern area of the field.</p> <p>Some evidence of ridge and furrow surviving as ditches.</p>



Field No.	Archaeological Anomalies	Summary	Interpretation
6	Possible?	A number of ferrous anomalies and evidence for ridge and furrow	<p>Field 6 exhibits a notable concentration of strong magnetic disturbances along a north-south axis. These disturbances signify the presence of magnetic anomalies that may have archaeological significance within the northern and southern areas of the field.</p> <p>In the southern corner, a linear ditch feature is observed. Its characteristics suggest the presence of a potential ditch.</p> <p>Ridge and Furrow is identified across the south of Field 6 surviving as linear ditches. This may be indicative of later medieval activity and may relate to the nearby Furtho Manor DMV.</p>
7	Probable	Circular ring ditch accompanied by ferrous anomalies and suspected remains of a Romano-British field system.	<p>A well-defined prehistoric ring ditch is present in field 7 PDA. This feature stands out as a distinct and separate entity within the field indicating its potential significance.</p> <p>Further strong magnetic responses indicate a suspected linear field system associated with the probable Romano-British Farmstead seen in Field 10. A prominent and well-defined linear alignment displaying a strong magnetic response was present in the SW corner of Field 7. Such ditches were commonly used to demarcate land boundaries and agricultural divisions.</p> <p>Across the entirety of Field 7, clusters of intense ferrous magnetic disturbances are observed alongside geological anomalies that extend from Field 8. Extensive geological features are noted across the PDA.</p>
8	Probable	Probable mineral extraction/watering hole alongside probable geological features	<p>A possible extraction site/watering hole associated with the prehistoric archaeology as seen in Field 7.</p> <p>A number of ferrous anomalies are also observed including a number of strongly magnetic ferrous anomalies.</p> <p>Ridge and furrow is identified across the entirety of Field 8 and is likely truncated by modern ploughing.</p>
9	Possible	Possible Prehistoric field boundary system and historic ridge and furrow	<p>A continuation of the possible prehistoric boundary ditch seen in Field 10 is visible orientated east-west, alongside the inclusion of a further possible boundary ditch.</p>

Field No.	Archaeological Anomalies	Summary	Interpretation
10	Probable	Remains of a suspected Romano-British farmstead with a high concentration of ferrous and geological anomalies and historic ridge and furrow	<p>An enclosed settlement which may represent a Romano-British farmstead is visible. The rectilinear features inside the enclosure are also indicative of in-situ structural remains. The site is defined by a mixed of high amplitude magnetic signatures indicative of ferrous components, possibly relating to former industry or a destruction event.</p> <p>Two linear ditch features are observed within the vicinity. These features may be associated with the presumed Romano-British farmstead, or alternatively, they could potentially indicate prehistoric boundary systems.</p> <p>Ridge and Furrow is identified across the entirety of field 8 and has likely been truncated by modern ploughing.</p>

Table 2: Geophysics Results and Interpretations

## 4 DISCUSSION AND CONCLUSIONS

4.1.1 The survey successfully identified a number of features and indicates the validity of the survey method and approach.

4.1.2 A number of magnetic anomalies were identified that are certainly related to archaeological deposits. An enclosed settlement (Field 10), a ring ditch (Field 7) and the presence of field boundaries (presenting as ditches) along with other features, such as historic ridge and furrow, point to the PDA containing a multiphase agricultural landscape.

4.1.3 The features are not particularly dense across the site although where they do occur they present as well-defined features with good geophysical responses providing a high degree of certainty of their presence. It should be noted that, given the presence of a number of prehistoric enclosures in close proximity to the survey area, the more ephemeral anomalies recorded as possible archaeology north of Yardley Road may be associated with Bronze Age/Iron Age settlement activity.

4.1.4 It can be assumed that a large number of the individual ferrous anomalies are related to that of modern deposition and agricultural waste.

## 5 PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

5.1.1 Any publicity will be handled by the client.

5.1.2 ARS Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

## 6 STATEMENT OF INDEMNITY

13.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion

resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

## 7 ARCHIVE

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7.1.1 One bound copy of the final report with an attached digital PDF/A copy on disc will be deposited with the [ARCHIVE REPOSITORY DETAILS] The disc will also include a digital archive, consisting of relevant ESRI shapefiles or CAD files, for use of updating the HER database.

## 8 ACKNOWLEDGEMENTS

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8.1.1 ARS Ltd would like to thank Atmos Consulting for commissioning the project.

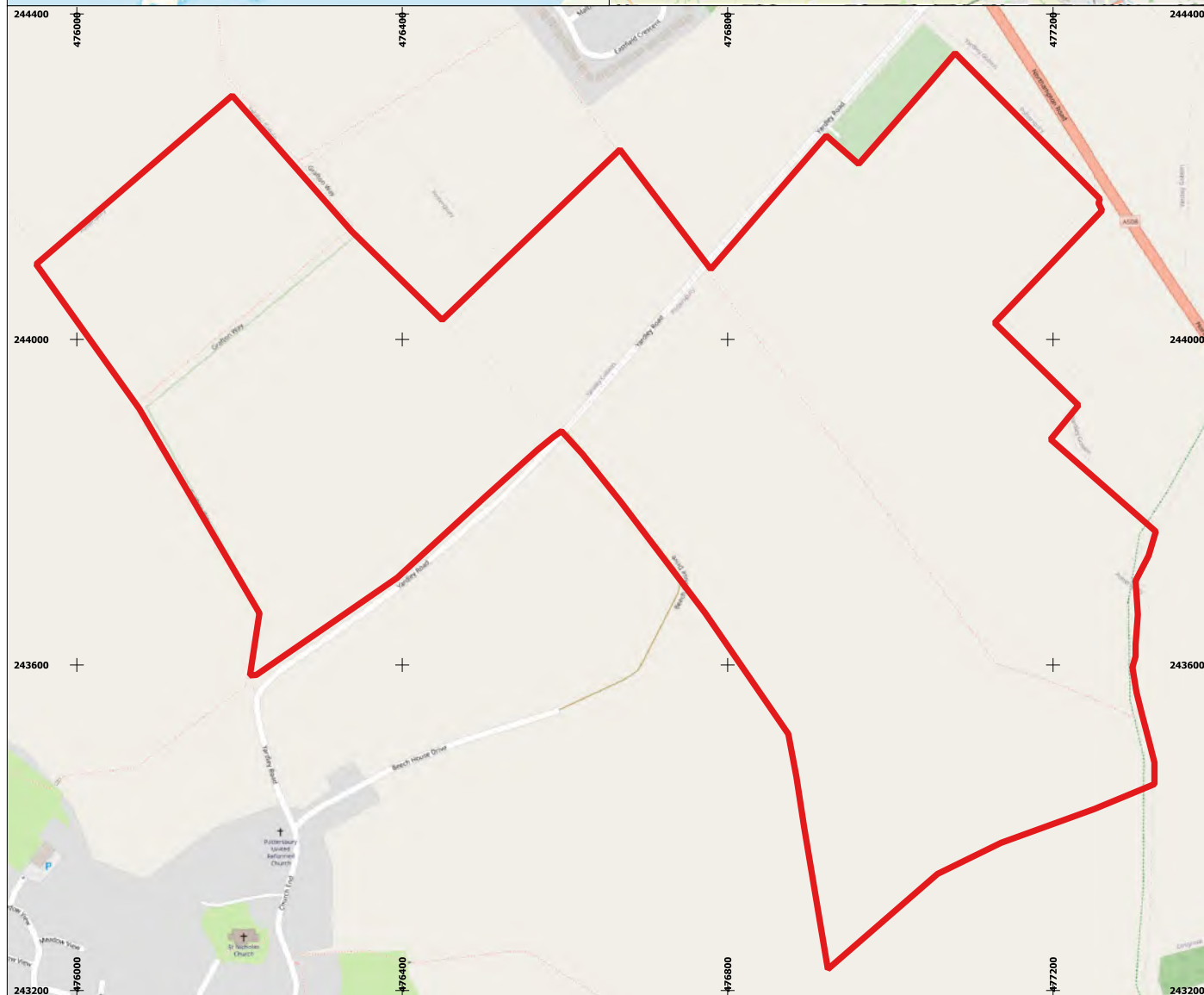
## 9 REFERENCES




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- British Geological Survey. 2020. Geology of Britain viewer. Available online at: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [02/05/2023]
- Byard, A. 2004. 47-53 High Street, Potterspurty: an archaeological watching brief. Network Archaeology Ltd [assessment & evaluation reports]. ADS ID 1820291: <https://archaeologydataservice.ac.uk/archsearch/record?titleId=1820291>
- Chartered Institute for Archaeologists. 2014a. Code of Conduct Chartered Institute for Archaeologists, Reading.
- Chartered Institute for Archaeologists. 2020. Standard and Guidance for Archaeological Geophysical Survey. Chartered Institute for Archaeologists, Reading.
- Deegan, A. 2017 Northamptonshire National Mapping Programme. Historic England
- Gaffney, C., Gater, J. and Ovenden, S. 2008. Geophysical Survey in Archaeological Field Evaluation. London, English Heritage.
- Gaffney, C. and Gater, J. 2003. Revealing the Buried Past. Geophysics for Archaeologists. Tempus Publishing.
- Gerrard, J., Caldwell, L., and Kennedy, A. 2015. 'Green Waste and Archaeological Geophysics.' In: Archaeological Prospection 22, pg. 139-142.
- Ministry of Housing, Communities and Local Government (MHCLG). 2019. National Planning Policy Framework. London, The Stationery Office.
- Meek J. 1997. An archaeological evaluation of the Salcey - Deanshanger Mains Duplication Pipeline Stage 3, Northamptonshire: interim report. University of Leicester Archaeological Services [assessment & evaluation reports]. ADS ID 1852215: <https://archaeologydataservice.ac.uk/archsearch/record?titleId=1852215>
- Schmidt A et al. 2015 *EAC Guidelines for the Use of Geophysics in Archaeology: Questions to Ask and Points to Consider* EAC Guidelines 2 ([https://www.europae-archaeologiae-consilium.org/files/ugd/881a59\\_fdb1636e95f64813a65178895aea87cf.pdf](https://www.europae-archaeologiae-consilium.org/files/ugd/881a59_fdb1636e95f64813a65178895aea87cf.pdf))
- Soil Survey of England and Wales. 1983a. Sheet 3: Soils of Central England.
- Soil Survey of England and Wales. 1983b. Legend for the 1:250,000 Soil Map of England and Wales.
- Webb, A. 2015. Land off Sanders Lane, Potterspurty, Northamptonshire: geophysical survey/Report No 2691. Archaeological Services WYAS reports. ADS ID 3513269: <https://archaeologydataservice.ac.uk/archsearch/record?titleId=3513269>

## APPENDIX I      FIGURES

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<p>Site name: Yardley Road  Date: 05/2023  Drawn by: JL  Scale: Varies</p>	<p><b>Figure 1: Site location</b></p>		<p><b>Archaeological Research Services Ltd</b></p>
<p>This drawing: © ARS Ltd  Contains Ordnance Survey data.  © Crown copyright and database right 2020</p>	<p> Proposed development area (PDA)   Site Location</p>	<p>Unit 2  Aizlewood's Mill  Nursery Street  Sheffield  South Yorkshire  S3 8GG</p>	 <p>ARCHAEOLOGICAL  RESEARCH SERVICES LTD  Digging with Purpose  Tel: 0114 275 0140  www.archaeologicalresearchservices.com</p>



