Lewis Lane, Arlesey

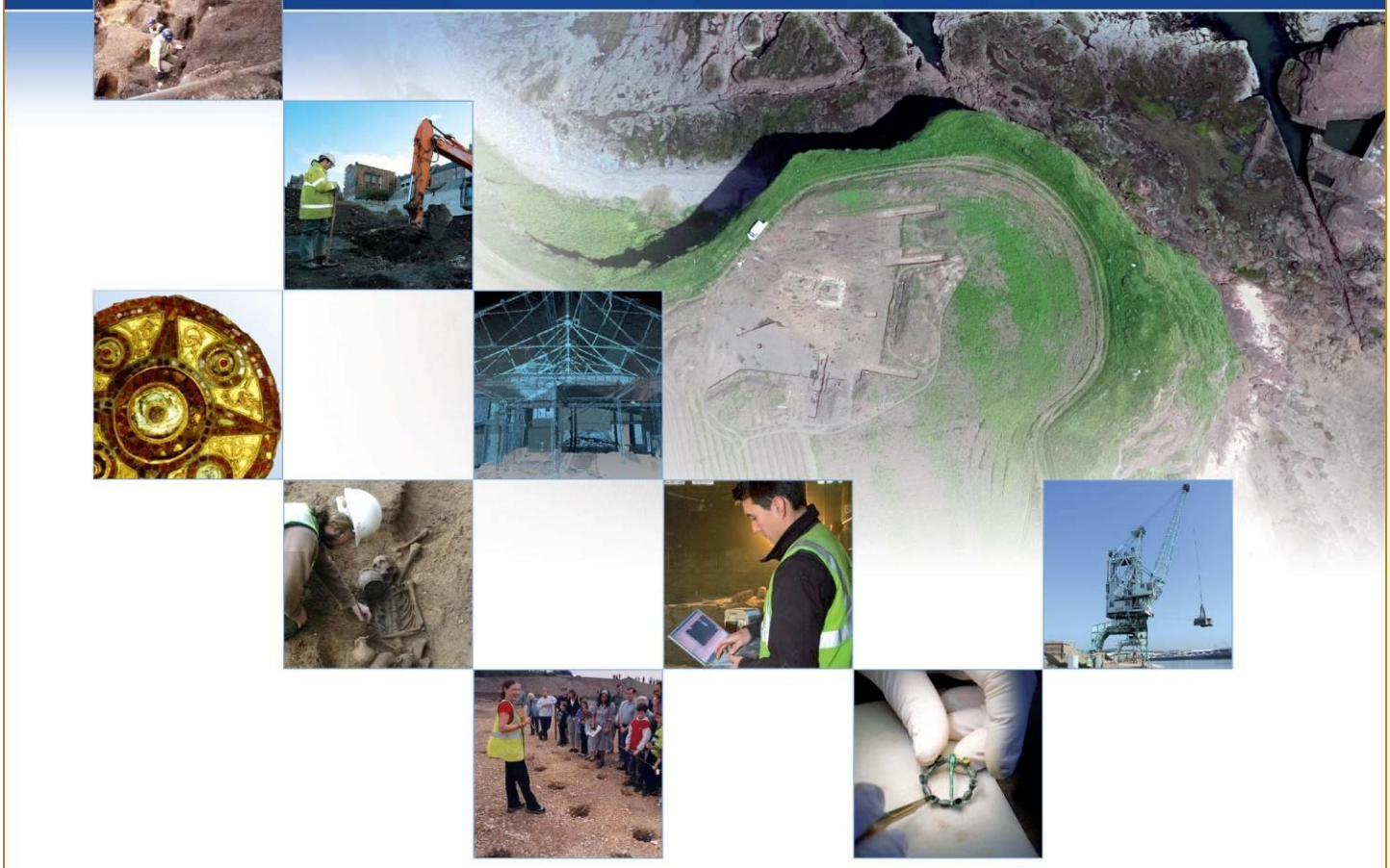
Bedfordshire

Archaeological Geophysical Survey

National Grid Reference: TL 19430 36750

AOC Project No: 52004

Date: March 2019



AOC Archaeology Group

ARCHAEOLOGY | HERITAGE | CONSERVATION

Lewis Lane, Arlesey

Bedfordshire

Archaeological Geophysical Survey

On Behalf of:	**WYG Environment Planning Transport Ltd** **Arndale Court** **Headingley** **Leeds** **West Yorkshire** **LS6 2UJ**
National Grid Reference (NGR):	**TL 19430 36750**
AOC Project No:	**52004**
Prepared by:	**Kimberley Teale**
Illustrations by:	**Kimberley Teale**
Date of survey:	**13th March 2019**

This document has been prepared in accordance with AOC standard operating procedures.

Author: Kimberley Teale	**Date: 26th March 2019**
Approved by: James Lawton	**Date: 26th March 2019**
Report Stage: Final Draft	**Date: 26th March 2019**

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Non-Technical Summary

AOC Archaeology Group was commissioned by WYG Environment Planning Transport Ltd to undertake an archaeological geophysical gradiometer survey to investigate the potential for buried archaeological remains on a proposed development site at Lewis Lane, Arlesey (centred at TL 19430 36750*). A total of 2.5 hectares were surveyed and the results of the survey have identified the following.*

Three sub-circular anomalies are visible in the dataset which could be archaeological in origin, relating to enclosures or settlement activity. Three pit-like anomalies have also been identified, though it is unclear if these have an archaeological origin.

Several trends of an unclear nature have been identified across the rest of the dataset. A possible former field boundary runs north-east to south-west through the centre of the site, which is not visible on any available historical mapping.

Rectilinear trends are visible in the north-west of the dataset which could relate to small field systems or enclosures, however the trends are magnetically weak so interpretation is tentative. Similarly, small sub-circular trends in the east could relate to small enclosures, but their interpretation is also tentative. A large area of enhanced magnetism across the centre of the dataset has unclear origins; it could relate to archaeological activity however it could also have agricultural or natural origins.

Ridge and furrow ploughing trends run across the entire site, showing the area has been historically farmed. It is possible that some of the trends in the dataset are of the same age as the ridge and furrow regime and may be related.

Modern magnetic disturbance around the periphery of the dataset relates to surrounding modern boundary fencing. A high level of ferrous / iron spikes are visible throughout the dataset, which are thought to be modern, relating to debris from the construction of the adjacent houses or dumps of rubbish within the field.

