



WYAS  
**Archaeological  
Services**

**Milton Road, Lupset,  
Wakefield,  
West Yorkshire**

Geophysical Survey

Report no. 3043  
November 2017

**Client:** Pegasus Group



# Milton Road, Lupset, Wakefield, West Yorkshire

## Geophysical Survey

### *Summary*

*A geophysical (magnetometer) survey was undertaken on approximately 7.5 hectares of land to the west of Milton Road, Lupset, Wakefield, West Yorkshire. This is in advance of a planning application for proposed housing development. A number of potential archaeological anomalies have been detected in the form of ring and linear ditches, pits and a possible small enclosure. Geological and agricultural anomalies have also been detected. The majority of the dataset is magnetically noisy which has hindered the interpretation, however, based upon the geophysical results the archaeological potential is therefore medium to high.*



**Report Information**

Client: Pegasus Group  
Address: Pavilion Court, Green Lane, Garforth, Leeds, LS25 2AF  
Report Type: Geophysical Survey  
Location: Lupset  
County: West Yorkshire  
Grid Reference: SE 3028 1960  
Period(s) of activity: ?prehistoric  
Report Number: 3043  
Project Number: 6877  
Site Code: LUW17  
Oasis: archaeol11-301406  
Date of fieldwork: October 2017  
Date of report: November 2017  
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## 1 Introduction

Archaeological Services WYAS (ASWYAS) were commissioned by Pegasus Group to undertake a geophysical (magnetometer) survey on land to the west of Milton Road, Lupset, Wakefield. Guidance contained within the National Planning Policy Framework (DCLG 2012) was followed, in line with current best practice (CifA 2014; David *et al.* 2008). The survey was carried out on the 26th and 27th October 2017.

### Site location, topography and land-use

The survey area lies to the west of Lupset, approximately 3km to the southwest of Wakefield. It is bounded to the east by Milton Crescent and Milton Road, to the south by Snapethorpe Primary School and to the north by further housing and is centred on National Grid Reference SE 3028 1960 (see Fig. 1). The proposed development area is approximately 7.5 hectares and lies between 63m above Ordnance Datum (aOD) in the south to 84m aOD in the north.

### Soils and geology

The underlying bedrock geology belongs to the Pennine Middle Coal Formation – mudstone, siltstone and sandstone. Sedimentary bedrock formed approximately 310 to 318 million years ago in the Carboniferous period (BGS 2017). Soils of the area are characterised as slowly permeable seasonally wet acid loamy and clayey soils (CSAI 2017).

## 2 Archaeological and Historical Background

A HER search on a radius of 1km from the survey area has revealed the following information which can be seen in Table 1. They correspond to the numbers on Figure 2. There are nine recorded assets and one listed building. No scheduled monuments, listed parks and gardens or battlefields have been recorded,

In 2007 ASWYAS surveyed land approximately 3.3km to the west of the site, in which archaeological features were detected which correspond to cropmark features identified from aerial photographs (ASWYAS 2007).

A search of the available Ordnance Survey old mapping from the area show that in 1854 the northern field of the PDA was split into two and remains this way until 1938. On the 1907-1919 map, Milton Crescent has been built and on the 1968 mapping the M1, to the west has been constructed (OS 2017).

Table 1: Recorded assets

No	Name	Grid Ref	HER Ref. or Monument No.	Significance	Description
1	Possible site of first Hofmann Kiln in the country	SE 29900 20420	PRN4529	Low	Possible site first Hofmann Kiln in the country. In first instance, check 1st edn. 1: 2500 maps to exactly locate kiln, and check Bradley and Craven firm histories to establish strength of claim.
2	Roman coin	SE 30150 20090	PRN1910	Low	As of Trajan (A.D. 98-117.) Found in the garden of 39 Gargrave Place, Lupset. Present location unknown.
3	Desk based assessment	SE 30600 20300	PRN6110	Low	A desk-top appraisal carried out in advance of determination of planning permission for an area between Grove Road and Ings Road, Wakefield. Cartographic and documentary sources suggest a continual occupation from the C13th to the present day. There may be pockets of surviving medieval stratigraphy on the site.
4	Tessellated pavement	SE 30720 20150	PRN2116	Low	Tessellated pavement(s) exposed ca. 1870 in the field between Snapethorpe Hall and the road leading to Ossett. Site now covered by Lupset housing estate. Find date unknown. Exact find spot unknown; grid ref. centred between Snapethorpe Old Hall and the Wakefield/Halifax Trust Turnpike as marked on O.S. 1st. edn. sheet no 248. Possible villa site.
5	Roman coin	SE 30400 19800	PRN1811	Low	Coin of Carinus (A.D. 283-285.) Found in 1961 in the garden of 11 Milton Crescent, Lupset. In the Wakefield Museum.
6	Handaxe	SE 31000 19900	PRN3814	Low	Palaeolithic handaxe, measuring 3.5 in length, apparently found at Lupset in 1932. No further information on precise find spot of the axe. The implement is held by Wakefield Museum. This find, like those other Palaeolithic finds from nearby (PRNs 3812, 3813) is extremely important as very little Palaeolithic material has been found in West Yorkshire. Drawing a maximum limit for the Devensian glaciation is difficult in this region, as in many areas there is a zone of ground between the undoubtedly ice-free and the undoubtedly glaciated areas within which there is insufficient evidence to judge. However, the Calder valley was ice-free, except for a tongue of Airedale ice which overflowed into the head of the Spen valley to Oakenshaw.

No	Name	Grid Ref	HER Ref. or Monument No.	Significance	Description
7	Spring End Farm Cottage	SE 29755 19116	PRN13714	Low	Spring End Farm: one of two adjacent post-medieval cottages (the other is known as 'Spring End Cottage'). In September 2013 a site visit to inspect a cellar at Spring End Farm, which had been discovered during groundworks for a new dwelling attached to Spring End Farm. The new dwelling had been granted permission under 12/02003/FUL 'Conversion & extension of outbuildings to form a two-storey dwelling', however WYAAS had not requested a watching brief to take place. As such WYAAS made an ad-hoc visit to look at what had been discovered. The cellar was clearly associated with the cottage known as Spring End Farm. It had stone steps and evidence for a blocked doorway down into the cellar, within the gable wall of Spring End Farm. A number of keeping places and a metal vent were set within the walls of the cellar, and there was a blocked window to the north-west wall. The owner had recovered a number of fragments of stoneware jars during the excavation of the cellar. During this visit WYAAS were also able to look around the cottage, which has a king-post roof structure. The cottage has early origins - and it is likely that further features are currently hidden behind plaster and render. Above a doorway to the rear of the cottage there was what appeared to be a timber wall plate, with a scarf joint in it (although it is likely that this post has been re-used as the seating for a rafter was visible - not in-situ).
8	Quern stones	SE 30600 19500	PRN7181	Low	A pair of quern stones discovered in April 1930 at Snapethorpe. The quern stones were discovered during the excavation of foundation trenches for the school, constructed in the same year. Walker (1972, p. 18) provides the following description of the quern stones: 'The bed stone of the mill is shaped like a solid basin with a flat top, the upper stone is similarly basin shaped, but inverted; through the centre of the upper stone is a funnel shaped aperture 5 inches wide at the mouth and on one side of the quern is a whole for insertion of a wooden handle; each stone is about 8 inches thick.' Walker also adds that the quern was then located in Wakefield Museum.
9	Bronze Age dagger	SE 31000 19000	PRN2988	Low	Raistrick mentions a Bronze Age bronze dagger, found in Wakefield and held by Leeds City Museum. O.S. field investigation of 1964 states that Leeds City museum had no record or knowledge of the implement.