**Figure 2:**

Field IDs Yardley

**Site name:** Yardley

**Date Surveyed:** March/April 2023

**Date Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

 PDA Yardley

0 100 200 m



1:6,500

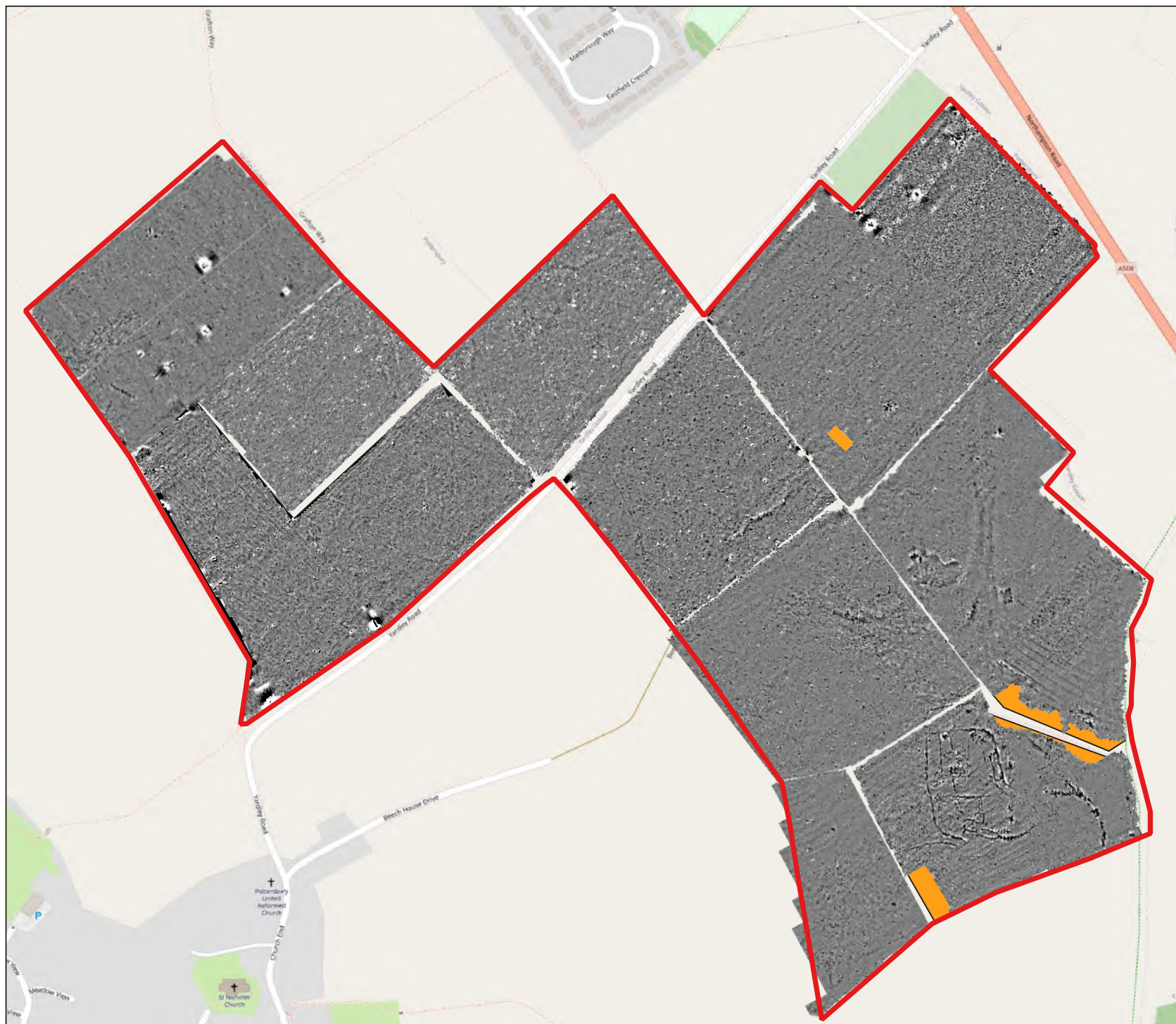


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This drawing: © ARS Ltd





**Figure 3:**

Overview: Greyscale shade plot of processed gradiometer data at Yardley

**Site name:** Yardley

**Date Surveyed:** March/April 2023

**Date Drawn:** May 2023

**Client:** Atmos Consulting

### Key

-  PDA Yardley
-  Obstructions

0 100 200 m



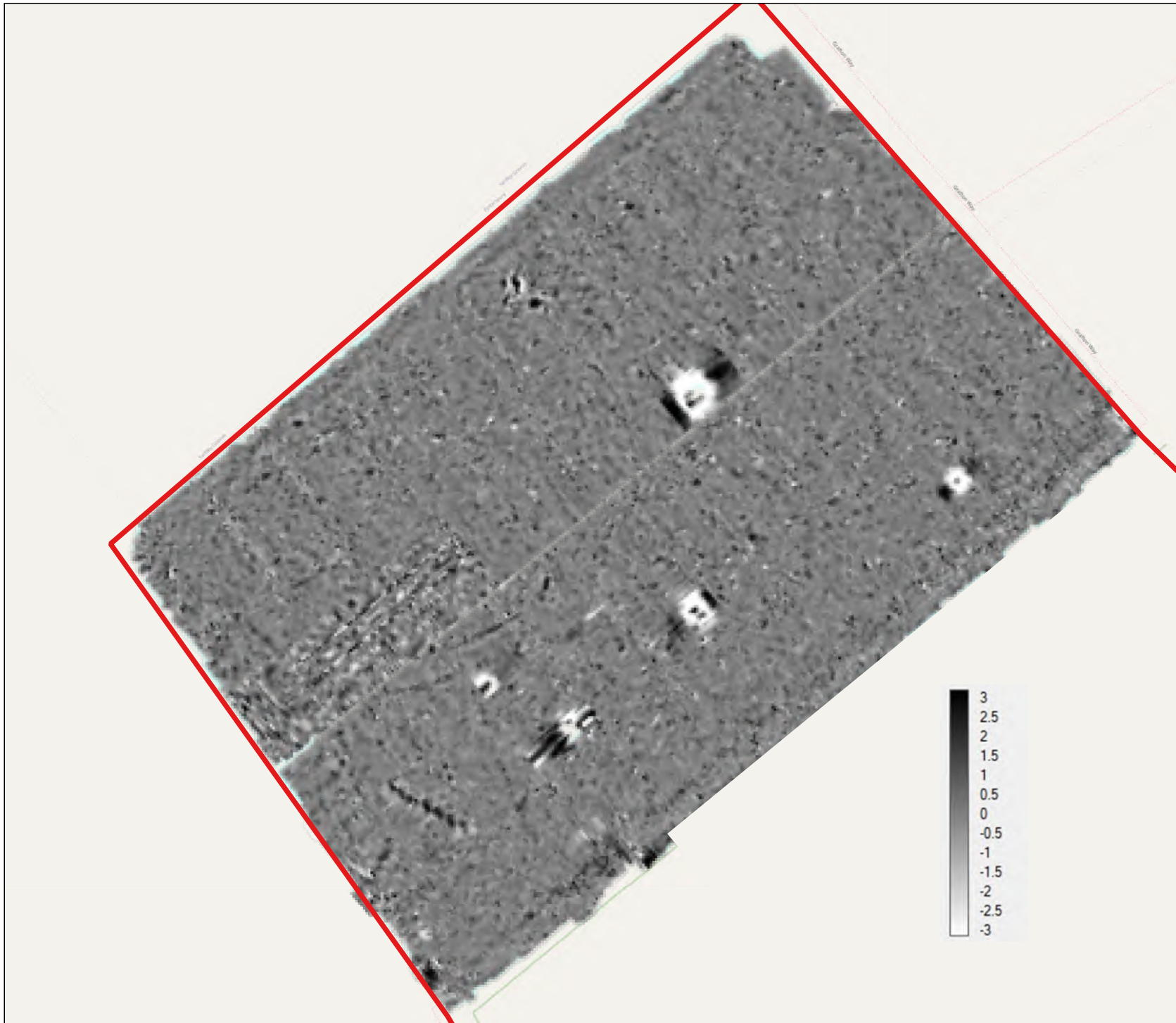
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**Figure 4:**

Greyscale shade plot of processed gradiometer data - Field 1.

**Site name:** Yardley Road

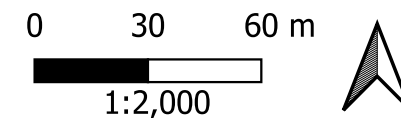
**Date Surveyed:** March/April 2023

**Date Drawn:** May 2023

**Client:** Atmos Consulting

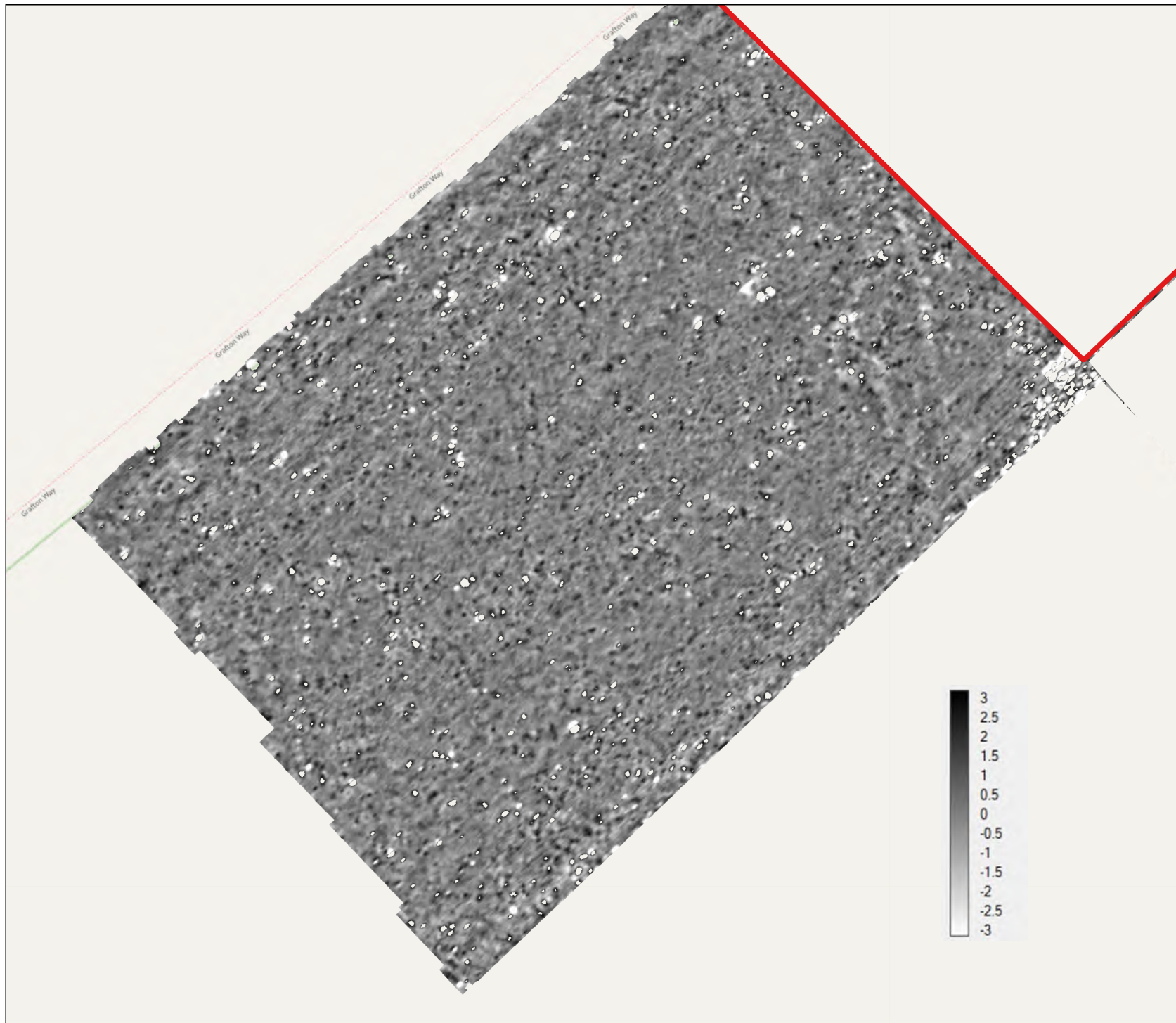
**Key**

 PDA Yardley



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**Figure 5:**

Greyscale shade plot of processed  
gradiometer data - Field 2

**Site name:** Yardley


**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

 PDA Yardley

0 20 40 m  
  
1:1,500



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**Figure 6:**

Greyscale shade plot of processed  
gradiometer data - Field 3

**Site name:** Yardley


**Date**  
**Surveyed:** March/April 2023

**Date**  
**Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

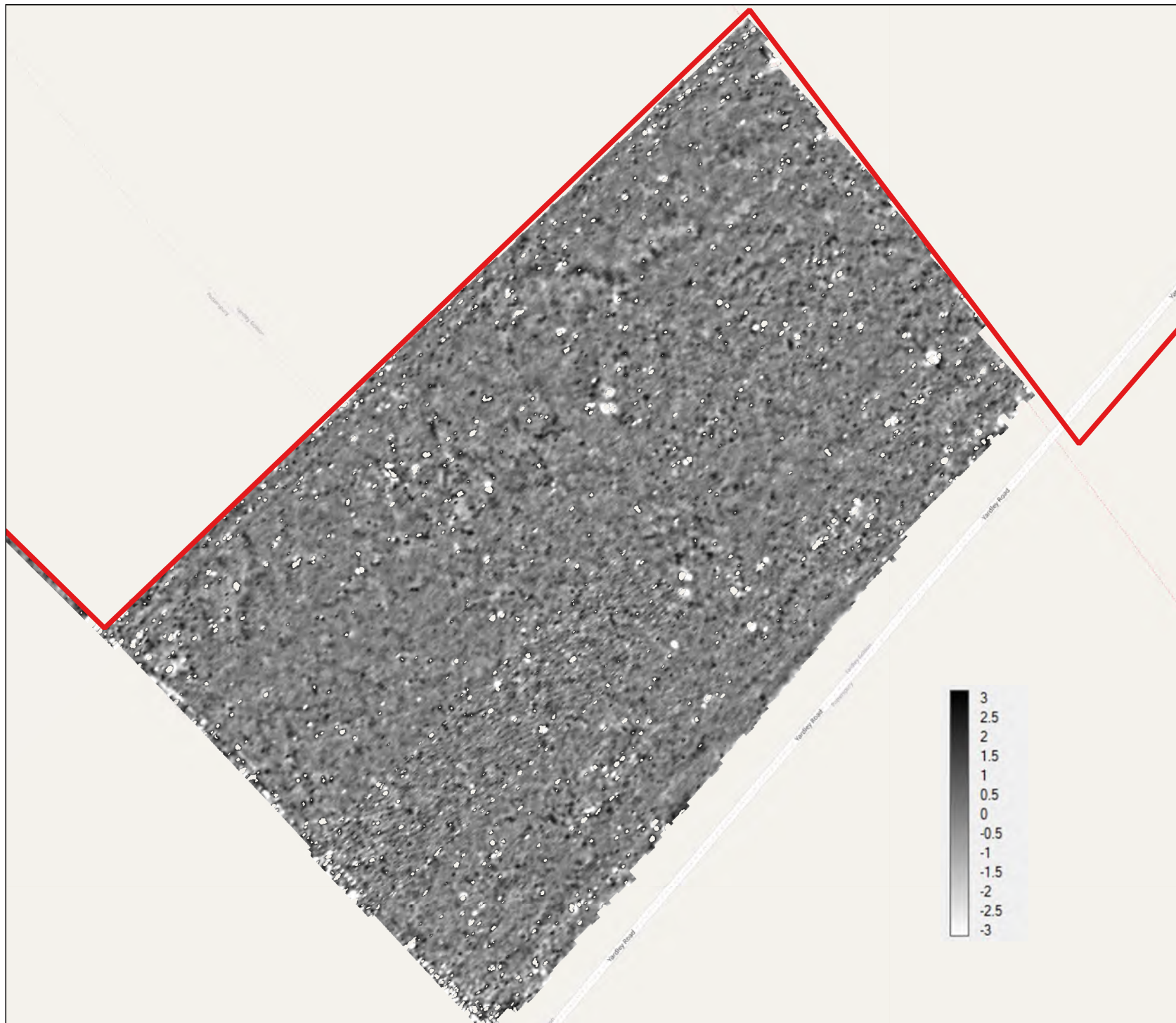
 PDA Yardley

0 30 60 m  
  
1:2,300



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**Figure 7:**

Greyscale shade plot of processed  
gradiometer data- Field 4

**Site name:** Yardle


**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

 PDA Yardley

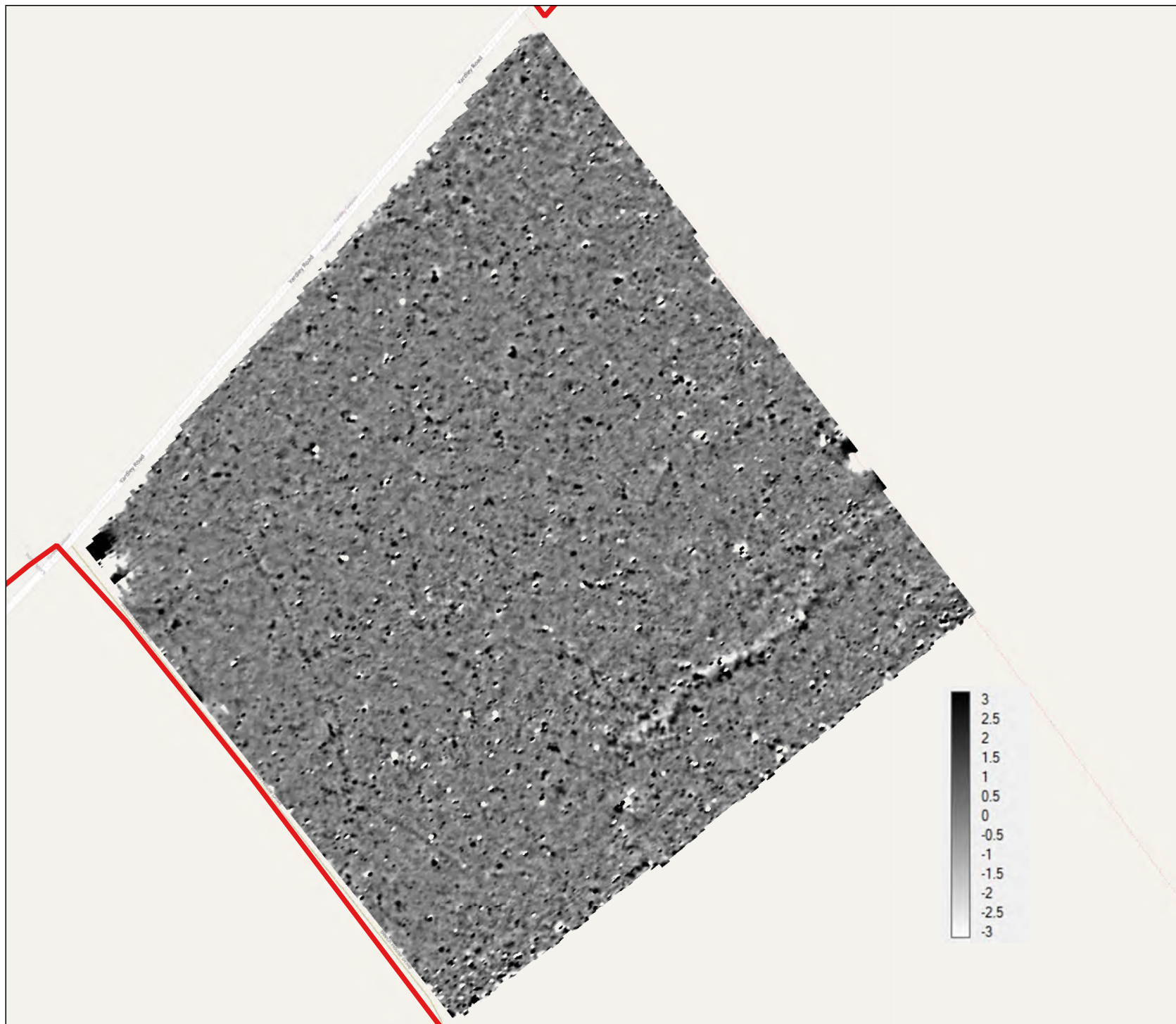
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1:1,800