1 Introduction

1.1 AOC Archaeology Group was commissioned by WYG Environment Planning Transport Ltd (hereafter 'WYG') to undertake an archaeological geophysical gradiometer survey of a development site at Lewis Lane, Arlesey, Bedfordshire, as part of a wider scheme of archaeological assessment in advance of the proposed development of the site.

1.2 The survey was carried out to provide information on the extent and significance of potential buried archaeological remains within the proposed development site.

2 Site Location and Description

2.1 The proposed development site (hereafter 'the site') is located off Lewis Lane, 130m north of the town of Arlesey, Bedfordshire (centred at TL 19430 36750, see Figure 1).

2.2 The site covers approximately 3 hectares (ha) across a single pasture field which was overgrown with scrub and was cut back prior to survey. Small patches of trees caused some obstruction to the survey and this is detailed in Figure 2.

2.3 The site is situated on relatively level ground, at approximately 44m aOD (above Ordnance Datum).

2.4 The bedrock recorded geology within the site consists of the Gault Formation – a Mudstone, with the West Melbury Marly Chalk Formation in the east of the site (BGS, 2019).

2.5 These are overlain by freely draining shallow lime-rich soils over chalk or limestone (Soilscapes, 2019).

2.6 Gradiometer survey is suggested to provide a poor response over mudstones and fairs better over limestone chalk (David *et al.* 2008, 15).

3 Archaeological Background

3.1 The archaeological background below is drawn from the written scheme of investigation of the site, undertaken in 2018 (WYG, 2018). All references to HERs, SMRs and site codes can be found in the appendix of this written scheme of investigation.

Designated Assets

3.2 No designated assets were identified within the site, however one Grade I Listed and 5 Grade II Listed Buildings are located within 1km of the site area.

Prehistoric and Romano-British (8,000BC - AD410)

3.3 There are no recorded remains of prehistoric and Roman date within the proposed development area itself.

3.4 To the south east of the site there is a potential prehistoric circular enclosure cropmarked site, while Neolithic to Bronze Age flint scatters have been identified to the south of Stotford and on the north eastern edge of the 1km study area; undated flint implements have also been identified within the Etonbury medieval manorial site, on the northerly edge of the study area. Further evidence within the study area includes enclosures that dated between 800 BCE and 409 CE upon the western half of the playing field of Etonbury School, just outside the easterly edge of the study area, as well as cropmarks to the south of Arlesey Road and south of Cityfield Farm, indicating settlement patterns. Later Roman evidence has also been identified in Etonbury, to the north of the study area in the form of sherds of pottery and possible Roman metal objects.

Medieval to Modern (AD410 - present)

3.5 The Medieval settlement of Arlesey, thought to have originated in the late Saxon period, is located upon the western edge of the site. Within Arlesey and to the south-west of the site a number of post medieval buildings have been identified as well as a number of public houses. An excavation of a single trench to the west of the site area located remnants of a small structure built in the late 1890s, although no other archaeological features were identified. St Peter's School, founded in 1856, is also located to the north west of the site. The London to Peterborough section of the former Great Northern Railway Line is located to the west of the study area, running north to south. Important modern historic features within the study area include a War Memorial on the High Street that honours those who fell in the First and Second World War and the site of a demolished gas works, which was built in 1903.

3.6 Historical maps show the site as being consistently agricultural, with no former structures or buildings present as early as 1885 (NLS, 2019).

4 Aims

4.1 The aim of the geophysical survey was to identify any potential archaeological anomalies that would enhance the current understanding of the archaeological resource within the proposed survey area.

4.2 Specifically, the aims of the gradiometer survey were;

- To locate, record and characterise any surviving sub-surface archaeological remains within the survey area
- To help determine the next stage of works as per the client's instruction
- To provide an assessment of the potential significance of any identified archaeological remains in a local, regional and (if relevant) national context
- To produce a comprehensive site archive and report.

5 Methodology

5.1 All geophysical survey work was carried out in accordance with recommended good practice specified in the EAC guideline documents published by Historic England (Schmidt et al. 2016) and the Chartered Institute for Archaeologists Standard and Guidance for archaeological geophysical survey (2014).

5.2 Parameters were selected that were suitable for the prospective aims of the survey and in accordance with recommended professional good practice (Schmidt et al. 2016).

5.3 The gradiometer survey was carried out using Bartington Grad601-2 fluxgate gradiometers (see Appendices 2 and 3). Data was collected on an east-west alignment using zig-zag traverses, with a sample interval of 0.25m and a traverse interval of 1m. A total of 37 full or partial 30m by 30m grids were surveyed within the specified area, totalling an area of approximately 2.5ha.

5.4 Attention was taken to avoid metal obstacles present within the survey area during data collection using gradiometers. Gradiometer survey is affected by 'above-ground noise' such as metal objects, and avoiding these improves the overall data quality and results obtained.

5.5 The gradiometer data were downloaded using Bartington Grad601 PC Software v313 and processed using Geoscan Geoplot v3.0 / v4.0. The details of these processes can be found in Appendices 4 and 5. Data processing, storage and documentation were carried out in accordance with the good

practice specifications detailed in the guidelines issued by the Archaeology Data Service (Schmidt and Ernenwein, 2009).

5.6 Interpretations of the data were created as layers in AutoCAD LT 2009 / GIS and the technical terminology used to describe the identified features can be found in Appendix 6.

6 Results and Interpretation

6.1 The gradiometer survey results have been visualised as greyscale plots, with the minimally processed data plotted at -1nT to 2nT in Figure 3. The processed data is also plotted at -1nT to 2nT and can be seen in Figure 4. An interpretation of the data can be seen in Figure 5 and an individual characterisation of the identified anomalies follows this in Appendix 1.

Archaeology

6.2 No responses indicating definitive archaeological remains have been located in the survey area.

Possible Archaeology

6.3 Trends in the centre and west of the dataset have been identified which could have an archaeological origin. Trends classed as 'possible archaeology' are described as anomalies of a linear / curvilinear / rectilinear form either composed of an increased or decreased signal compared to magnetic background values. It is possible these anomalies belong to archaeological remains, however they lack supporting evidence or interpretation is tentative.