No	Name	Grid Ref	HER Ref. or Monument No.	Significance	Description
LB1	Lupset Hall	SE 31420 19452	1258152	Medium	Grade II* Now Lupset Park Golf Club House. Built for Richard Witton. Dated 1716 on keystone of doorway. 2 storeys, 7 windows arranged 2:3:2 small, bright red brick in Flemish bond. Ashlar dressings include plinth, quoins, 1st floor band, frieze, cornice and blocking course. Hipped roof, now slated. Central section set back with stone centre bay having carved escutcheon over 1st floor window and a small, pedimented raised attic, with round window, above. Stone architraves and cills to sash windows with glazing bars, some replaced. 6-panel double door, with tall fanlight, in architrave. Shallow prostyle Ionic porch, (of early C20 appearance, although columns may be original) has open pediment with monogram in medallion. Rear elevation similar except for porch. Plain, 5-bay right return. Left return concealed by modern additions. Interior; cantilevered staircase in square well has cut string, curved and ramped handrail, twist column bottom newel and attractive fluted and turned balusters with gadrooned collars above the fluting. Arcaded landing screen. Door and window woodwork. Intact but plasterwork and one chimneypiece suggest the early-mid C19. Panelling and a bolection moulded chimney-piece in hall appear original.

### 3 Aims, Methodology and Presentation

The main aim of the geophysical survey was to provide any archaeological information within the area. To achieve this, a magnetometer survey covering all available parts of the PDA was undertaken.

The general objectives of the geophysical survey were:

- to provide information about the nature and possible interpretation of any magnetic anomalies identified;
- to therefore determine the presence/absence and extent of any buried archaeological features; and
- to prepare a report summarising the results of the survey.

#### Magnetometer survey

The site grid was laid out using a Trimble VRS differential Global Positioning System (Trimble R6 model). The survey was undertaken using Bartington Grad601 magnetic gradiometers. These were employed taking readings at 0.25m intervals on zig-zag traverses 1m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation. Geoplot 3 (Geoscan Research) software was used to process and present the data. Further details are given in Appendix 1.

#### Reporting

A general site location plan, incorporating the 1:50000 Ordnance Survey (OS) mapping, is shown in Figure 1. Figure 2 shows the survey location with the HER search at a scale of 1:10000. An overview of the data is shown in Figure 3 at a scale of 1:2000. The processed and minimally processed data, together with an interpretation of the survey results are presented in Figures 4 to 9 inclusive at a scale of 1:1000.

Technical information on the equipment used, data processing and survey methodologies are given in Appendix 1. Technical information on locating the survey area is provided in Appendix 2. Appendix 3 describes the composition and location of the archive. A copy of the completed OASIS form is included in Appendix 4.

The survey methodology, report and any recommendations comply with guidelines outlined by English Heritage (David *et al.* 2008) and by the Chartered Institute for Archaeologists (CIfA 2014). All figures reproduced from Ordnance Survey mapping are with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

***The figures in this report have been produced following analysis of the data in processed formats and over a range of different display levels. All figures are presented to most***

*suitably display and interpret the data from this site based on the experience and knowledge of Archaeological Services staff.*

## **4 Results and Discussion**

### *Possible archaeological anomalies*

The whole of the dataset is magnetically, quite noisy and as such has hindered the interpretation a little. However, a number of potential archaeological anomalies have been recorded as follows. Anomaly (A), located in the southwest corner of Area 1 forms a tentative circle, measuring approximately 12m in diameter. A similar response (B) to the north of Area 1 measures 8m in diameter. Another circular anomaly (C) has been detected in the southwest of Area 2, measuring 17m in diameter. It is possible that these are associated with ring ditches of a prehistoric date.

Anomaly D comprises a linear ditch on a northeast to southwest alignment crossing the southeast of Area 1. A rectilinear anomaly (E) can be seen bisecting the ditch. This feature measures approximately 17m by 11m and could represent a small enclosure.

An area of magnetic enhancement (F) in the south of Area 2 is potentially an area of interest. It may reflect potential buried archaeological remains that have been disturbed by the ploughing within the area.

A number of other potential archaeological anomalies have been recorded in the form of pits, ditches and linear features. Due to the noisy dataset it is difficult to give a full interpretation of these features. In 2007 a geophysical survey was conducted approximately 3km to the west in which a similar dataset was recorded, comprising of linear ditches and ring ditches (ASWYAS 2007).

### *Geological anomalies*

The survey has detected a number of low magnitude anomalies that have been interpreted as geological in origin. It is thought that the responses have been detected because of the variation in the composition and depth of the deposits of superficial material in which they derive.

### *Agricultural anomalies*

Magnetically strong, parallel linear trends have been detected in Area 1 which are likely to relate to field drains running into the land drain immediately to the south. Further, strong linear trends in Area 2 have also been recorded but these relate to ploughing, possible that of medieval ridge and furrow cultivation.

A former field boundary has been recorded in Area 1 which corresponds to mapping dating from 1854 (OS 2017).

#### *Ferrous anomalies*

Ferrous anomalies, as individual 'spikes', or as large discrete areas are typically caused by ferrous (magnetic) material, either on the ground surface or in the plough-soil. Little importance is normally given to such anomalies, unless there is any supporting evidence for an archaeological interpretation, as modern ferrous debris or material is common on rural sites, often being present as a consequence of manuring or tipping/infilling. There is no obvious pattern or clustering to their distribution in this survey to suggest anything other than a random background scatter of ferrous debris in the plough-soil.

Ferrous responses along the periphery of the survey areas are due to metal fencing within the field boundaries.

## **5 Conclusions**

Anomalies of a potential archaeological origin have been detected within the magnetic datasets. These comprise of possible ring ditches, linear ditches and trends, pits and a possible small enclosure.