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**Figure 8:**

Greyscale shade plot of processed  
gradiometer data- Field 5

**Site name:** Yardley



**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

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**Key**

 PDA Yardley

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1:2,000 





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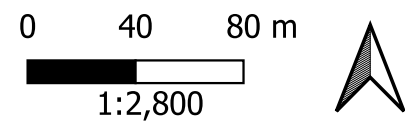
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**Figure 9:**  
Greyscale shade plot of processed  
gradiometer data - Field 6

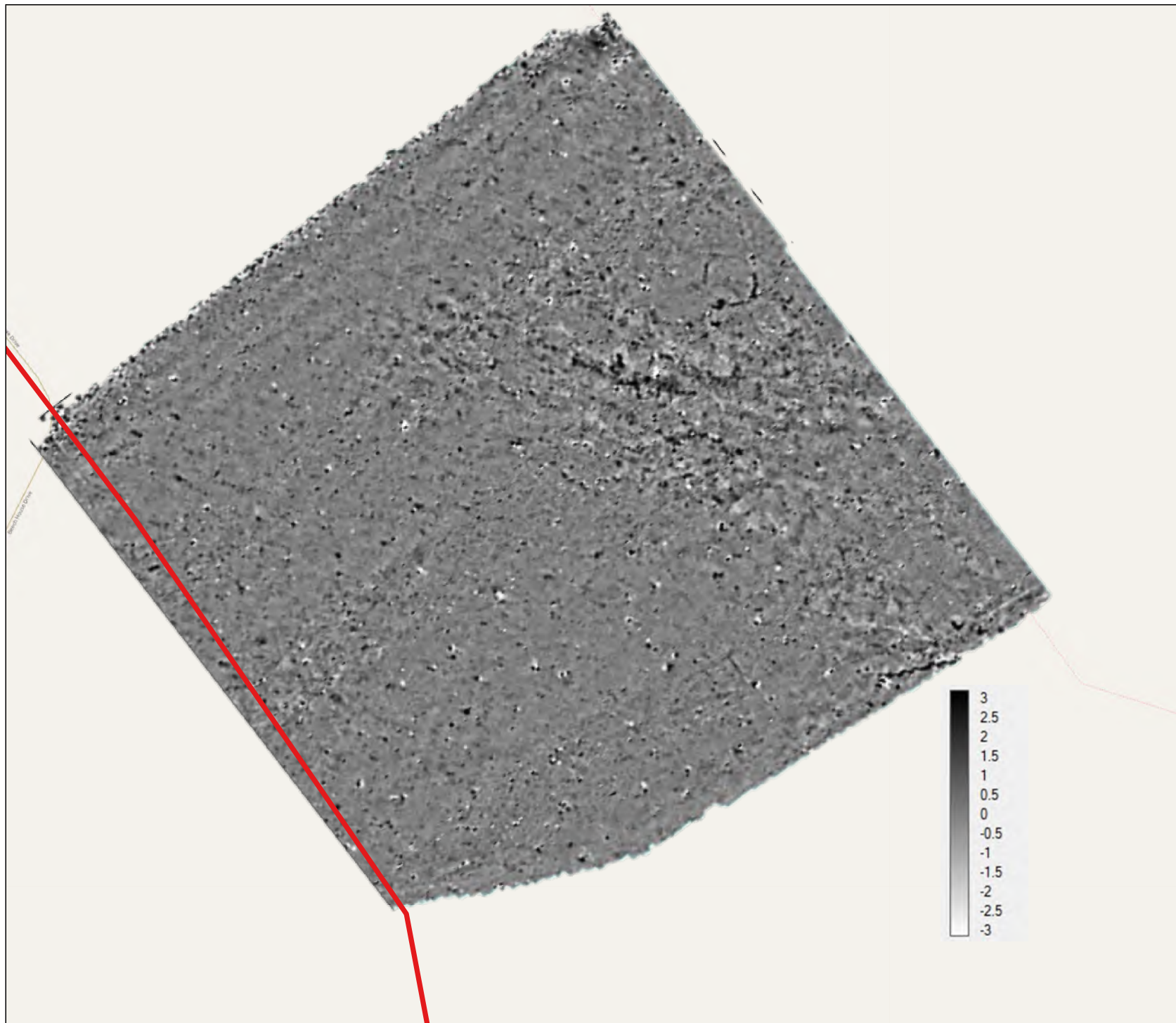
**Site name:** Yardley  
**Date**  
**Surveyed:** March/April 2023  
**Date**  
**Drawn:** May 2023  
**Client:** Atmos Consulting

- Key**
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  -  Obstructions



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**Figure 10:**

Greyscale shade plot of processed  
gradiometer data - Field 7

**Site name:** Yardley



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Drawn:** May 2023

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**Key**

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0 30 60 m  
  
1:2,000 



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**Figure 11:**

Greyscale shade plot of processed  
gradiometer data - Field 8

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

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**Key**



PDA Yardley



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0 30 60 m



1:2,500



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**Figure 12:**

Greyscale shade plot of processed  
gradiometer data- Field 9

**Site name:** Yardley


**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

 PDA Yardley

0 20 40 m  
  
1:1,700



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**Figure 13:**

Greyscale shade plot of processed  
gradiometer data- Field 10

**Site name:** Yardley


**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

-  PDA Yardley
-  Obstructions

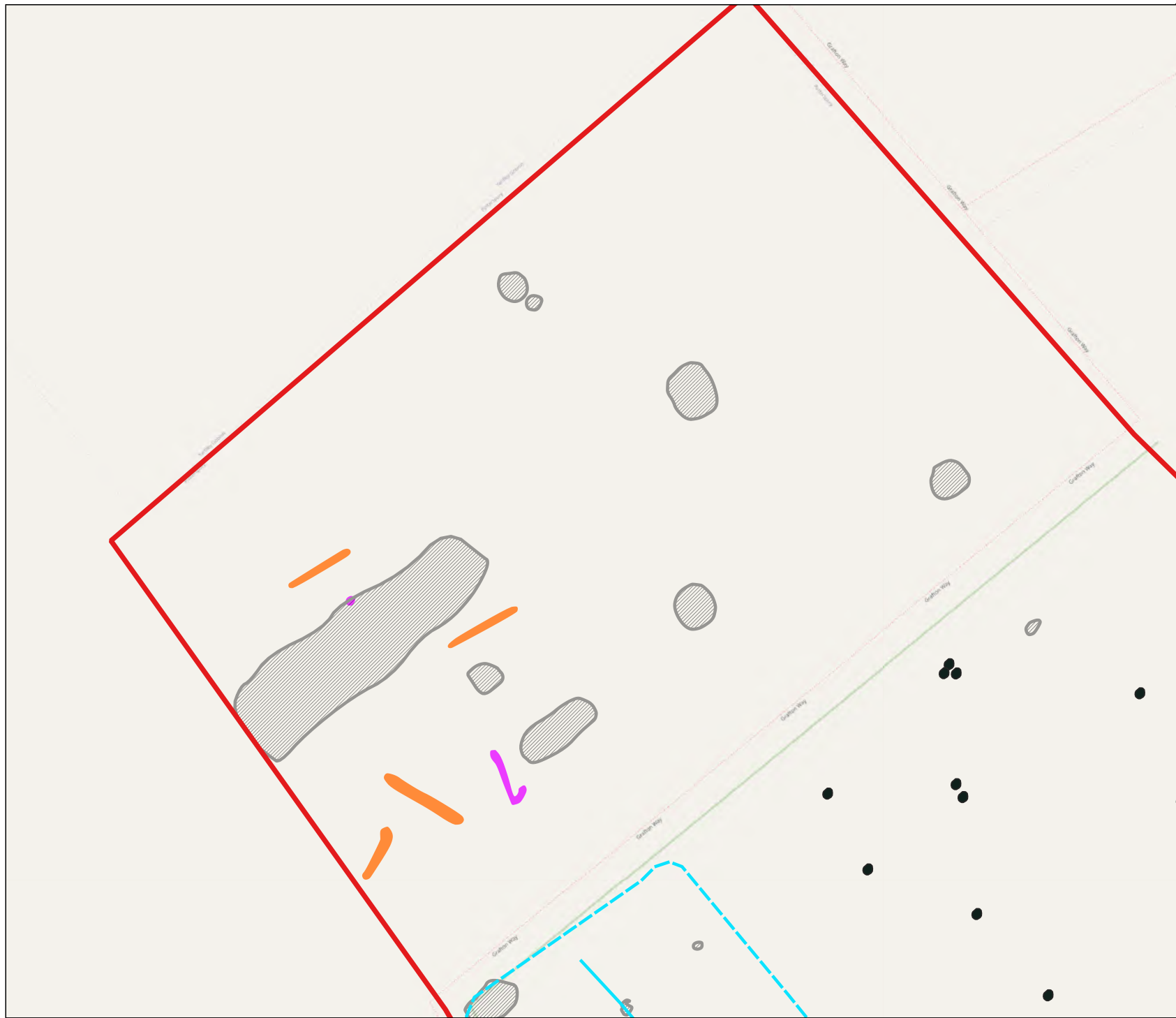
0 20 40 m  
  
1:1,800



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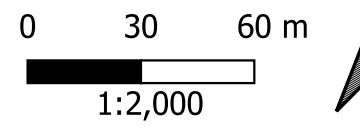




**Figure 14:**  
Interpretive plan of  
gradiometer data at Yardley of  
Field 1

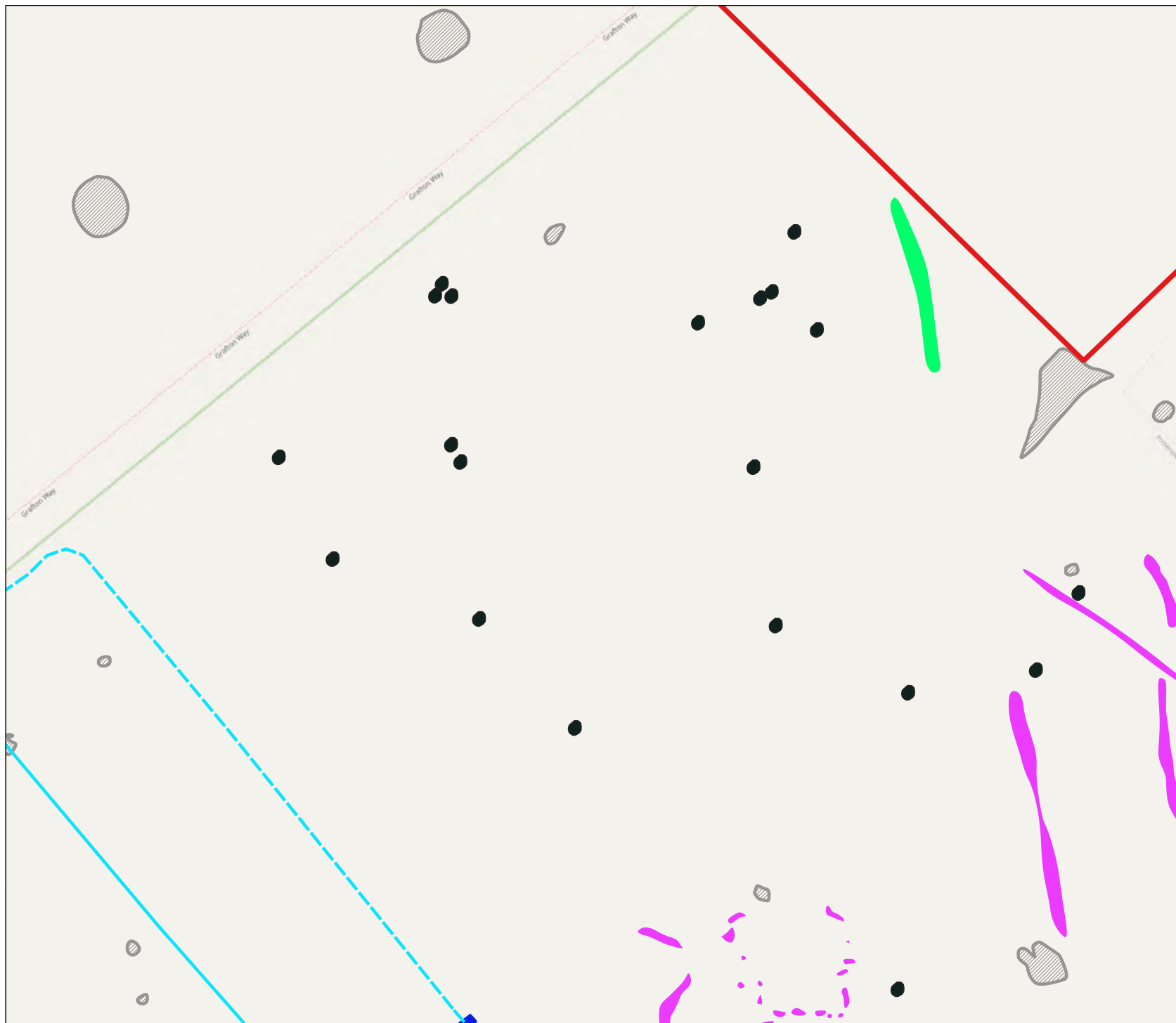
**Site name:** Yardley  
**Date**  
**Surveyed:** March/April 2023  
**Date**  
**Drawn:** May 2023  
**Client:** Atmos Consulting

- Key**
- PDA Yardley
  - Probable Archaeology
  - Possible Archaeology
  - Extent of Ridge And Furrow
  - Extraction
  - Natural
  - Magnetic Disturbance
  - Ferrous Object
  - Drain/Service
  - Ridge and Furrow



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**Figure 15:**

Greyscale shade plot of processed gradiometer data at Yardley of Field 2.