6.4 In the west of the dataset, three strong positive amorphous anomalies form a sub-circular trend which could be archaeological and could relate to an enclosure (**L1**).

6.5 A positive linear trend runs roughly north-west to south-east to the north of this which may or may not be related (**L2**).

6.6 In the centre-east of the dataset, a group of positive parallel curvilinear trends appear to form a further sub-circular trend, which could also relate to an enclosure (**L3**).

6.7 Three pit-like anomalies have been identified in the south of the dataset (e.g. **L4**). It is not clear if these are archaeological in origin or if they relate to natural or geological variations. Given the proximity of trends of a possible archaeological origin, it is possible that these pit-like anomalies could relate to archaeological activity.

6.8 Two positive curvilinear trends in the north-west of the dataset surround a negative trend forming a sub-circular anomaly (**L5**).

Unclear Origins

6.9 A number of trends are visible across the dataset which have unclear origins. Anomalies of this kind are described as being of a linear / curvilinear form which are composed of a weak or different change in magnetic values. Coupled with poor patterning, the anomalies are difficult to interpret and it is unclear whether they have an archaeological origin.

6.10 A long, weak and fractured linear trend runs north-east to south-west through the centre of the dataset (**L6**). The trend is likely to relate to a former field boundary, though as none are visible on historic mapping from as early as 1885 (NLS, 2019) it is likely that the boundary pre-dates any available cartographic references.

6.11 Linear trends are visible in the north of the dataset running north-east to south-west and north-west to south-east, forming a rough rectilinear shape (**L7** & **L8**). It is possible these trends could relate to

former field systems, though the trends are magnetically weak and could instead have agricultural origins.

6.12 An area of enhanced magnetism has been identified across the centre-east of the dataset (**L9**). The disturbance encompasses a number of positive curvilinear and linear trends (e.g. **L10**) making them appear fractured and difficult to interpret. It is not clear if these trends are related to one another.

6.13 Further unclear positive trends are visible to the east and west of the enhanced magnetism (e.g. **L11**). The trends appear to form tentative enclosures, though they could be the result of natural variations in the ground.

Agricultural

6.14 Long positive and negative trends run across the entire dataset from west-north-west to east-south-east (e.g. **L12**). The trends are typical of ploughing anomalies and their wide regular spacing is suggestive of a former ridge and furrow ploughing regime.

Non-archaeology

6.15 Across the dataset there is a higher than usual quantity of isolated dipolar anomalies (ferrous / iron spikes). These are commonly caused by ferrous or highly magnetic material on the surface or within the topsoil of the site and it is likely that modern agricultural activity has created a high level of background 'noise' within the data set. It is possible that these have originated from the construction of adjacent housing estates, or from dumps of modern rubbish.

6.16 The high level of ferrous gives the dataset a 'magnetically noisy' appearance and has made the visibility of some trends quite difficult.

6.17 Areas of modern magnetic disturbance are visible around the periphery of the dataset. Areas of modern disturbance are characterised by significant increases or decreases in values compared with background readings. This disturbance is a result of the surrounding modern metallic boundary fencing, adjacent housing and debris at the field edges.

7 Conclusion

7.1 The gradiometer survey has not identified any anomalies or features of a definitive archaeological nature.

7.2 Three sub-circular anomalies have been identified in the dataset which could possibly be archaeological in origin and relate to enclosures or settlement evidence. However, their interpretation is tentative as the trends are somewhat masked by a high level of ferrous within the magnetic background of the dataset.

7.3 Three pit-like anomalies in the south-east of the dataset could be archaeological, however, they could also be natural in-filled pits.

7.4 A possible former boundary runs through the centre of the site, but without supporting cartographic evidence, it cannot be definitively confirmed as a boundary.

7.5 Several trends of an unclear origin are visible throughout the dataset. In the north-west of the site they appear to form tentative rectilinear field systems or enclosures, but the trends are magnetically very weak. In the centre of the dataset, curvilinear trends could be associated with a large area of enhanced magnetic readings. It is not clear if these have an archaeological or natural geological origin.

7.6 In the east of the site, tentative sub-circular trends are visible which could indicate archaeological activity, but again they are magnetically weak and could relate to natural variations in the ground.

7.7 Ridge and furrow ploughing trends running across the entire dataset show that the site has been historically farmed. It is possible that the trends seen in the dataset are associated with the ridge and furrow and could also date to the early / late medieval period.

7.8 A high level of ferrous anomalies seen throughout the dataset are likely to be modern in origin. Similarly, magnetic disturbance around the field peripheries is modern and relates to surrounding fencing, adjacent housing and debris at the field edges.

8 Statement of Indemnity

8.1 Although the results and interpretation detailed in this report have been produced as accurately as possible, it should be noted that the conclusions offered are a subjective assessment of collected data sets.

8.2 The success of a geophysical survey in identifying archaeological remains can be heavily influenced by several factors, including geology, seasonality, field conditions and the properties of the features being detected. Therefore, the geophysical interpretation may only reveal certain archaeological features and not produce a complete plan of all of the archaeological remains within a survey area.

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Plate 1. Survey area looking east from the west