A former field boundary has been recorded that correlates to old mapping dating from 1854. Both modern and possible historic ploughing have also been detected along with field drains.

Geological and ferrous anomalies have also been detected and are thought to not be of any archaeological interest.

Based on this survey, the archaeological potential of this site is medium to high.

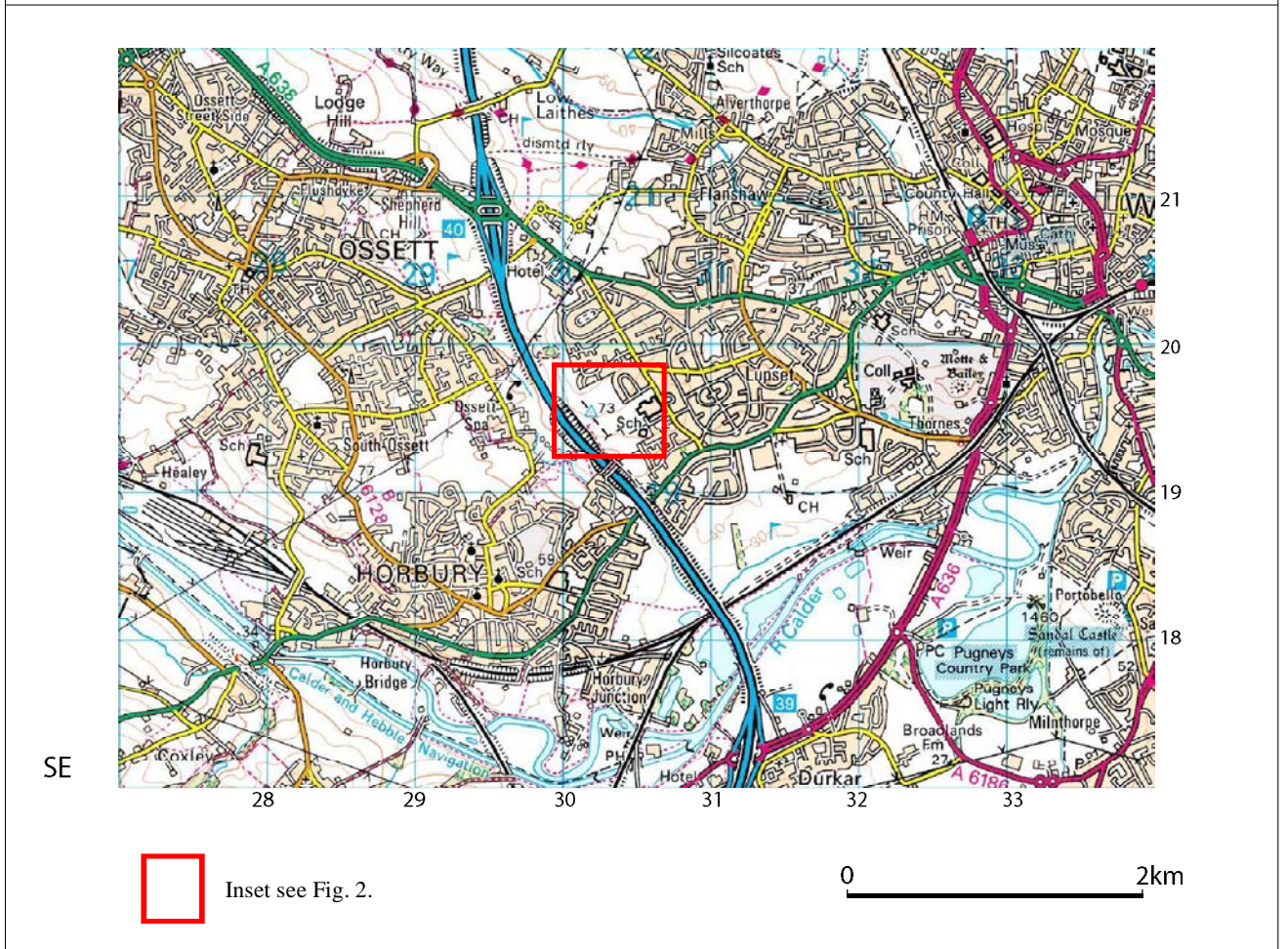
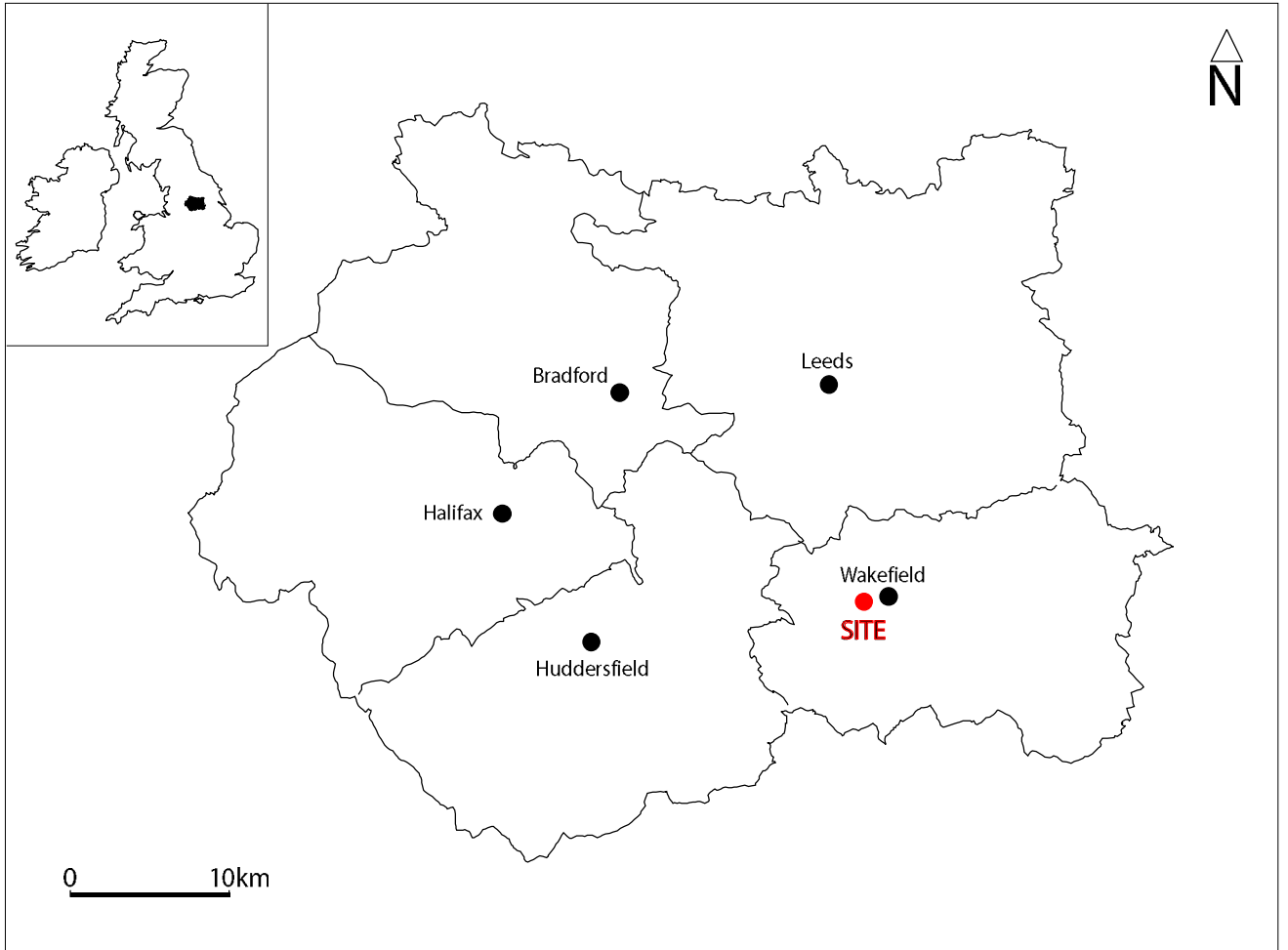