**Site name:** Yardley

**Date Surveyed:** March/April 2023

**Date Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

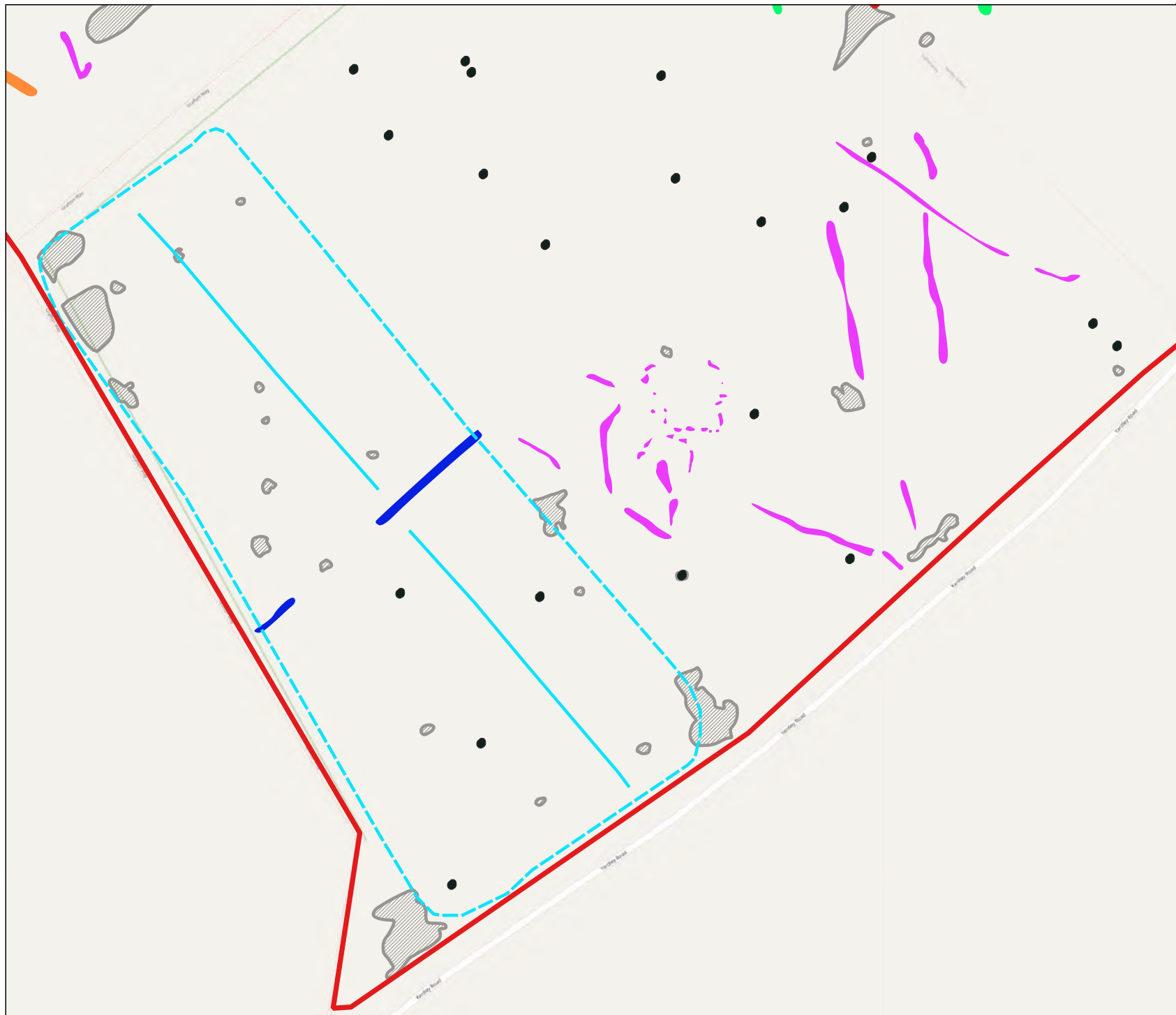
- PDA Yardley
- Probable Archaeology
- Possible Archaeology
- Extent of Ridge And Furrow
- Extraction
- Natural
- Magnetic Disturbance
- Ferrous Object
- Drain/Service
- Ridge and Furrow

0 20 40 m  
1:1,500



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**Figure 16:**

Interpretive plan of gradiometer data  
at Yardley of Field 3

**Site name:** Yardley

**Date**  
**Surveyed:** March/April 2023

**Date**  
**Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

- PDA Yardley
- Probable Archaeology
- Possible Archaeology
- Extent of Ridge And Furrow
- Extraction
- Natural
- Magnetic Disturbance
- Ferrous Object
- Drain/Service
- Ridge and Furrow

0 30 60 m

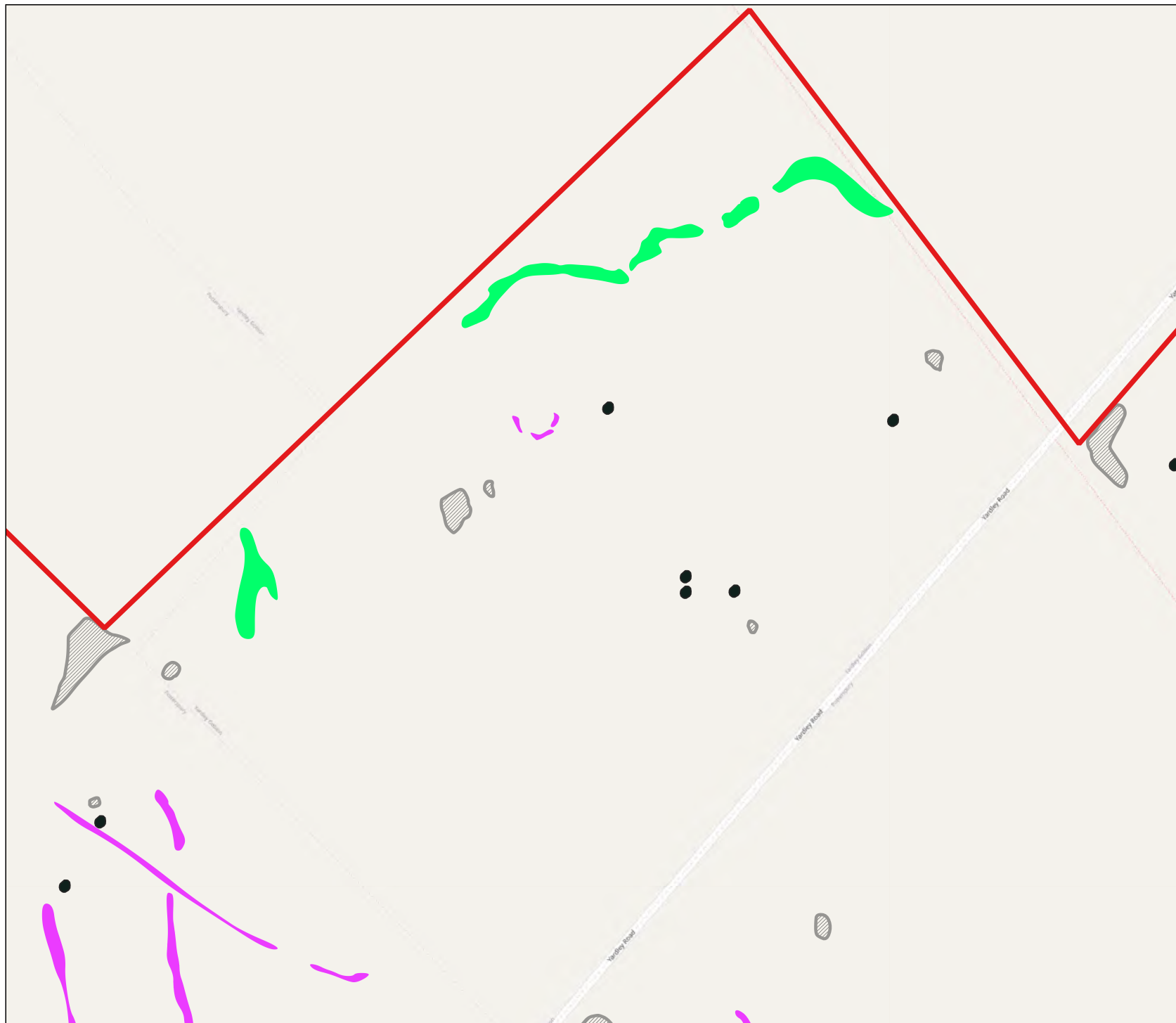


1:2,300



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**Figure 17:**

Interpretive plan of gradiometer data  
at Yardley of Field 4

**Site name:** Yardley

**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

- PDA Yardley
- Probable Archaeology
- Possible Archaeology
- Extent of Ridge And Furrow
- Extraction
- Natural
- Magnetic Disturbance
- Ferrous Object
- Drain/Service
- Ridge and Furrow

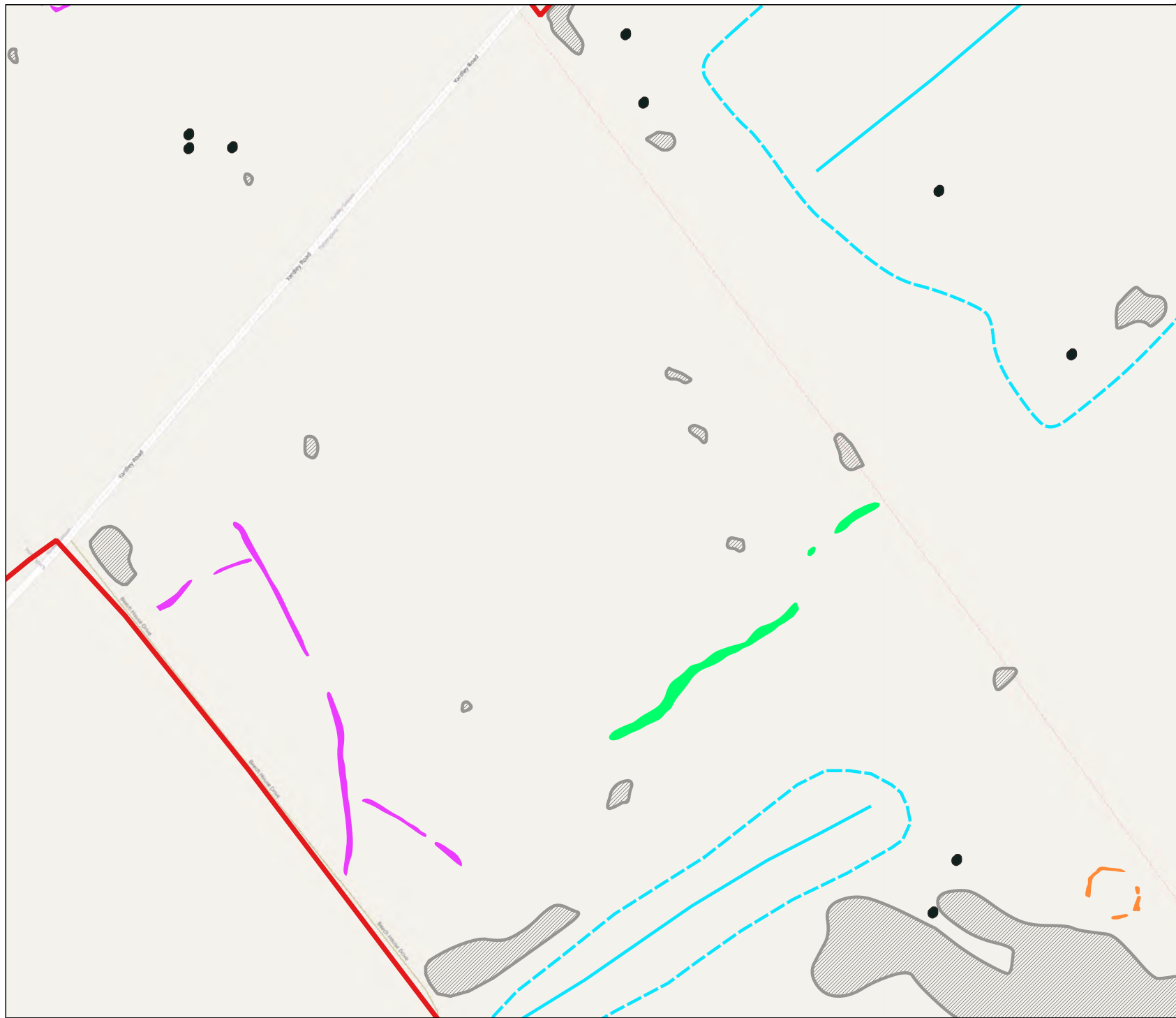
0 20 40 m  
1:1,800



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**Figure 18:**  
Interpretive plan of gradiometer data  
at Yardley of Field 5.