Plate 2. Survey area looking south east from the north-west

Plate 3. Survey area looking north east from the west

Plate 4. Survey area looking east from the west

Figure 1: Site location plan

01/52004/REP/01/01

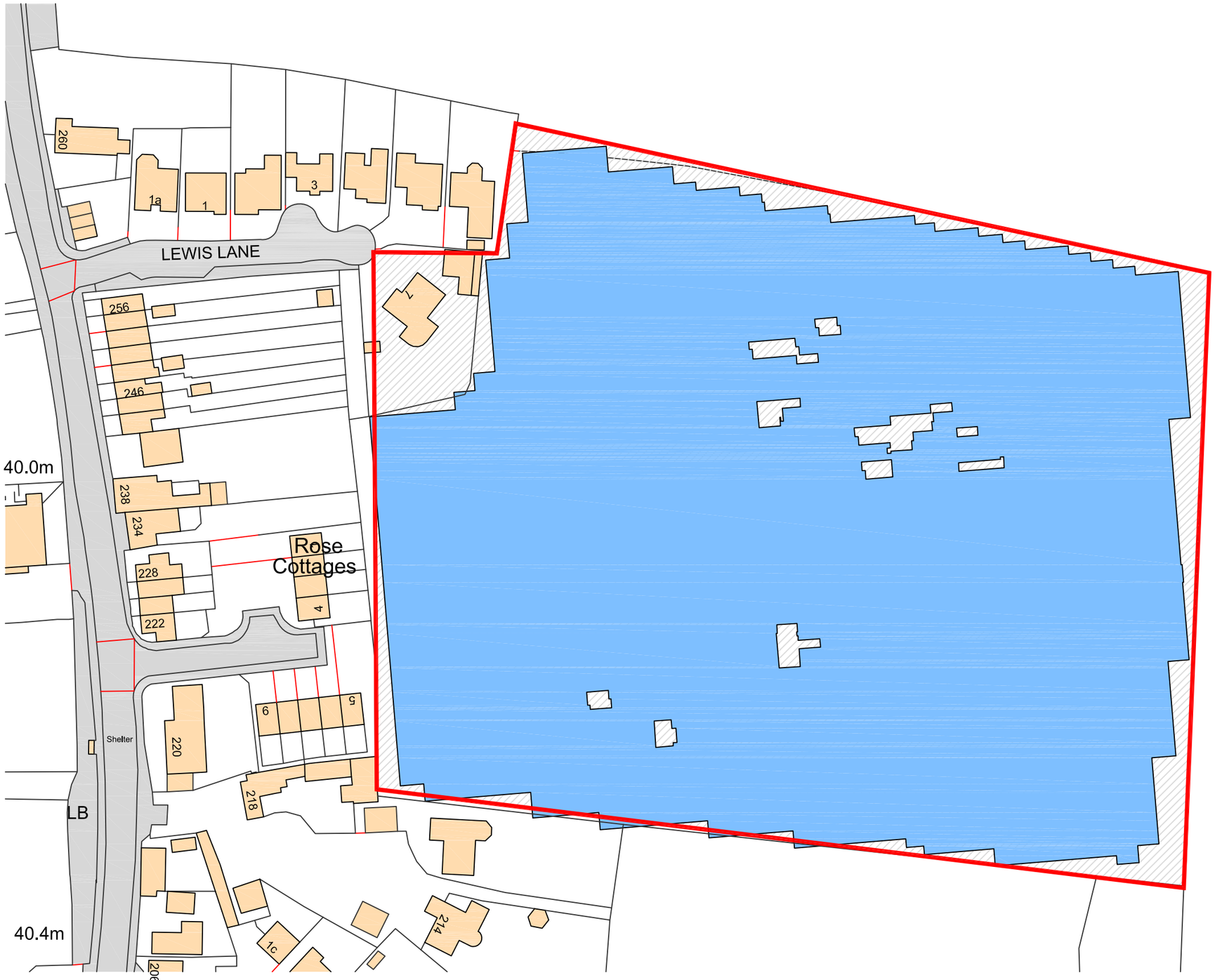


Figure 2: Location of Survey Area

Figure 2

Site Boundary

Area Surveyed

Area Not Surveyed

N

0 40m

1:1000 at A3

Drawing No:	05/52004/GEO/F2/V1
Drawn by/Checked by:	KT / JL
Date created:	26 / 03 / 2019