Fig. 1. Site location

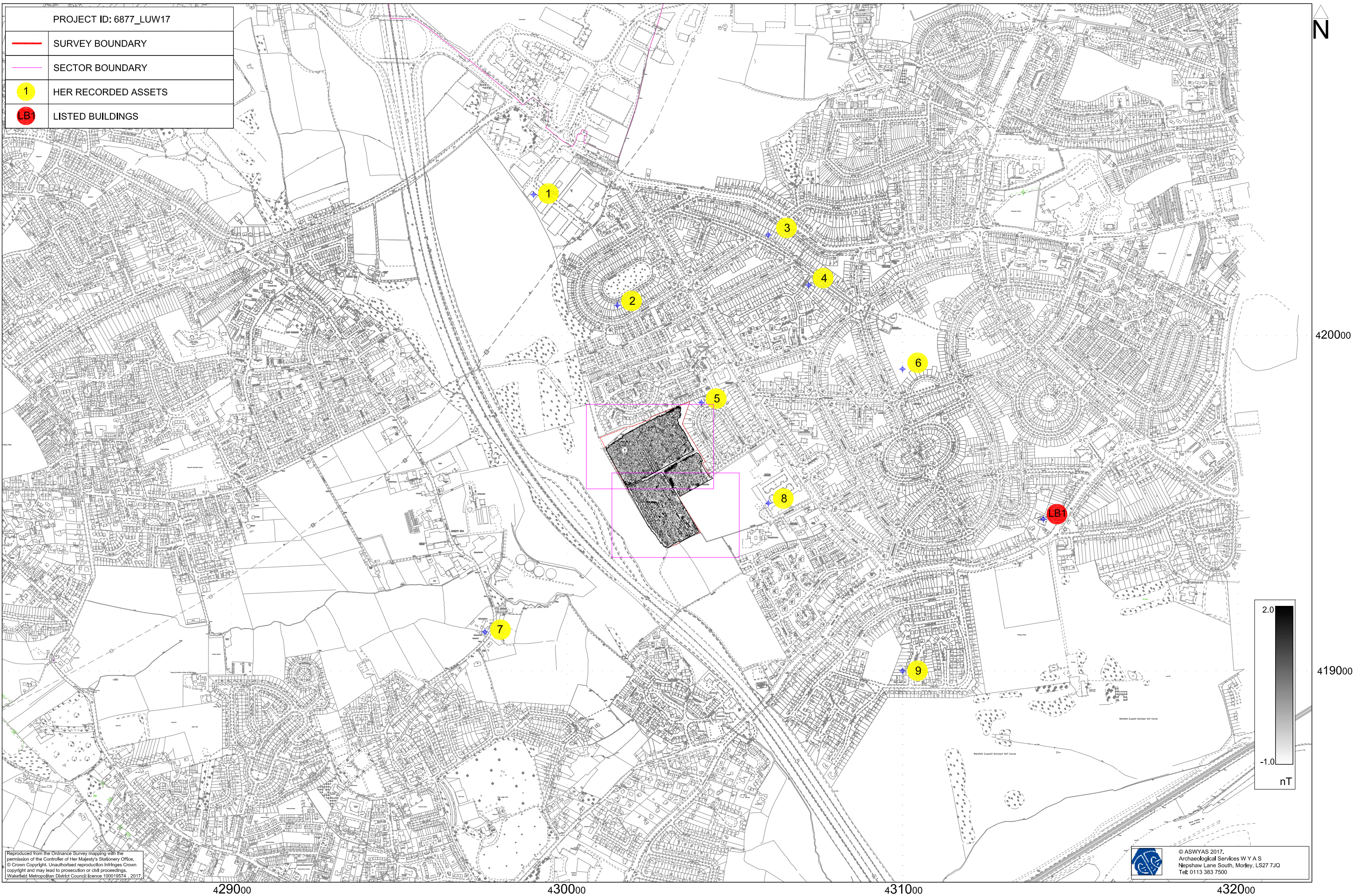


Fig. 2. Location of survey area and HER search covering a 1km radius (1:10,000 @ A3)