**Site name:** Yardley

**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

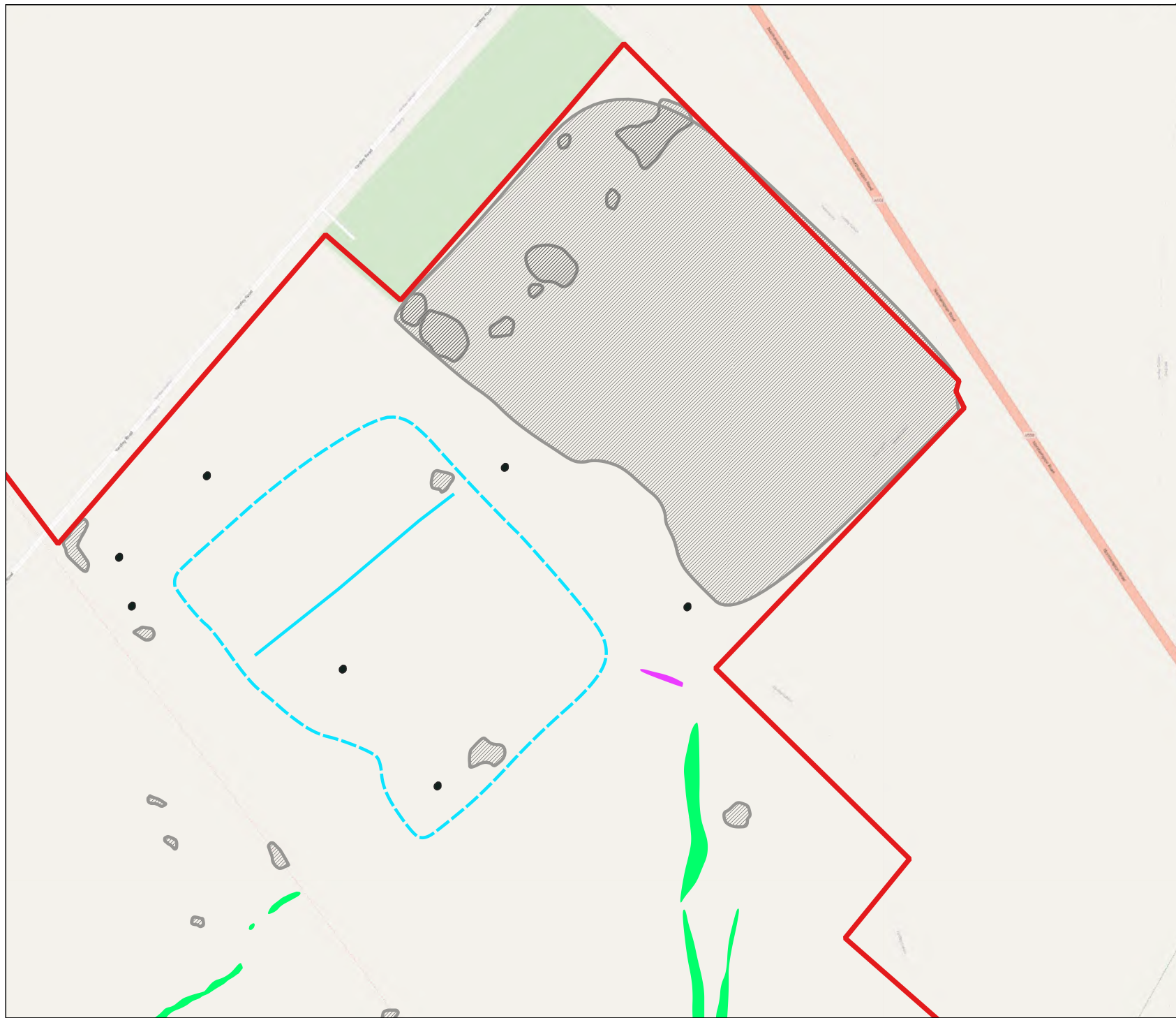
- PDA Yardley
- Probable Archaeology
- Possible Archaeology
- Extent of Ridge And Furrow
- Extraction
- Natural
- Magnetic Disturbance
- Ferrous Object
- Drain/Service
- Ridge and Furrow

0 30 60 m

1:2,000

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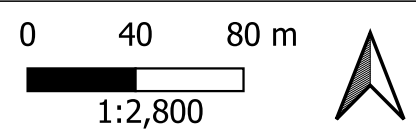


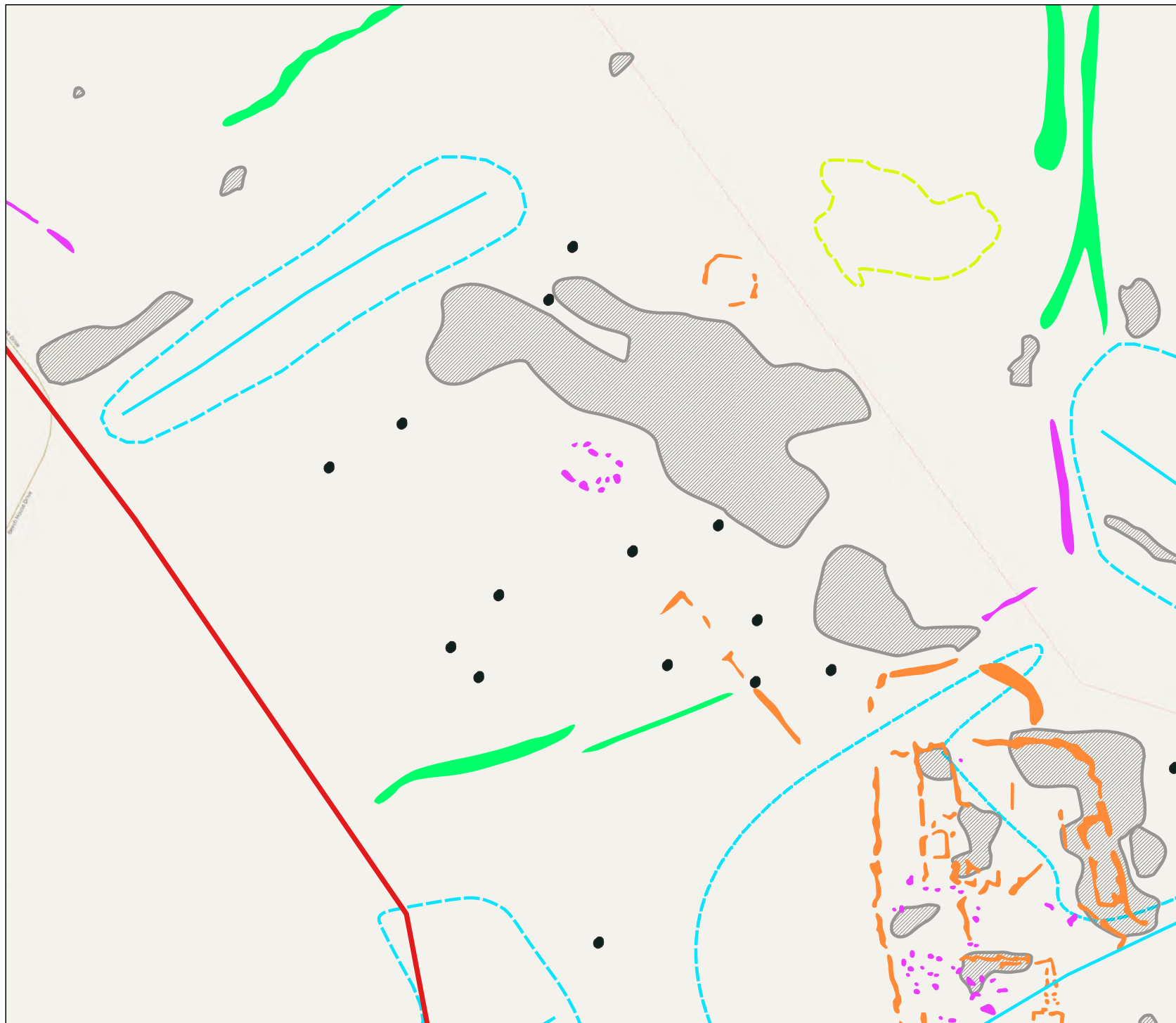
**Figure 19:**  
Interpretive plan of gradiometer data  
at Yardley of Field 6.

**Site name:** Yardley  
**Date  
Surveyed:** March/April 2023  
**Date  
Drawn:** May 2023  
**Client:** Atmos Consulting

**Key**

- PDA Yardley
- Probable Archaeology
- Possible Archaeology
- Extent of Ridge And Furrow
- Extraction
- Natural
- Magnetic Disturbance
- Ferrous Object
- Drain/Service
- Ridge and Furrow





**Figure 20:**

Interpretive plan of gradiometer data  
at Yardley of Field 7

**Site name:** Yardley

**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

- PDA Yardley
- Probable Archaeology
- Possible Archaeology
- Extent of Ridge And Furrow
- Extraction
- Natural
- Magnetic Disturbance
- Ferrous Object
- Drain/Service
- Ridge and Furrow

0 30 60 m

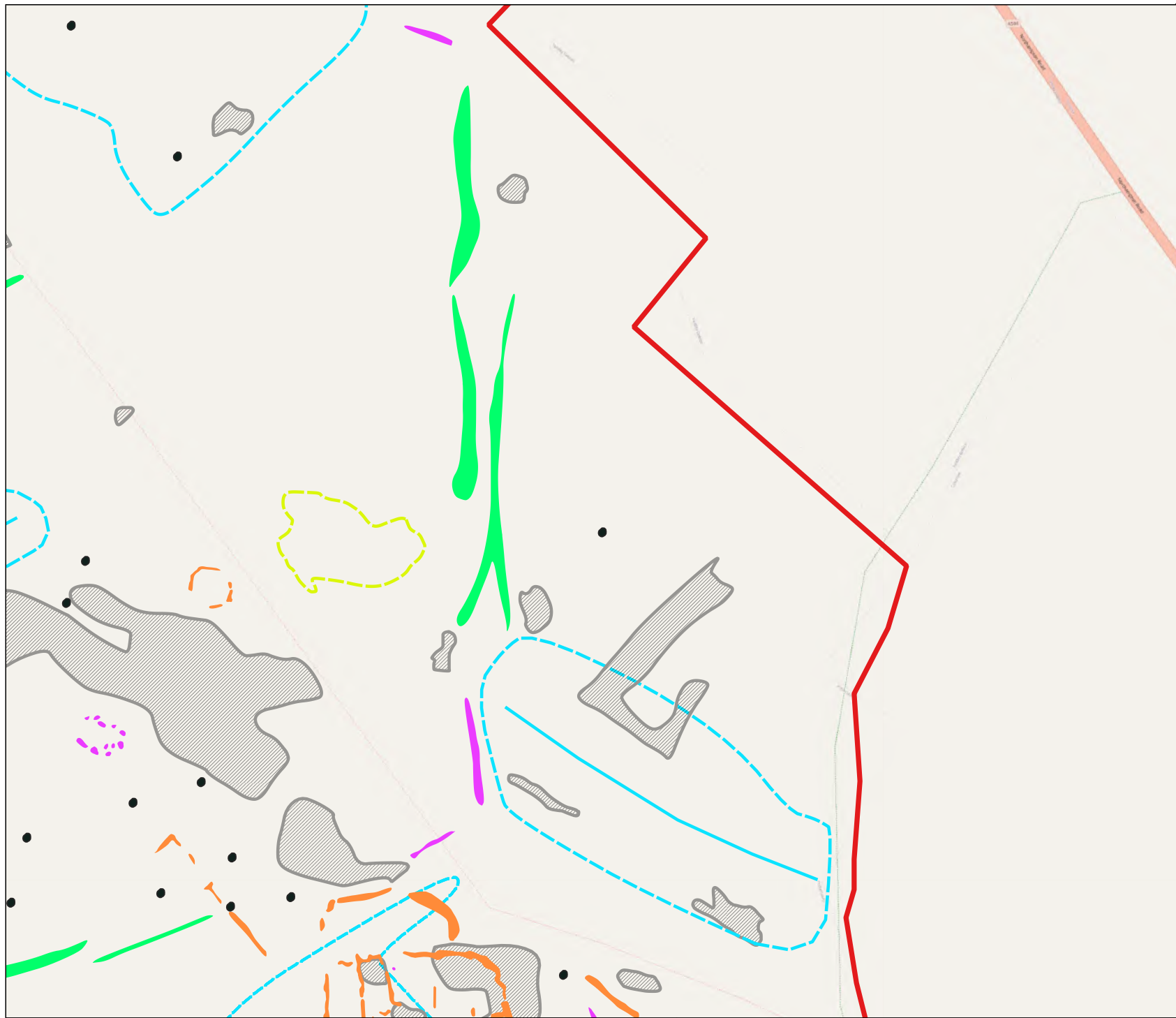


1:2,000



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**Figure 21:**  
Interpretive plan of gradiometer data  
at Yardley of Field 8

**Site name:** Yardley  
**Date**  
**Surveyed:** March/April 2023  
**Date**  
**Drawn:** May 2023  
**Client:** Atmos Consulting

**Key**

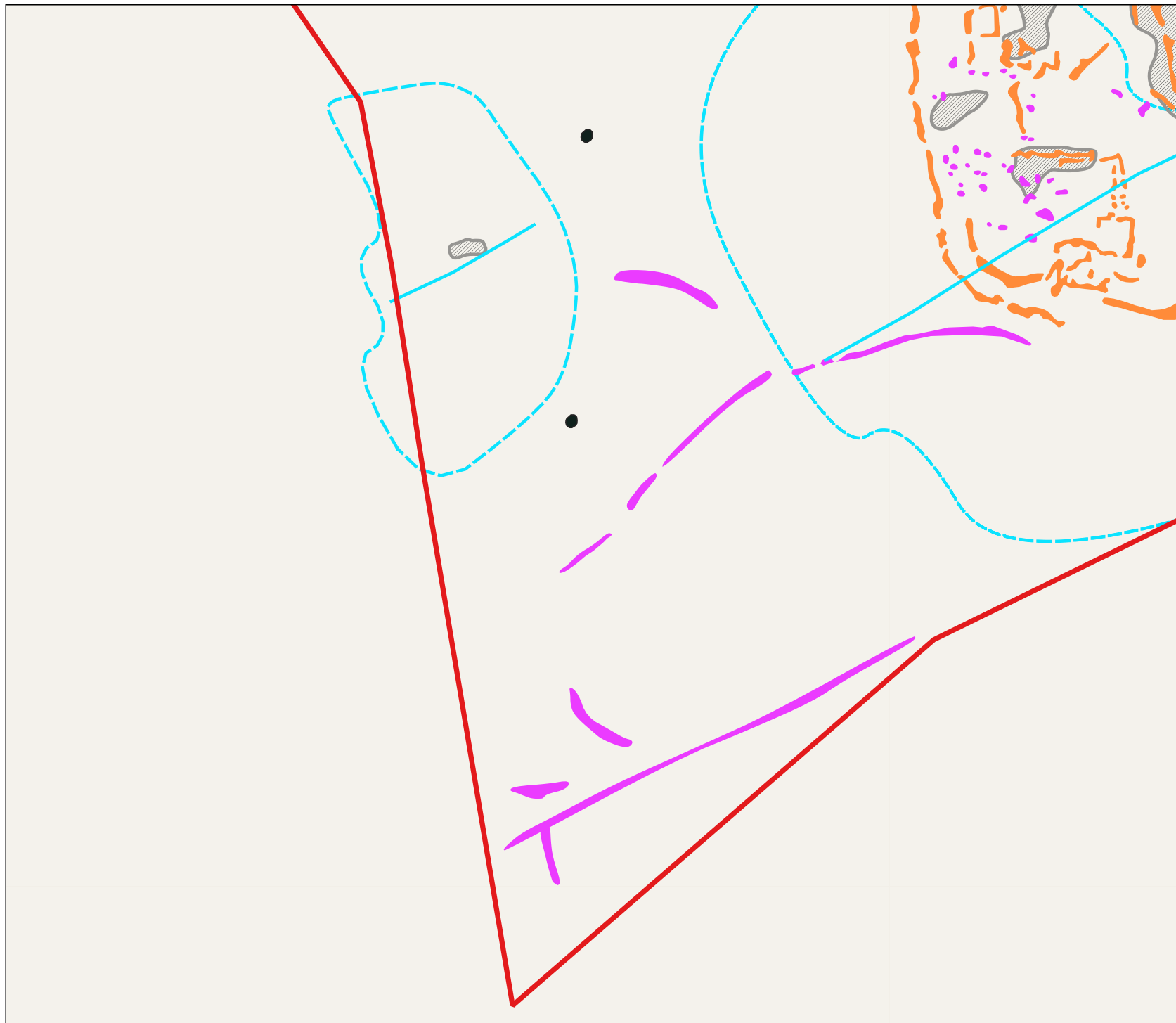
- PDA Yardley
- Probable Archaeology
- Possible Archaeology
- Extent of Ridge And Furrow
- Extraction
- Natural
- Magnetic Disturbance
- Ferrous Object
- Drain/Service
- Ridge and Furrow