AOC Archaeology Group

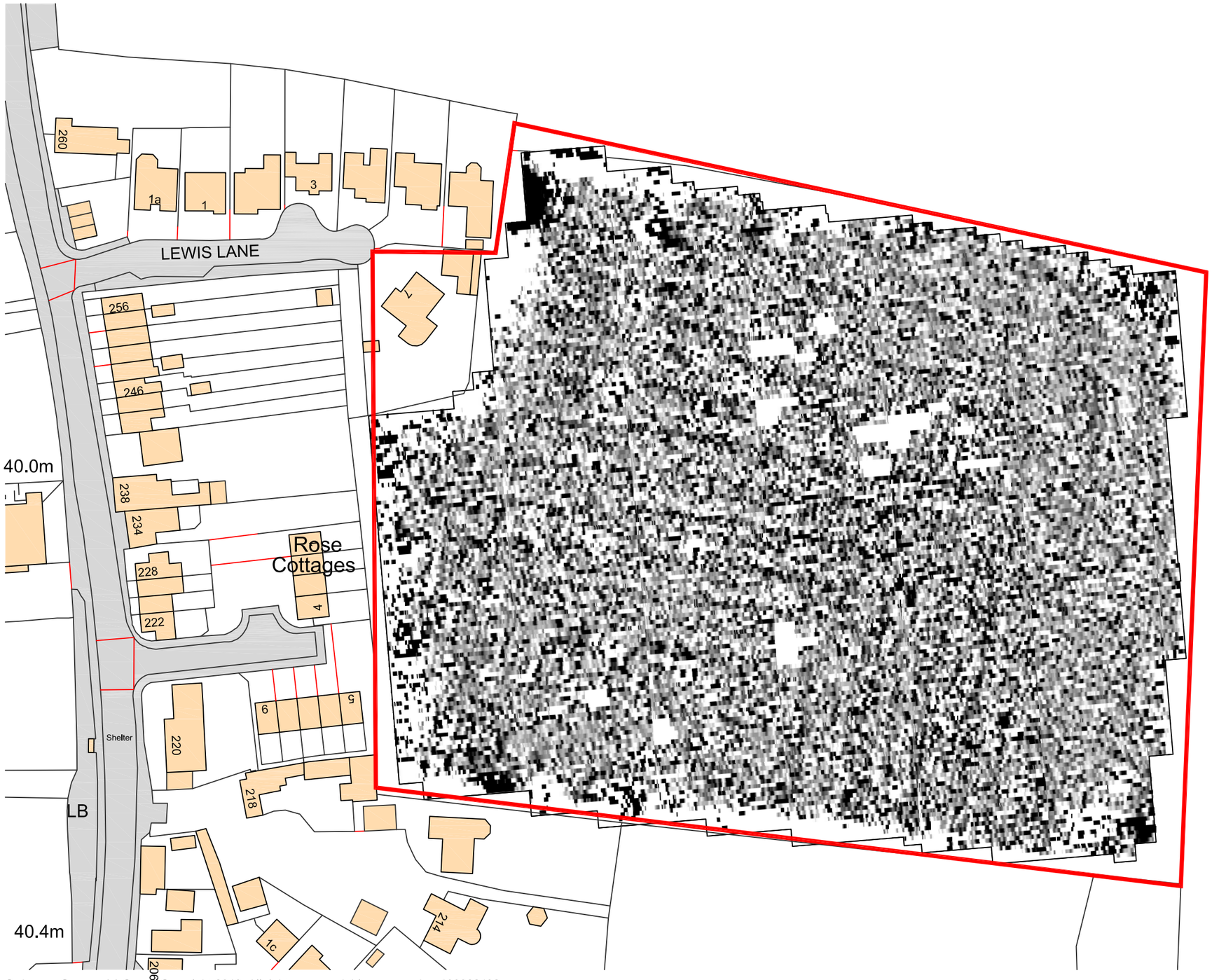


Figure 3: Minimally processed Gradiometer survey results - Greyscale plot

Figure 3

Greyscale +2nT -1nT

Site Boundary

N

0 40m

1:1000 at A3

Drawing No:	05/52004/GEO/F3/V1
Drawn by/Checked by:	KT / JL
Date created:	26 / 03 / 2019

AOC Archaeology Group

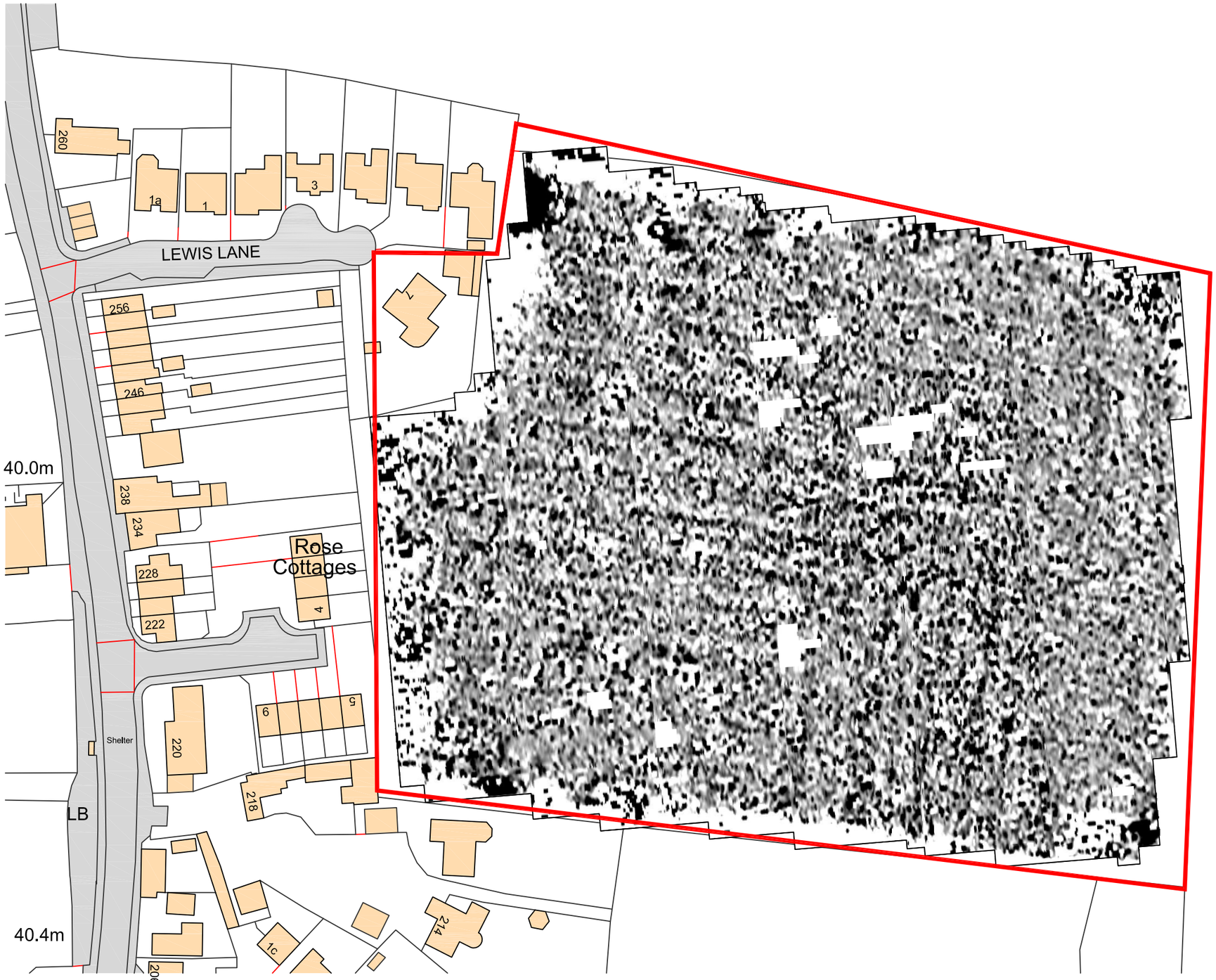


Figure 4: Processed Gradiometer survey results - Greyscale plot

Figure 4

Greyscale +2nT -1nT

Site Boundary

N

0 40m

1:1000 at A3

Drawing No:	05/52004/GEO/F4/V1
Drawn by/Checked by:	KT / JL
Date created:	26 / 03 / 2019