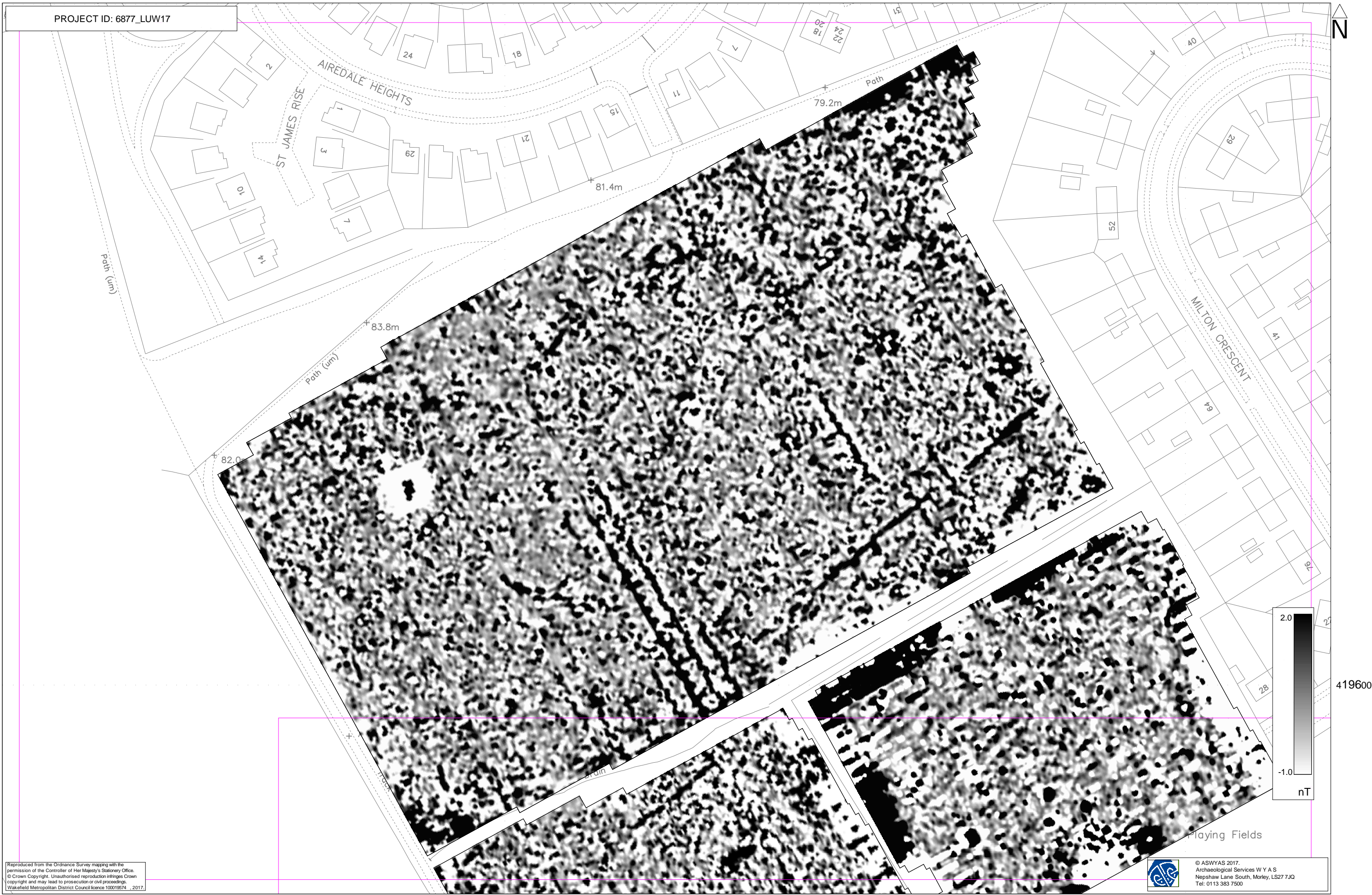


Fig. 3. Overview of survey area showing gradiometer greyscale (1:2000 @ A3)

0 100m

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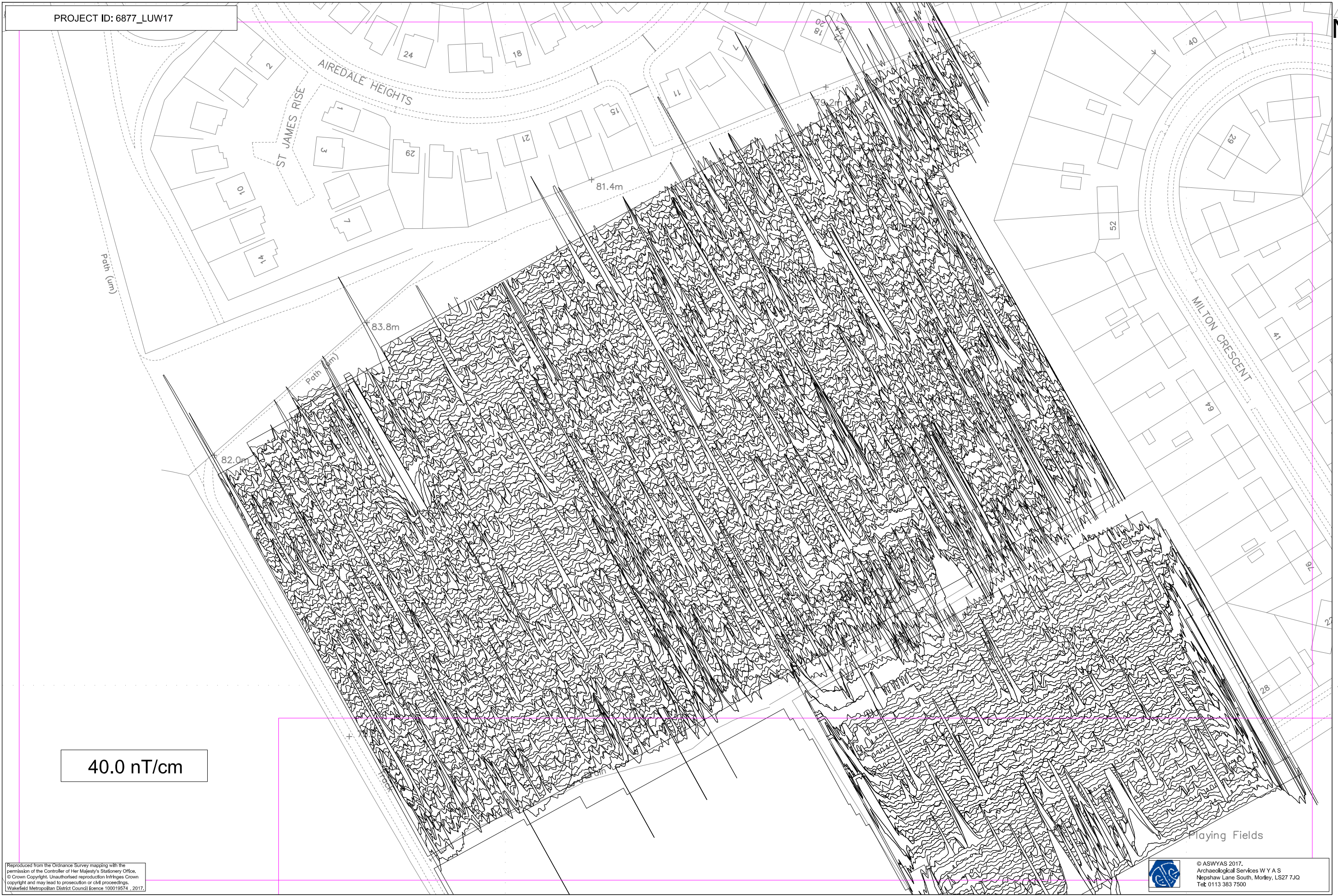
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Fig. 4. Processed gradiometer greyscale; Sector 1 (1:1000 @ A3)