0 30 60 m  
  
1:2,500



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**Figure 22:**

Interpretive plan of gradiometer data  
at Yardley of Field 9

**Site name:** Yardley

**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

-  PDA Yardley
-  Probable Archaeology
-  Possible Archaeology
-  Extent of Ridge And Furrow
-  Extraction
-  Natural
-  Magnetic Disturbance
-  Ferrous Object
-  Drain/Service
-  Ridge and Furrow

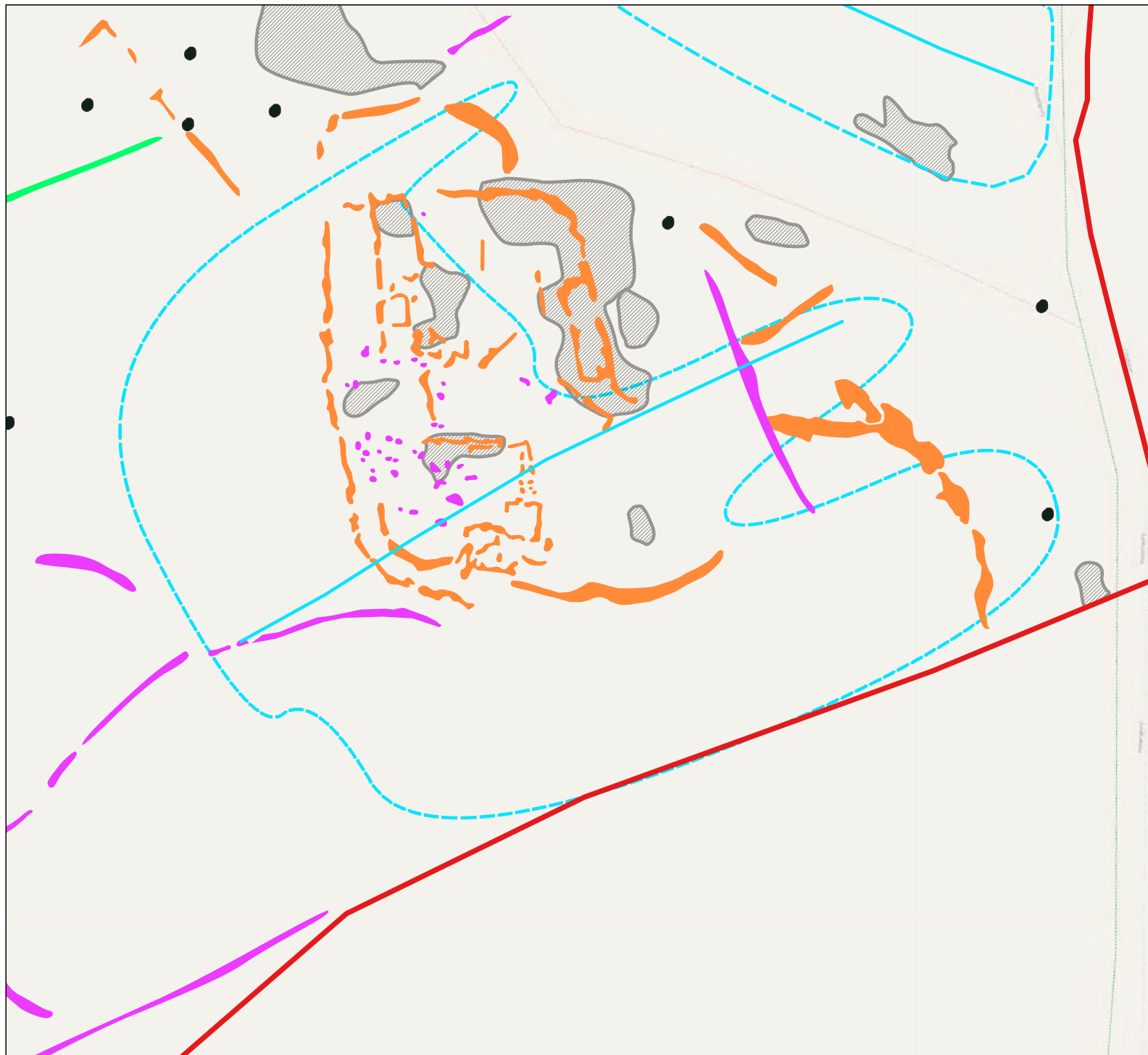
0 20 40 m  
1:1,700



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**Figure 23:**

Interpretive plan of gradiometer data  
at Yardley of Field 10

**Site name:** Yardley

**Date  
Surveyed:** March/April 2023

**Date  
Drawn:** May 2023

**Client:** Atmos Consulting

**Key**

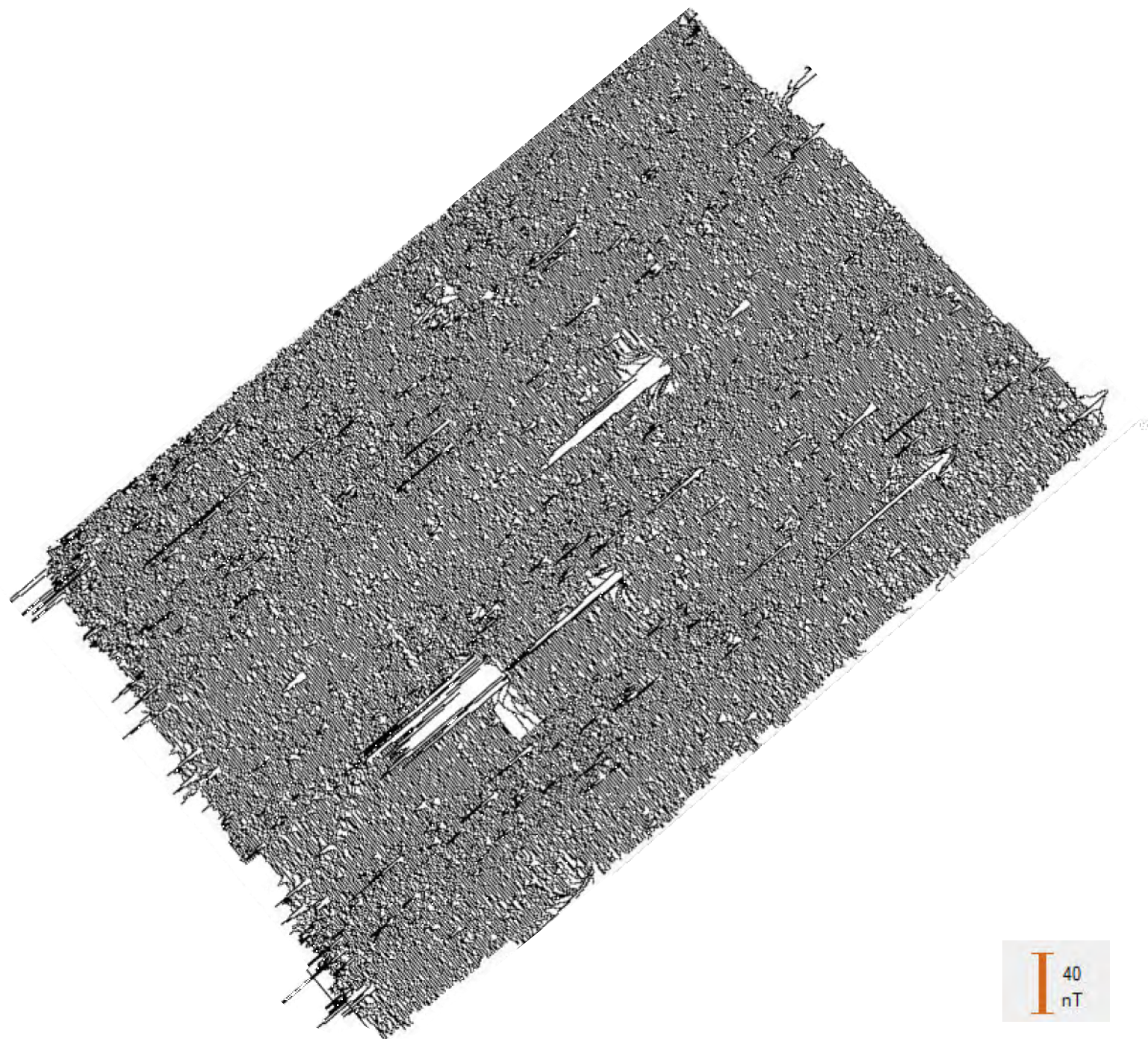
-  PDA Yardley
-  Probable Archaeology
-  Possible Archaeology
-  Extent of Ridge And Furrow
-  Extraction
-  Natural
-  Magnetic Disturbance
-  Ferrous Object
-  Drain/Service
-  Ridge and Furrow

0 20 40 m  
1:1,800



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**Figure 24:**

Trace plot of processed gradiometer data at Yardley - Field 1.

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:**

**Atmos Consulting**

0 30 60 m



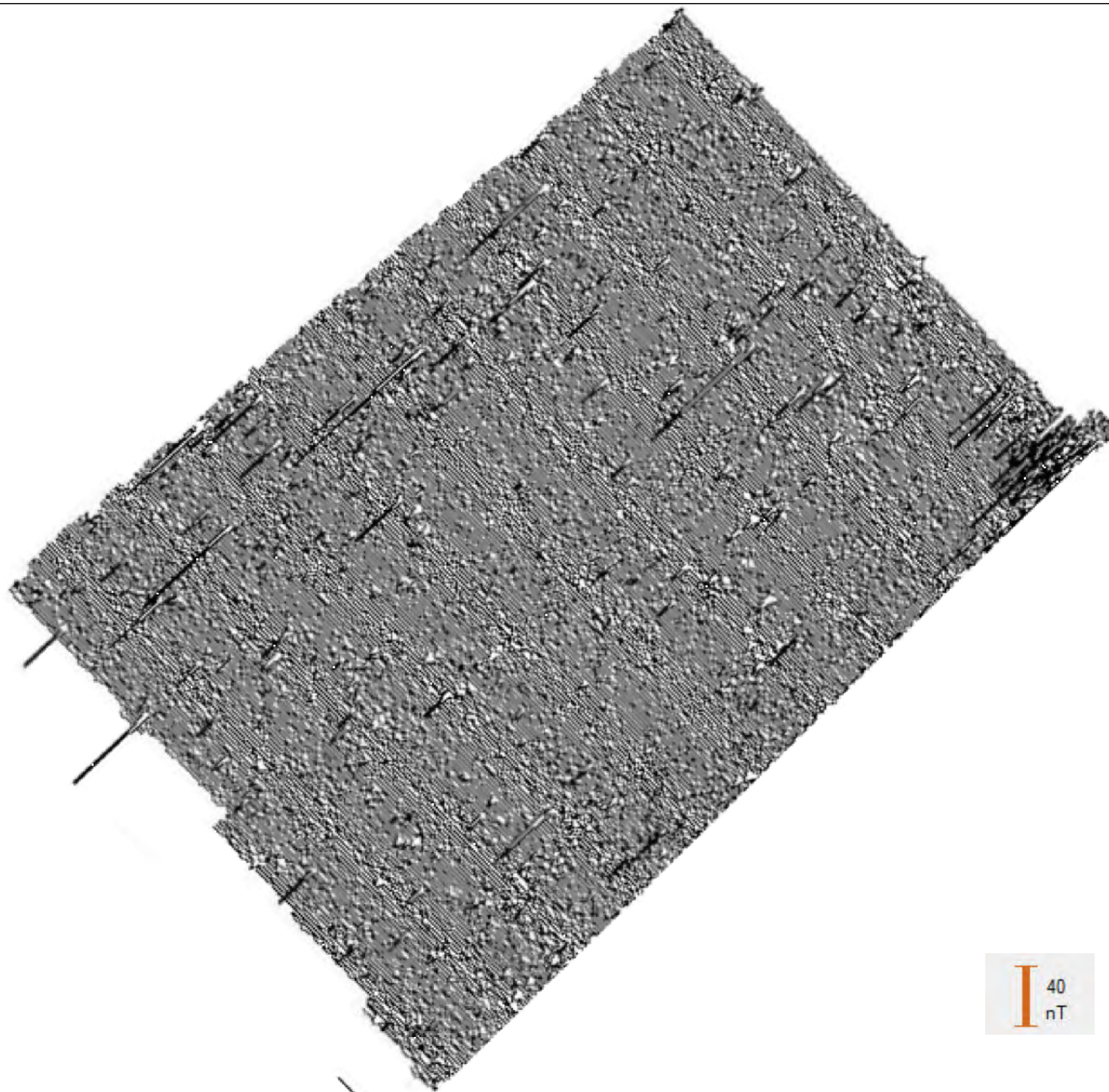
1:2,000



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**Figure 25:**

Trace plot of processed gradiometer data at Yardley - Field 2.