AOC Archaeology Group

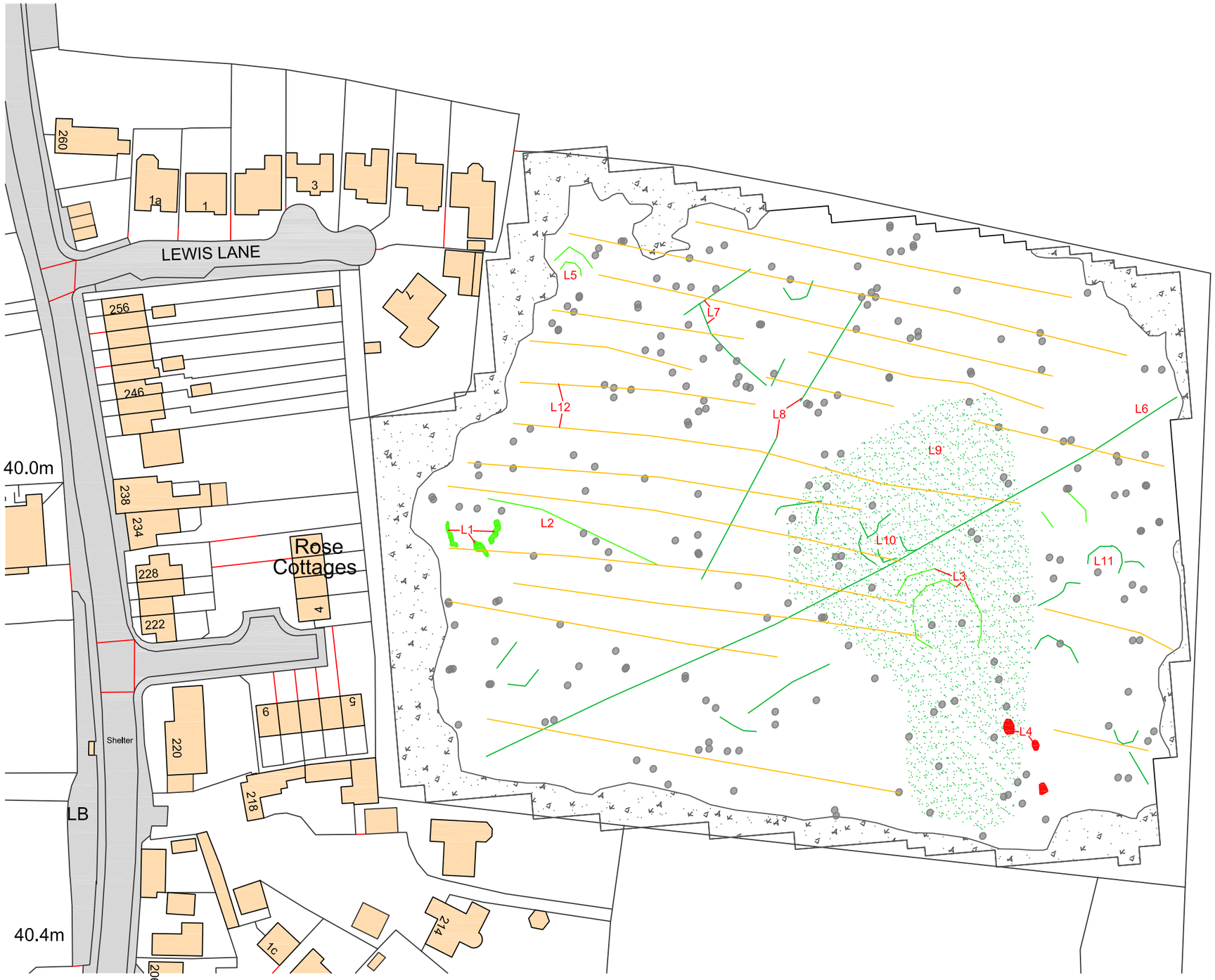


Figure 4: Processed Gradiometer survey results - Greyscale plot

Figure 5

Pit (Possible Archaeology)
Trend (Possible Archaeology)
Trend (Unclear Origin)
Enhanced Magnetism (Unclear Origin)
Linear Trend (Ploughing)
Area of Disturbance (Modern)
Ferrous / Iron Spike

N

0 40m

1:1000 at A3

Drawing No:	05/52004/GEO/F5/V1
Drawn by/Checked by:	KT / JL
Date created:	26 / 03 / 2019

AOC Archaeology Group

Appendix 1: Characterisation of Identified Anomalies

Gradiometer survey

Site Specific Anomaly Code: **L**

Anomaly	Type of Archaeology
L1	Sub-circular trend – Possible Archaeology
L2	Linear trend – Possible Archaeology
L3	Sub-circular trend – Possible Archaeology
L4	Pit-like anomalies – Possible Archaeology
L5	Sub-circular trend – Possible Archaeology
L6	Linear trend – Unclear Origins - Possible Old Field Boundary
L7	Linear trends – Unclear Origins
L8	Linear trends – Unclear Origins
L9	Enhanced magnetism – Unclear Origins
L10	Trends – Unclear Origins
L11	Curvilinear trends – Unclear Origins
L12	Linear trends – Agricultural (Ridge and Furrow)

Appendix 2: Survey Metadata

Field	Description
Surveying Company	AOC Archaeology
Data collection staff	Alistair Galt, Rebecca Bowran, Dan Shiel, Gareth Whelan
Client	WYG Environment Planning Transport Ltd
Site name	Lewis Lane, Arlesey
County	Bedfordshire
NGR	TL 19430 36750
Land use/ field condition	Waste ground
Duration	13/3/19
Weather	Sunny, overcast, gales
Survey type	Gradiometer Survey
Instrumentation	Trimble GXOR system Bartington Grad 601-2
Area covered	Approx 2.5 ha (37 full and partial grids)
Download software	Grad601 PC Software v313
Processing software	Geoplot v3.0 / v4.0
Visualisation software	AutoCAD LT 2009
Geology	Gault Formation and West Melbury Marly Chalk Formation to the east (BGS, 2019)
Soils	Freely draining shallow lime-rich soils over chalk or limestone (Soilscapes, 2019)
Scheduled Ancient Monument	No
Known archaeology on site	None
Historical documentation/ mapping on site	None
Report title	Lewis Lane, Arlesey: Archaeological Geophysical Survey
Project number	52004
Report Author	Kimberley Teale
Report approved by	James Lawton

Appendix 3: Archaeological Prospection Techniques, Instrumentation and Software Utilised

Gradiometer survey

Gradiometer surveys measure small changes in the earth's magnetic field. Archaeological materials and activity can be detected by identifying changes to the magnetic values caused by the presence of weakly magnetised iron oxides in the soil (Aspinall *et al.*, 2008, 23; Sharma, 1997, 105). Human inhabitation often causes alterations to the magnetic properties of the ground (Aspinall et al, 2008, 21). There are two physical transformations that produce a significant contrast between the magnetic properties of archaeological features and the surrounding soil: the enhancement of magnetic susceptibility and thermoremnant magnetization (Aspinall *et al.*, 2008, 21; Heron and Gaffney 1987, 72).