0 50m





40.0 nT/cm

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Fig. 5. XY trace plot of minimally processed gradiometer data; Sector 1 (1:2000 @ A3)

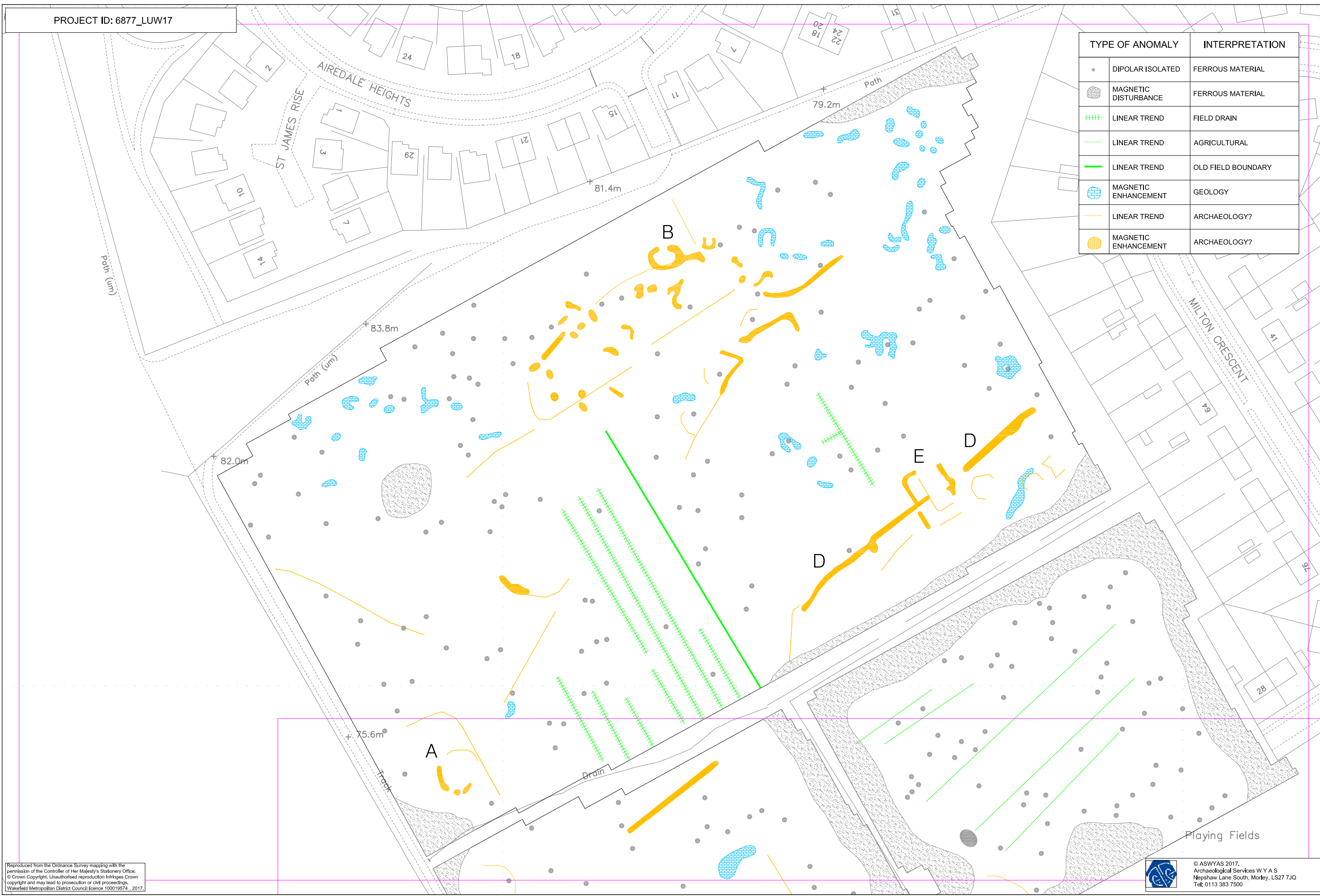
0 50m

430200

430400

419600

TYPE OF ANOMALY		INTERPRETATION
•	DIPOLAR ISOLATED	FERROUS MATERIAL
●	MAGNETIC DISTURBANCE	FERROUS MATERIAL
+++	LINEAR TREND	FIELD DRAIN
—	LINEAR TREND	AGRICULTURAL
—	LINEAR TREND	OLD FIELD BOUNDARY
⊕	MAGNETIC ENHANCEMENT	GEOLOGY
—	LINEAR TREND	ARCHAEOLOGY?
●	MAGNETIC ENHANCEMENT	ARCHAEOLOGY?