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:**

**Atmos Consulting**

0 20 40 m

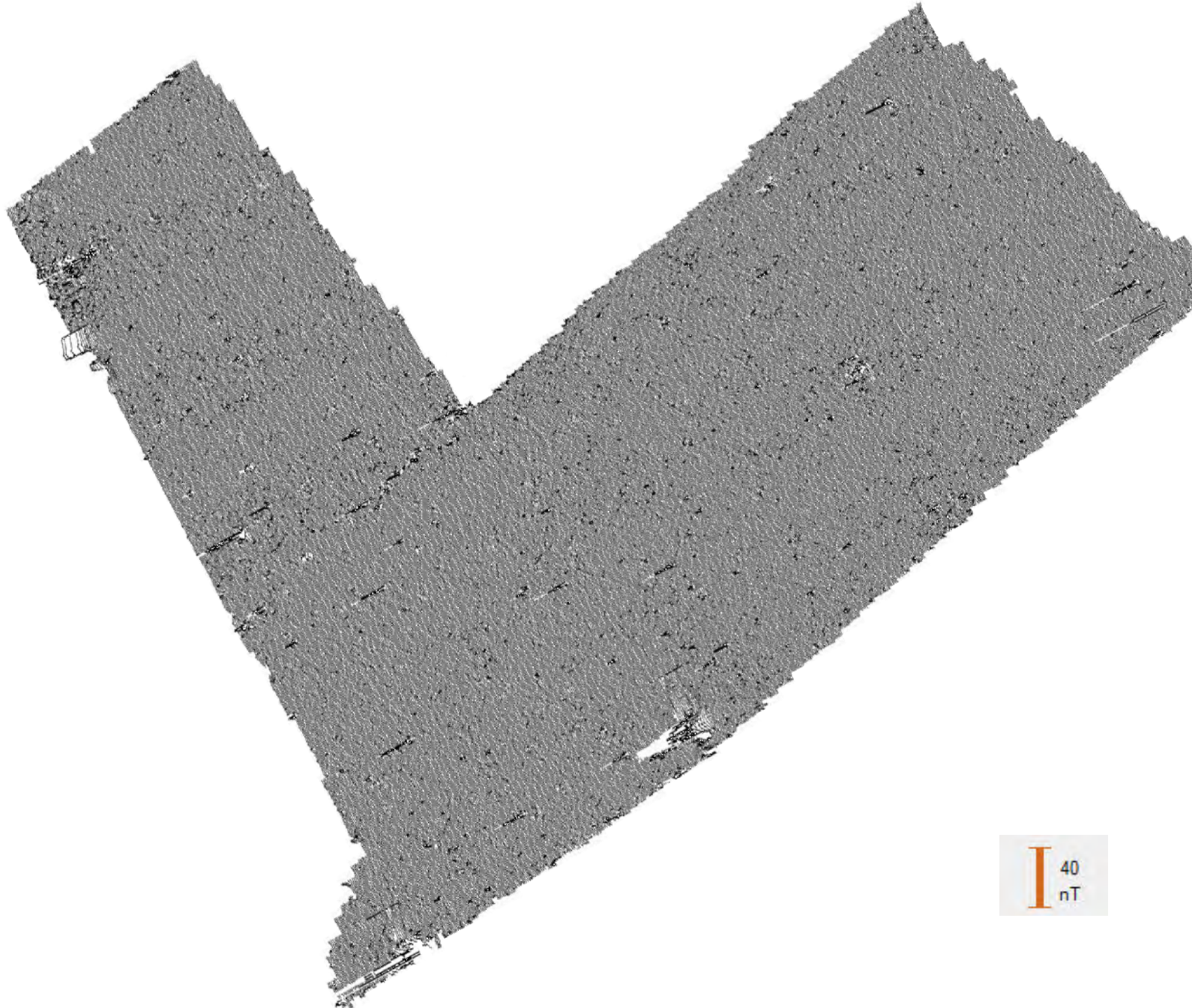


1:1,500



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**Figure 26:**

Trace plot of processed gradiometer data at Yardley - Field 3.