Ditches and pits can be easily detected through gradiometer survey as the top soil is generally suggested to have a greater magnetisation than the subsoil caused by human habitation. Areas of burning or materials which have been subjected to heat commonly also have high magnetic signatures, such as hearths, kilns, fired clay and mudbricks (Clark 1996, 65; Lowe and Fogel 2010, 24).

It should be noted that negative anomalies can also be useful for characterising archaeological features. If the buried remains are composed of a material with a lower magnetisation compared to the surrounding soil, the surrounding soil will consequently have a greater magnetization, resulting in the feature in question displaying a negative signature. For example; stone materials of a structural nature that are composed of sedimentary rocks are considered non-magnetic and so will appear as negative features within the dataset.

Ferrous objects - i.e. iron and its alloys - are strongly magnetic and are typically detected as high-value peaks in gradiometer survey data, though it is not usually possible to determine whether these relate to archaeological or modern objects.

Although gradiometer surveys have been successfully carried out in all areas of the United Kingdom, the effectiveness of the technique is lessened in areas with complex geology, particularly where igneous and metamorphic bedrock is present. All magnetic geophysical surveys must therefore take the effects of background geological and geomorphological conditions into account.

Gradiometer survey instrumentation

AOC Archaeology's gradiometer surveys are carried out using Bartington Grad601-2 magnetic gradiometers. The Grad601-2 is a high-stability fluxgate magnetic gradient sensor, which uses a 1m sensor separation. The detection resolution is from 0.03 nT/m to 0.1nT/m, depending on the sensor parameters selected, making the Grad601-2 an ideal instrument for prospective survey of large areas as well as detailed surveys of known archaeology. The instrument stores the data collected on an on-board data-logger, which is then downloaded as a series of survey grids for processing.

Gradiometer survey software

Following the survey, gradiometer data is downloaded from the instrument using Grad601 PC Software v313. Survey grids are then assembled into composites and enhanced using a range of processing techniques using Geoscan Geoplot v3.0 / v4.0 (see Appendix 4 for a summary of the processes used in Geoplot and Appendix 5 for a list of processes used to create final data plots).

Appendix 4: Summary of Processes used in Geoplot

Process	Effect
Clip	Limits data values to within a specified range
De-spike	Removes exceptionally high readings in the data that can obscure the visibility of archaeological features. In resistivity survey, these can be caused by poor contact of the mobile probes with the ground. In gradiometer survey, these can be caused by highly magnetic items such as buried ferrous objects.
De-stagger	Corrects a misalignment of data when the survey is conducted in a zig-zag traverse pattern.
Edge Match	Counteracts edge effects in grid composites by subtracting the difference between mean values in the two lines either side of the grid edge.
High pass filter	Removes low-frequency, large scale detail in order to remove background trends in the data, such as variations in geology.
Interpolate	Increases the resolution of a survey by interpolating new values between surveyed data points, creating a smoother overall effect.
Low Pass filter	Uses a Gaussian filter to remove high-frequency, small scale detail, typically for smoothing the data.
Periodic Filter	Used to either remove or reduce the appearance of constant and reoccurring features that distort other anomalies, such as plough lines.
Wallis filter	Applies a locally adaptive contrast enhancement filter.
Zero Mean Grid	Resets the mean value of each grid to zero, in order to counteract grid edge discontinuities in composite assemblies.
Zero Mean Traverse	Resets the mean value of each traverse to zero, in order to address the effect of striping in the data and counteract edge effects.