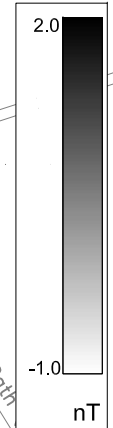
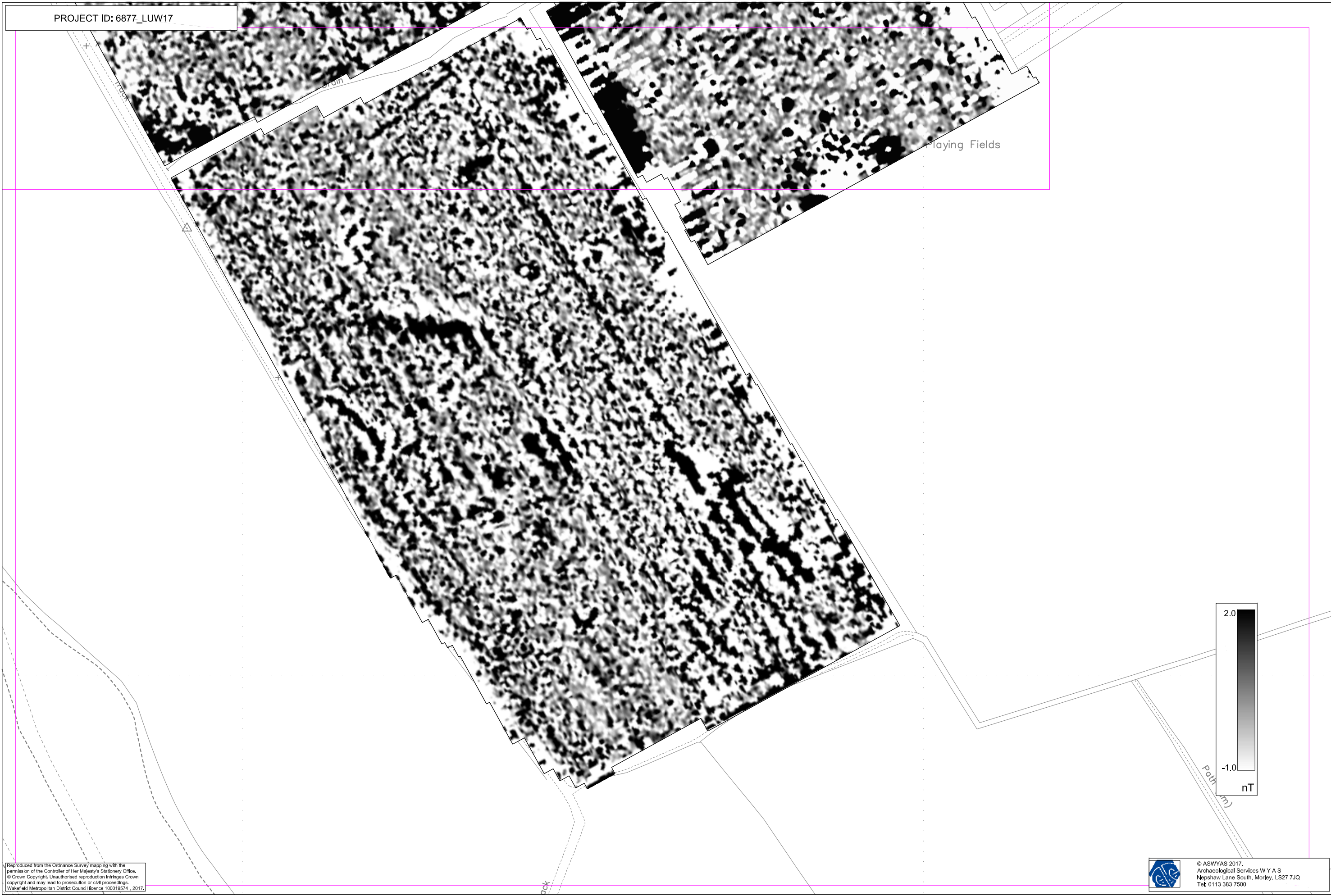
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Fig. 6. Interpretation of gradiometer data; Sector 1 (1:1000 @ A3)



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Fig. 7. Processed gradiometer greyscale; Sector 2 (1:1000 @ A3)



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Playing Fields

40.0 nT/cm

419400

Path (um)

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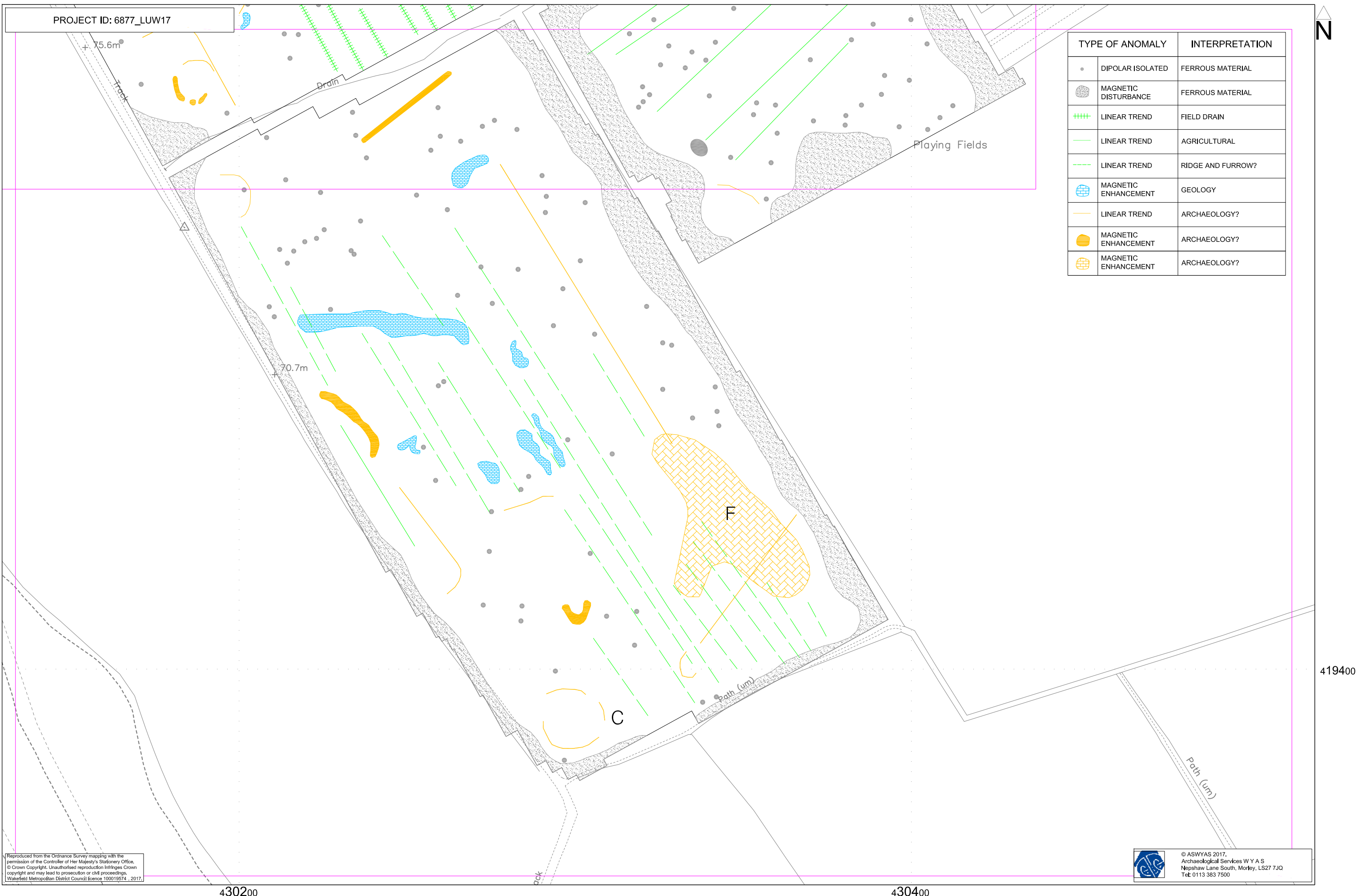
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430200

430400

Fig. 8. XY trace plot of minimally processed gradiometer data; Sector 2 (1:1000 @ A3)

0 50m



PROJECT ID: 6877\_LUW17

TYPE OF ANOMALY		INTERPRETATION
•	DIPOLAR ISOLATED	FERROUS MATERIAL
●	MAGNETIC DISTURBANCE	FERROUS MATERIAL
+++	LINEAR TREND	FIELD DRAIN
—	LINEAR TREND	AGRICULTURAL
- - -	LINEAR TREND	RIDGE AND FURROW?
⊕	MAGNETIC ENHANCEMENT	GEOLOGY
—	LINEAR TREND	ARCHAEOLOGY?
⊕	MAGNETIC ENHANCEMENT	ARCHAEOLOGY?
⊕	MAGNETIC ENHANCEMENT	ARCHAEOLOGY?