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:**

**Atmos Consulting**

0 30 60 m



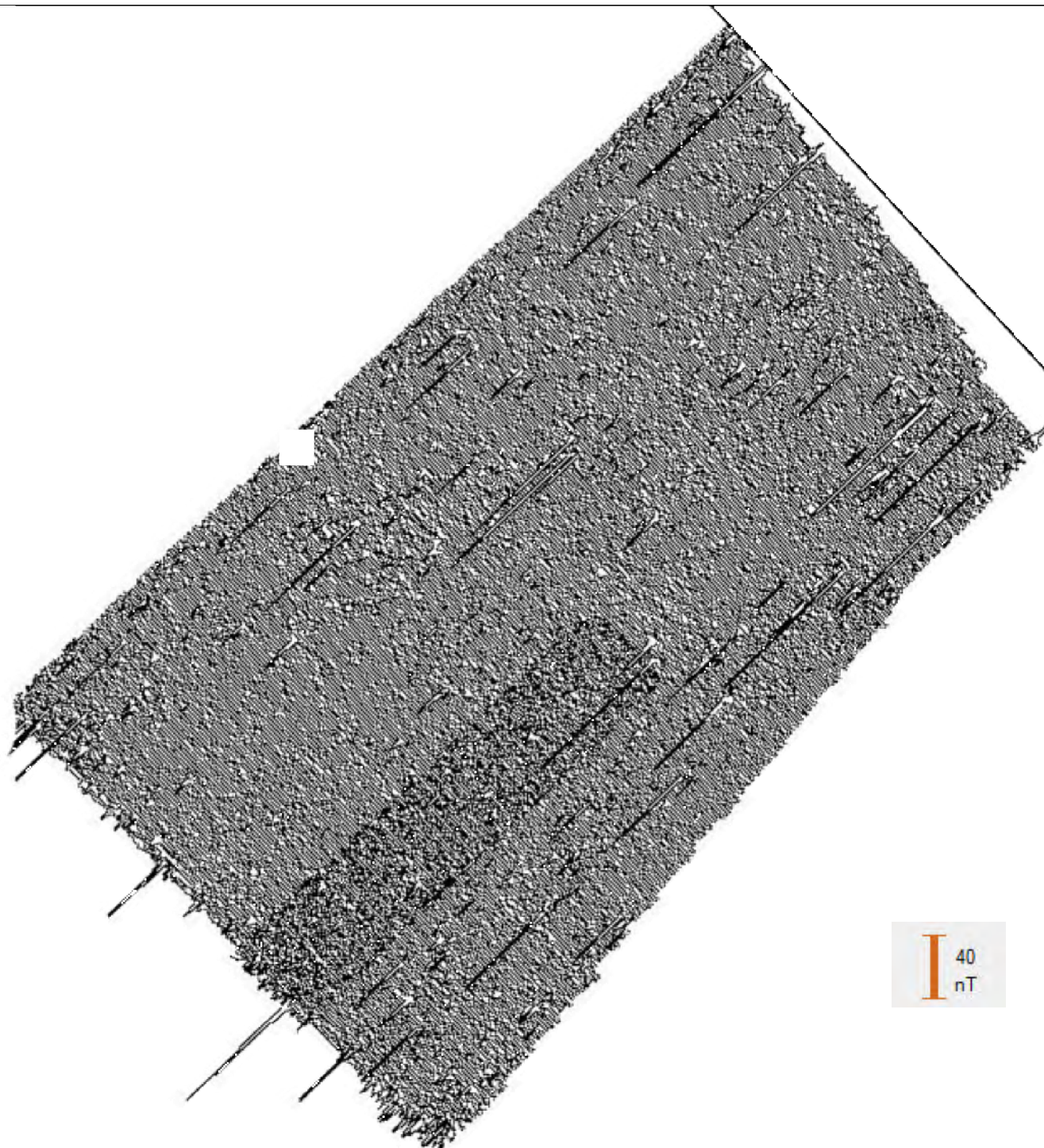
1:2,300



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**Figure 27:**

Trace plot of processed gradiometer data at Yardley - Field 4

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:** Atmos Consulting

0 20 40 m



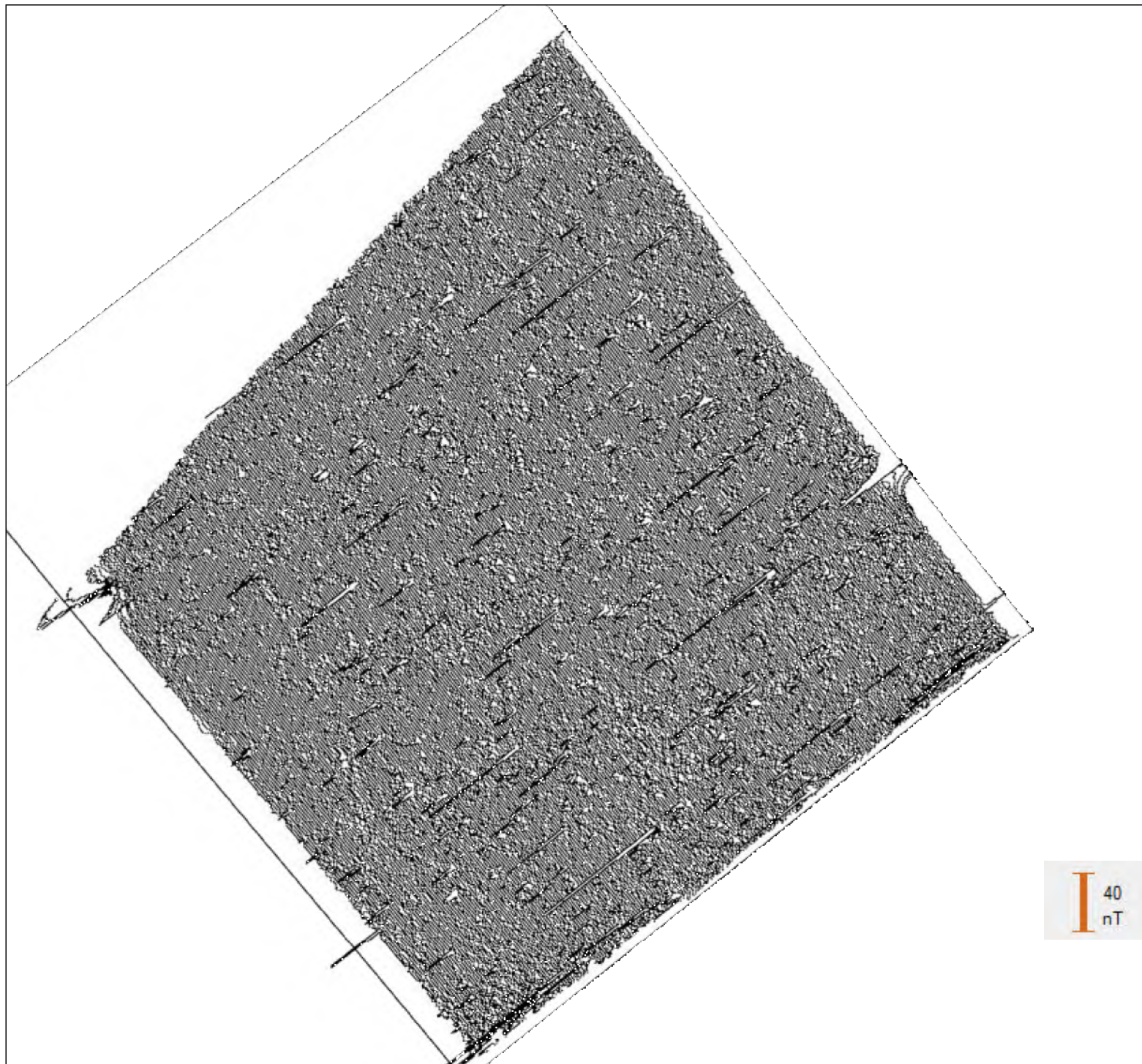
1:1,802.110183



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**Figure 28:**

Trace plot of processed gradiometer data at Yardley - Field 5

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:** Atmos Consulting

0 30 60 m



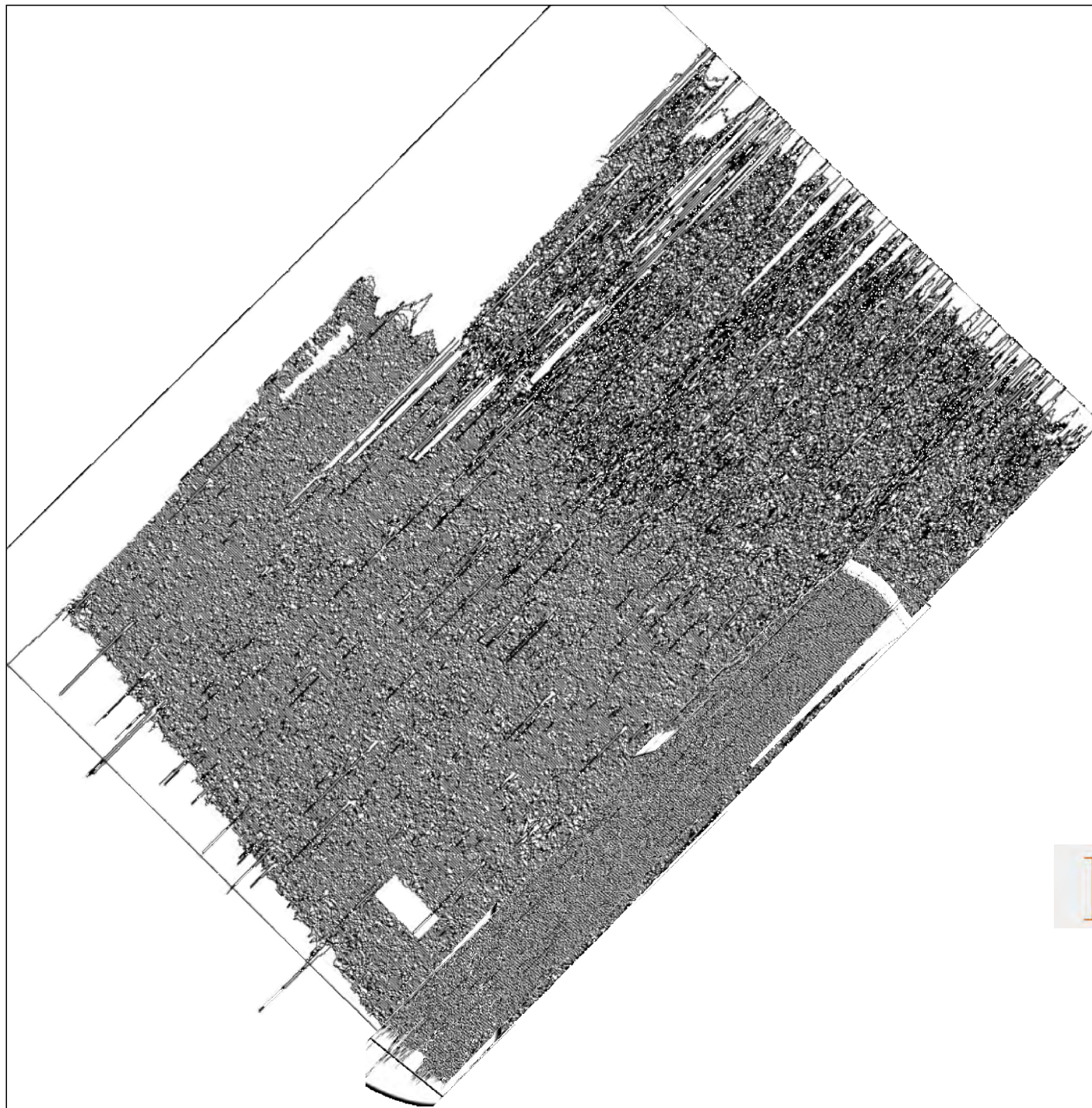
1:2,000



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**Figure 29:**

Trace plot of processed gradiometer data at Yardley - Field 6

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:**

**Atmos Consulting**

0 40 80 m



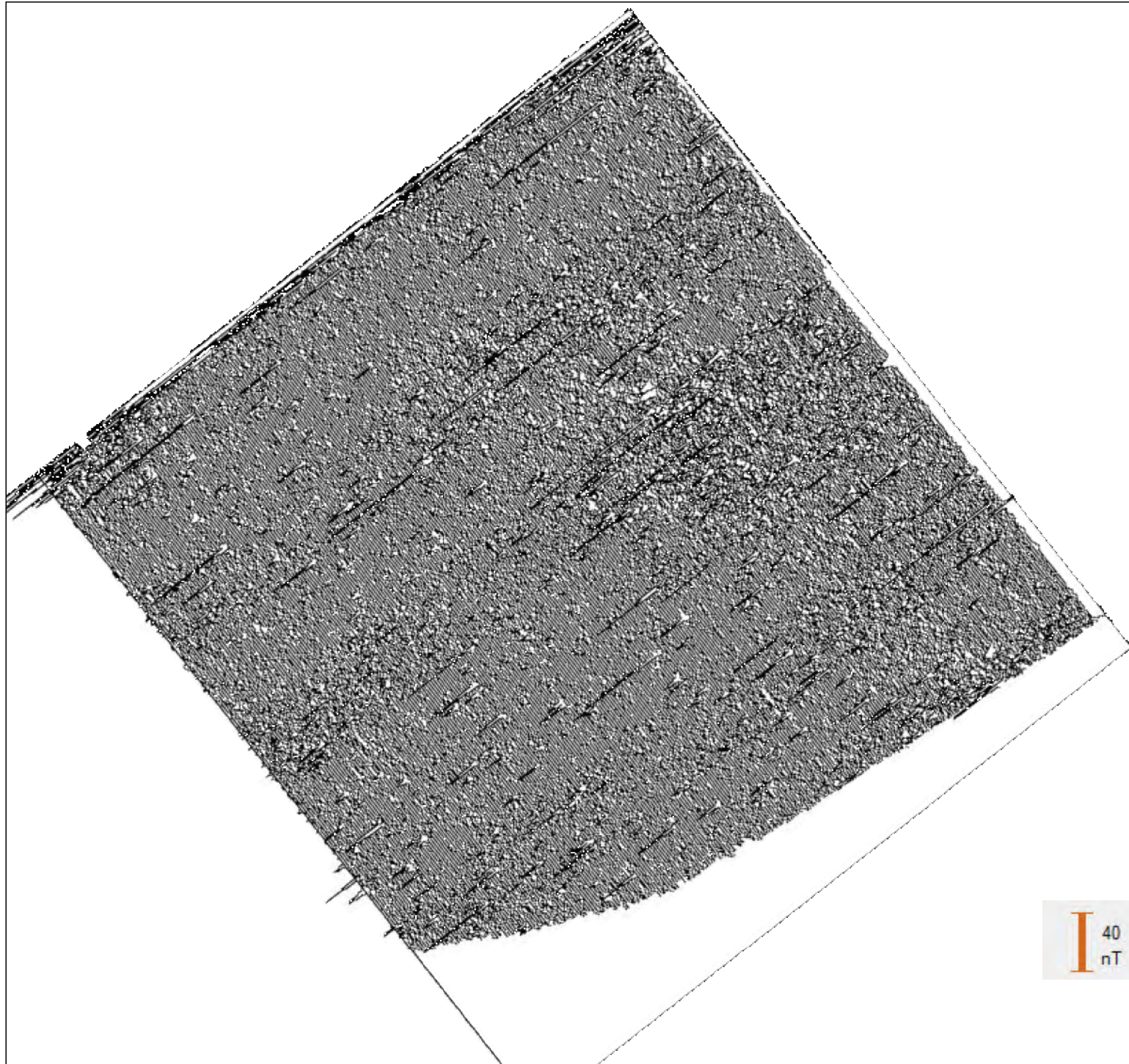
1:2,800



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**Figure 30:**

Trace plot of processed gradiometer data at Yardley - Field 7

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:** Atmos Consulting

0 30 60 m



1:2,000



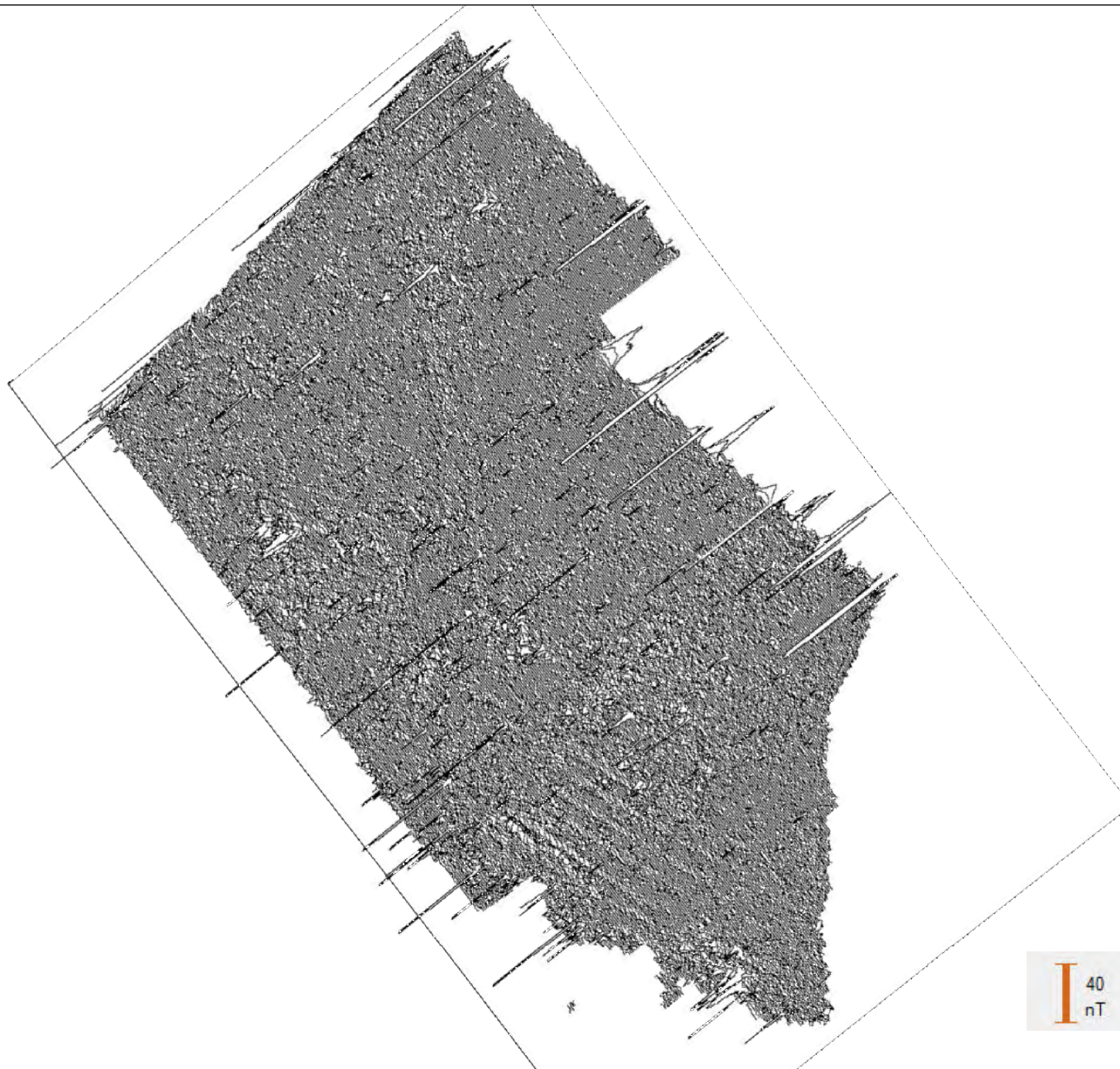
40  
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**Figure 31:**

Trace plot of processed gradiometer data at Yardley - Field 8

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:**

**Atmos Consulting**

0 30 60 m

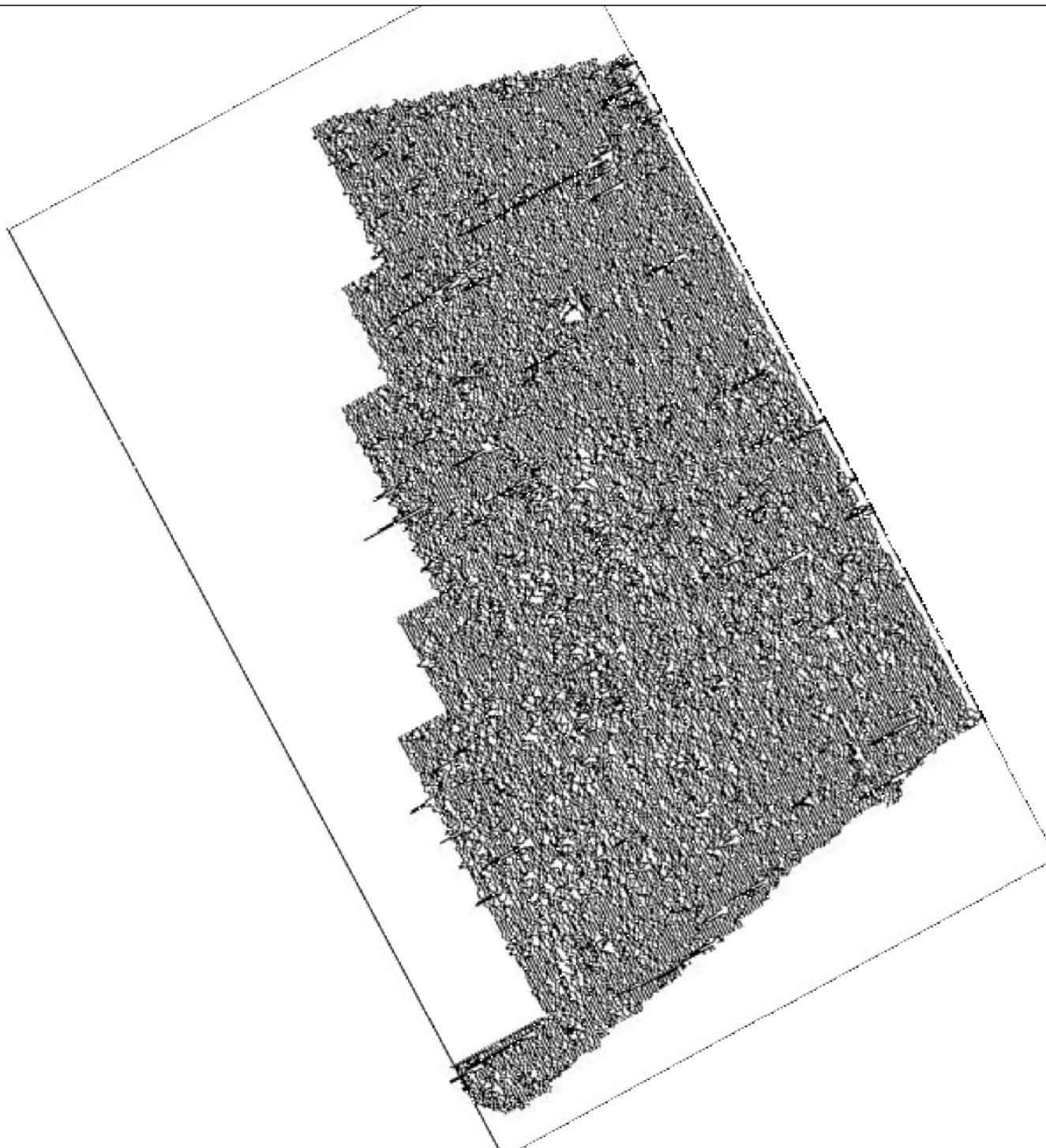


1:2,500



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**Figure 32:**

Trace plot of processed gradiometer data at Yardley - Field 9

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:**

**Atmos Consulting**

0 20 40 m



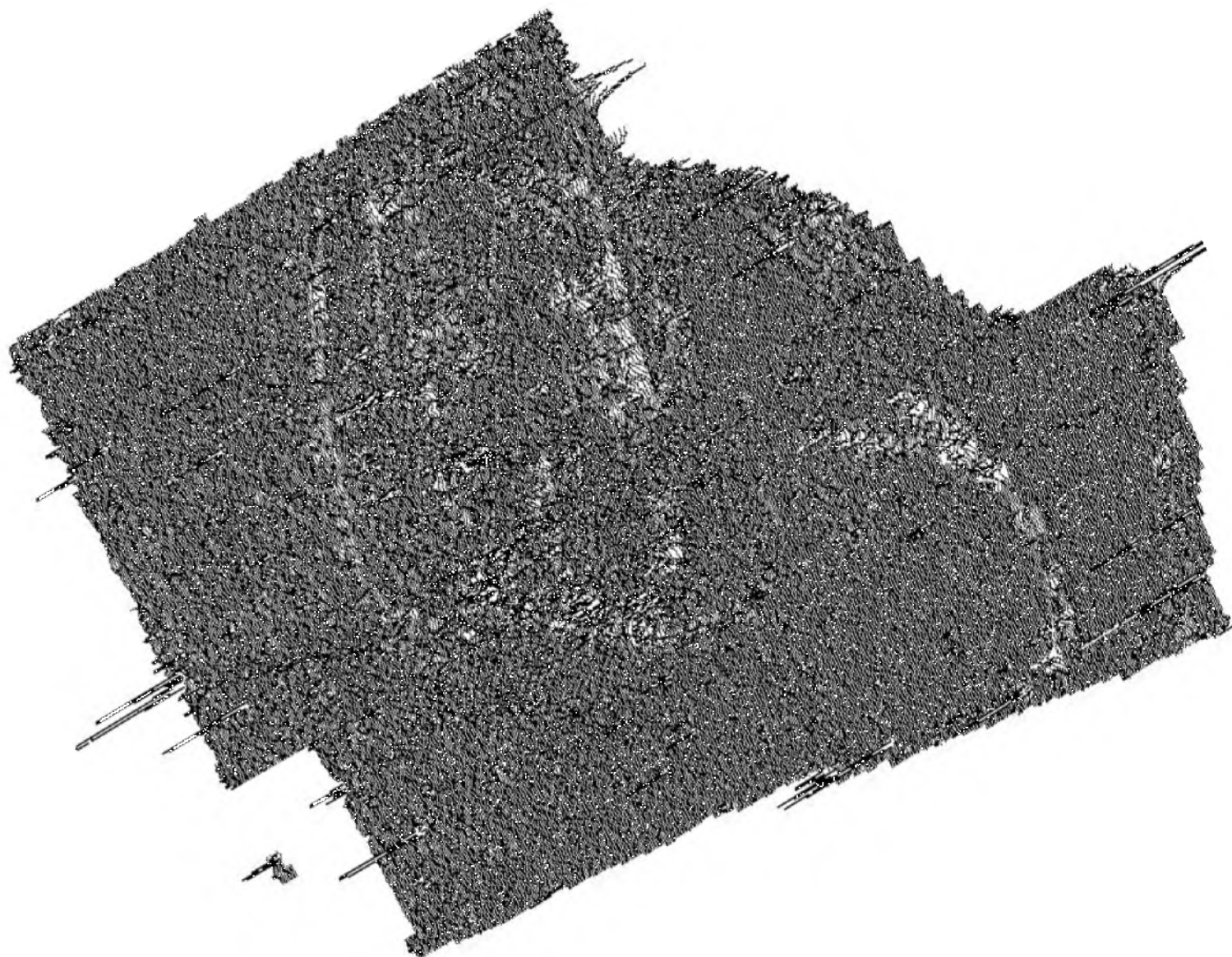
1:1,700



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**Figure 33:**

Trace plot of processed gradiometer data at Yardley - Field 10

**Site name:** Yardley

**Date**

**Surveyed:** March/April 2023

**Date**

**Drawn:** May 2023

**Client:** Atmos Consulting

0 20 40 m



1:1,800



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