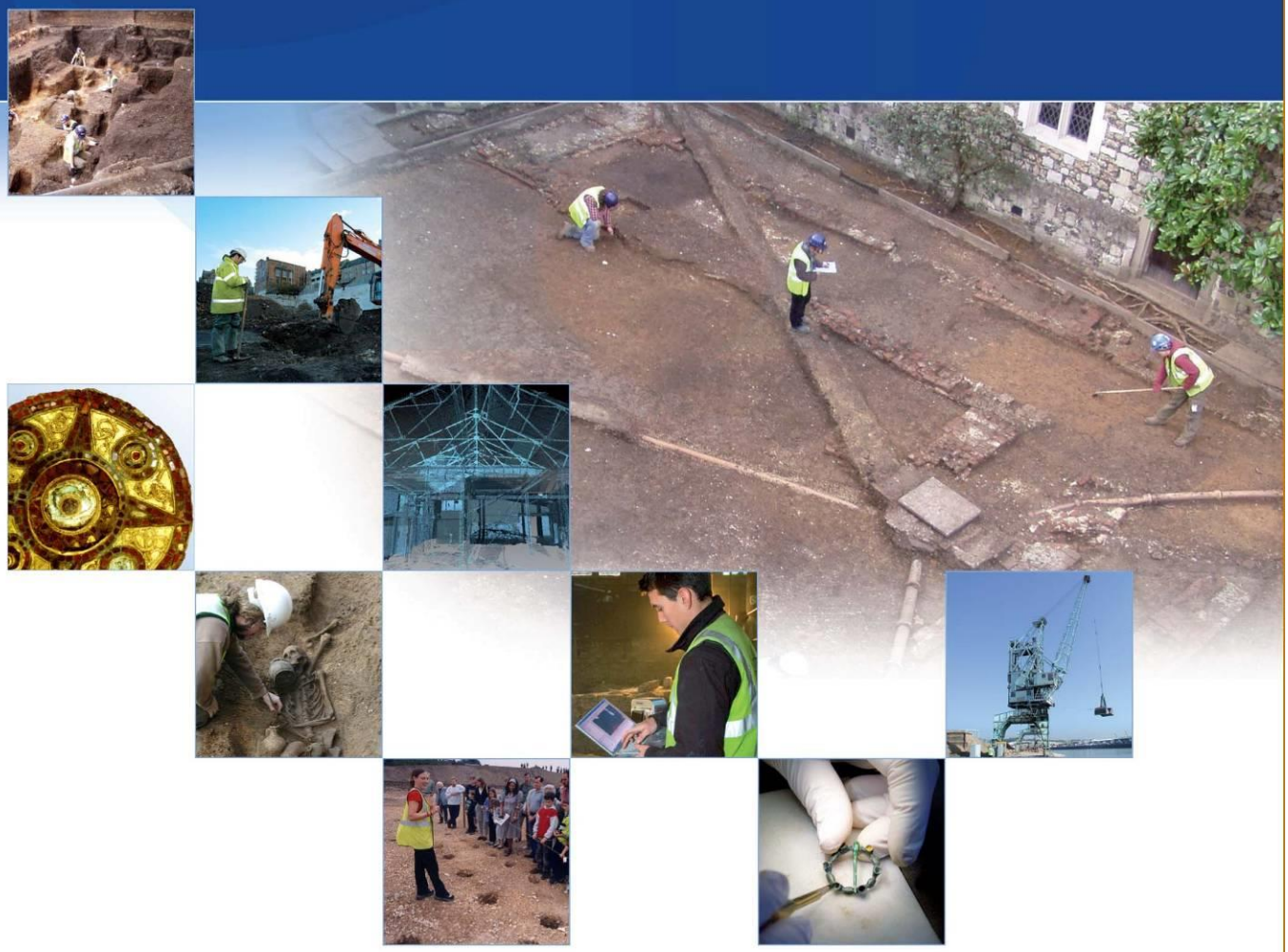
Appendix 5: Survey Processing Steps

Gradiometer survey	
Process	**Extent**
Zero Mean Traverse	All LMS =on, threshold -5 to 5
De-spike	X=1 Y=1 Thr = 3 Repl = Mean
Clip	Min =-5 Max = 5
De-stagger	All grids dir Shift = 2 Line Pattern 34-78 Dual-DS
Low Pass filter	X=1 Y=1 Wt=G
Interpolate	Y, Expand – Expand –SinX/X x2
Raw Palette Scale	Grey08 Min= -1nT Max= 2nT
Palette Scale	Grey08 Min= -1nT Max= 2nT

Appendix 6: Technical Terminology

Type of Anomaly	Description
Archaeology	
Archaeology - Trend	These are made up of linear / curvilinear / rectilinear anomalies and are either characterised by an increase or decrease in values compared to the magnetic background. This evidence is normally supported by the presence of archaeological remains and is confirmed by other forms of evidence such as HER records and aerial photography.
Archaeology - Area of enhanced magnetism	This is characterised by a general increase and decrease of magnetic responses over a localised area and does not appear as having a linear form. These anomalies do not have the high dipolar response which are manifested in an 'iron spike' anomaly. This anomaly may be supported by the known location of a former building, or other forms of evidence such as HER records and aerial photography.
Archaeology - Pit	An anomaly composed of an increase in magnetic values with a patterning on the XY trace plot that is suggestive of buried remains, such as the infill of a pit. This evidence is normally supported by the presence of archaeological remains and is confirmed by other forms of evidence such as HER records and aerial photography.
Possible Archaeology	
Archaeology? – Trend	Anomalies of a linear / curvilinear / rectilinear form either composed of an increased or decreased signal compared to magnetic background values. It is possible these anomalies belong to archaeological remains, but poor patterning or weaker response values makes interpretation difficult. Where historical records are present, the anomalies would appear to be weak or inconclusive.
Archaeology? - Area of enhanced magnetism	Anomalies with an increase or decrease in magnetic values compared with the magnetic background over a localised area. Poor patterning or weak signal changes creates difficulty in defining the origin of the anomaly and so interpretation is only tentative. The anomaly lacks definitive records to confirm its origin as being archaeological. Such areas could indicate the presence of buried rubble relating to fallen structures, or instead denote modern material from either quarrying or agricultural activity. On certain geologies these anomalies could be caused by in-filled natural features.
Archaeology? – Pit	An anomaly composed of an increase in magnetic values with a patterning on the XY trace plot that is suggestive of buried remains, such as the infill of a pit, but is isolated in its location and association with other features.
Unclear Origin	
Linear Trend	Anomalies of a linear / curvilinear form which are composed of a weak or different change in magnetic values. Coupled with poor patterning, the anomaly is difficult to interpret and it is unclear whether it has an archaeological origin.
Area of enhanced magnetism	An area of enhanced magnetic readings which consist of a variety of increased and decreased magnetic values compared with background readings, but lack sufficient patterning or context for a conclusive interpretation. It is likely that these readings are caused by modern disturbances, but interpretation is tentative.

Agricultural	
Linear Trend (Old Field Boundary)	These isolated long linear anomalies, most often represented as a negative magnetic trend, are likely to relate to former field boundaries. The magnetic signal may appear inconsistent but when the positioning is cross referenced with historic mapping, it is confirmed as a former field boundary.
Linear Trend (Old Field Boundary?)	These isolated long linear anomalies, most often represented as a negative magnetic trend, are likely to relate to former field boundaries. The positioning is not supported by historic mapping, but is often confirmed with adjacent ploughing patterns.
Linear Trend (Ridge and Furrow / Rig and Furrow)	A series of regular linear anomalies either composed of an increased or decreased magnetic response compared to background values. The width between the anomalies is consistent with that of a Ridge and Furrow ploughing regime, which is normally wider than conventional ploughing methods.
Linear Trend (Conventional ploughing)	A series of regular linear anomalies either composed of an increased or decreased magnetic response compared to background values. The regular patterning is likely to denote the presence of ploughing, however isolated trends can occasionally be observed that follow the orientation of ploughing trends seen elsewhere in the area. Anomalies seen adjacent to field edges are representative of headlands caused by ploughing.
Linear Trend (Field drainage)	A series of linear anomalies of an indeterminate date, usually with a regular or herringbone patterning and regular spacing. These are likely to represent agricultural activity such as land drainage.
Non - Archaeology	
Geology / Natural	An area of disturbance that is composed of irregular significant increases or decreases in magnetic values compared with background readings and is likely to indicate natural variations in soil composition or geology.
Linear Trend (possible modern service)	Anomalies of a linear form often composed of contrasting high positive and negative values. Such anomalies usually signify a feature with a high level of magnetisation and are likely to belong to modern activity such as pipe lines or modern services.
Disturbed Area (modern disturbance?)	An area of disturbance that is likely to be caused by modern activity and is characterised by significant increases or decreases in magnetic values compared with background readings.
Isolated Dipolar Anomalies / Ferrous (iron spikes)	A response normally caused by ferrous materials on the ground surface or within the top soil, which causes a ‘spike’ representing a rapid variation in the magnetic response. These are generally not assessed to be archaeological when surveying on rural sites, and generally represent modern material often re-deposited during manuring.



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