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Fig. 9. Interpretation of gradiometer data; Sector 2 (1:1000 @ A3)





*Plate 1. General overview of Area 1, facing west*



*Plate 2. General overview of Area 1, facing northeast*



*Plate 3. General overview of Area 2, facing southwest*



*Plate 4. General overview of Area 3, facing southwest*

## **Appendix 1: Magnetic survey - technical information**

### **Magnetic Susceptibility and Soil Magnetism**

Iron makes up about 6% of the Earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haemetite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms. Areas of human occupation or settlement can then be identified by measuring the magnetic susceptibility of the topsoil because of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of topsoils, subsoils and rocks into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected. The magnetic susceptibility of a soil can also be enhanced by the application of heat and the fermentation and bacterial effects associated with rubbish decomposition. The area of enhancement is usually quite large, mainly due to the tendency of discard areas to extend beyond the limit of the occupation site itself, and spreading by the plough.

### **Types of Magnetic Anomaly**

In the majority of instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a '?' is appended.

It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

### *Isolated dipolar anomalies (iron spikes)*

These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being present as a consequence of manuring.

### *Areas of magnetic disturbance*

These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire fencing and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

### *Linear trend*

This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

### *Areas of magnetic enhancement/positive isolated anomalies*

Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

### *Linear and curvilinear anomalies*

Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains), natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

## **Methodology: Gradiometer Survey**

The main method of using the fluxgate gradiometer for commercial evaluations is referred to as **detailed survey** and requires the surveyor to walk at an even pace carrying the instrument within a grid system. A sample trigger automatically takes readings at predetermined points, typically at 0.25m intervals, on traverses 1m apart. These readings are stored in the memory of the instrument and are later dumped to computer for processing and interpretation.



During this survey a Bartington Grad601 magnetic gradiometer was used taking readings on the 0.1nT range, at 0.25m intervals on zig-zag traverses 0.5m apart within 30m by 30m square grids. The instrument was checked for electronic and mechanical drift at a common point and calibrated as necessary. The drift from zero was not logged.

The gradiometer data have been presented in this report in processed greyscale format. The data in the greyscale images have been interpolated and selectively filtered to remove the effects of drift in instrument calibration and other artificial data constructs and to maximise the clarity and interpretability of the archaeological anomalies.

The results and subsequent interpretation of data from geophysical surveys should not be treated as an absolute representation of the underlying archaeological and non-archaeological remains. Confirmation of the presence or absence of archaeological remains can only be achieved by direct investigation of sub-surface deposits.

## **Appendix 2: Survey location information**

An initial survey station was established using a Trimble VRS differential Global Positioning System (Trimble R6 model). The data was geo-referenced using the geo-referenced survey station with a Trimble RTK differential Global Positioning System (Trimble R6 model). The accuracy of this equipment is better than 0.01m. The survey grids were then super-imposed onto a base map provided by the client to produce the displayed block locations. However, it should be noted that Ordnance Survey positional accuracy for digital map data has an error of 0.5m for urban and floodplain areas, 1.0m for rural areas and 2.5m for mountain and moorland areas. This potential error must be considered if co-ordinates are measured off hard copies of the mapping rather than using the digital co-ordinates.

*Archaeological Services WYAS cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.*

### **Appendix 3: Geophysical archive**

The geophysical archive comprises:-

- an archive disk containing compressed (WinZip 8) files of the raw data, report text (Microsoft Word 2000), and graphics files (Adobe Illustrator CS6 and AutoCAD 2008) files; and
- a full copy of the report.

At present the archive is held by Archaeological Services WYAS although it is anticipated that it may eventually be lodged with the Archaeology Data Service (ADS). Brief details may also be forwarded for inclusion on the English Heritage Geophysical Survey Database after the contents of the report are deemed to be in the public domain (i.e. available for consultation in the West Yorkshire Historic Environment Record).

## **Appendix 4: Oasis form**

# OASIS DATA COLLECTION FORM: England

[List of Projects](#) | [Manage Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

## Printable version

**OASIS ID: archaeol11-301406**

### Project details

Project name	Milton Road, Lupset
Short description of the project	A geophysical (magnetometer) survey was undertaken on approximately 7.5 hectares of land to the west of Milton Road, Lupset, Wakefield, West Yorkshire. This is in advance of a planning application for proposed housing development. A number of potential archaeological anomalies have been detected in the form of ring and linear ditches, pits and a possible small enclosure. Geological and agricultural anomalies have also been detected. The majority of the dataset is magnetically noisy which has hindered the interpretation, however, based upon the geophysical results the archaeological potential is therefore medium to high.
Project dates	Start: 26-10-2017 End: 27-10-2017
Previous/future work	No / Not known
Any associated project reference codes	6877 - Sitecode
Type of project	Field evaluation
Monument type	NONE None
Significant Finds	RING DITCH Uncertain
Methods & techniques	"Geophysical Survey"
Development type	Housing estate
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Not known / Not recorded
Solid geology (other)	Pennine Middle Coal formation
Drift geology	CLAY WITH FLINTS
Techniques	Magnetometry

### Project location

Country	England
Site location	WEST YORKSHIRE WAKEFIELD WAKEFIELD Milton Road, Lupset

Study area	7.5 Hectares
Site coordinates	SE 302 196 53.671770294243 -1.542822692152 53 40 18 N 001 32 34 W Point
Height OD / Depth	Min: 63m Max: 84m

### Project creators

Name of Organisation	Archaeological Services WYAS
Project brief originator	Pegasus Group
Project design originator	Pegasus Group
Project director/manager	E Brunning
Project supervisor	B Goulding

### Project archives

Physical Archive Exists?	No
Digital Archive recipient	Pegasus Group
Digital Contents	"Survey"
Digital Media available	"Geophysics","Images raster / digital photography","Text"
Paper Archive Exists?	No

### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Milton Road, Lupset, Wakefield
Author(s)/Editor(s)	Brunning, E.
Date	2017
Issuer or publisher	ASWYAS
Place of issue or publication	Leeds
Description	A4 report with A3 figures
Entered by	Emma Brunning (emma.brunning@aswyas.com)
Entered on	17 November 2017

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