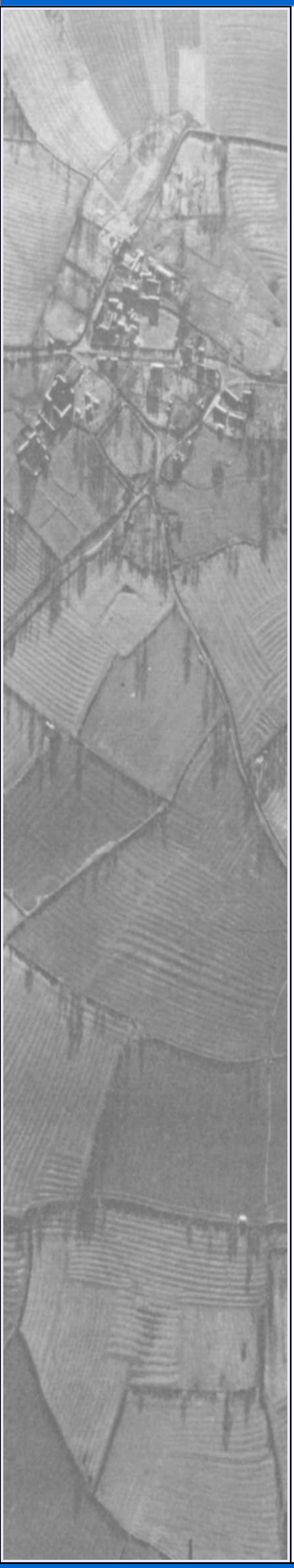

Westbury Hospital
Westbury
Wiltshire

MAGNETOMETER SURVEY REPORT

for

NHS Property Services Ltd

Kerry Donaldson & David Sabin

April 2015

Ref. no. 601

ARCHAEOLOGICAL SURVEYS LTD

Westbury Hospital
Westbury
Wiltshire

Magnetometer Survey Report

for

NHS Property Services Ltd

Fieldwork by David Sabin (Hons) MCIfA
Report by Kerry Donaldson BSc (Hons)
Report checked by David Sabin
Primary archive location - Archaeological Surveys Ltd, Yatesbury, Wiltshire

Survey dates – 30th March 2015
Ordnance Survey Grid Reference – **ST 87391 50712**

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CONTENTS

SUMMARY....1

1 INTRODUCTION....1

1.1 Survey background....1

1.2 Survey objectives and techniques....1

1.3 Site location, description and survey conditions....1

1.4 Site history and archaeological potential....2

1.5 Geology and soils....2

2 METHODOLOGY....2

2.1 Technical synopsis....2

2.2 Equipment configuration, data collection and survey detail....3

2.3 Data processing and presentation....3

3 RESULTS....4

3.1 General assessment of survey results....4

3.2 Statement of data quality....5

3.3 Data interpretation....5

3.4 List of anomalies....6

4 CONCLUSION....6

5 REFERENCES....7

Appendix A – basic principles of magnetic survey....8

Appendix B – data processing notes....9

Appendix C – survey and data information....10

Appendix D – digital archive....11

Appendix E – copyright and intellectual property....12

LIST OF FIGURES

Figure 01 Map of survey area (1:25 000)

Figure 02 Referencing information (1:1000)

Figure 03 Greyscale plot of minimally processed magnetometer data (1:500)

Figure 04 Greyscale plot of filtered processed magnetometer data (1:500)

Figure 05 Abstraction and interpretation of magnetic anomalies (1:500)

LIST OF PLATES

Plate 1: Survey area looking north.....2

LIST OF TABLES

Table 1: List and description of interpretation categories.....6

SUMMARY

A detailed magnetometer survey was undertaken by Archaeological Surveys Ltd, at the request of NHS Property Services Ltd, over an area of rough grassland at the site of the former Westbury Community Hospital. The results reveal a number of short or fragmented weakly positive linear anomalies in the eastern half of the site. Some appear to have been truncated by former ridge and furrow, and although they may relate to cut features, their weak response and short, poorly defined morphology prevents confident interpretation.

1 INTRODUCTION

1.1 Survey background

1.1.1 Archaeological Surveys Ltd was commissioned by NHS Property Services Ltd to undertake a magnetometer survey of an area of land at Westbury Community Hospital, Westbury, Wiltshire. The site has been outlined for a proposed residential development and the survey forms part of an archaeological assessment of the site.

1.2 Survey objectives and techniques

1.2.1 The objective of the survey was to use magnetometry to locate geophysical anomalies that may be archaeological in origin so that they may be assessed prior to development of the site. The methodology is considered an efficient and effective approach to archaeological prospection.

1.2.2 The survey and report generally follow the recommendations set out by: English Heritage (2008) *Geophysical survey in archaeological field evaluation;* and Institute for Archaeologists (2002) *The use of Geophysical Techniques in Archaeological Evaluations*. The work has been carried out to the Chartered Institute for Archaeologists (2014) *Standard and Guidance for Archaeological Geophysical Survey.*

1.3 Site location, description and survey conditions

1.3.1 The site is located on the south eastern edge of Westbury in Wiltshire. It is centred on Ordnance Survey National Grid Reference (OS NGR) ST 87391 50712, see Figures 01 and 02.

1.3.2 The geophysical survey covers approximately 0.8ha within an “L”shaped parcel of overgrown land that lies immediately to the east of the hospital buildings. The site slopes down towards the west and contains a small wooden agricultural building near the north western corner.

Plate 1: Survey area looking north

1.3.3 The ground conditions across the site were generally poor due to rough vegetation; however, magnetometry data were collected with no significant problems. Weather conditions during the survey were fine.

1.4 Site history and archaeological potential

1.4.1 An Archaeological Desk-Based Assessment has been carried out by Michael Heaton Heritage Consultants (2015). Although the site does not contain any designated or non-designated heritage assets, it does lie close to an extensive area of late prehistoric and Romano-British archaeological remains. These include investigations at Wellhead, 300m south of the site, which identified remains that relate to a substantial Roman settlement with industrial activity. Similar remains have also been located at The Ham, further to the north west.

1.4.2 The 1808 enclosure survey map shows that the site was comprised of three land parcels but these had been removed to form a single land plot by the 1842 tithe map. It remained as agricultural land until the hospital was constructed prior to 1936.

1.4.3 The location of the site within an area of prehistoric and Roman archaeological remains indicates that there may be potential for it to contain previously unrecorded features. It is also possible geophysical anomalies associated with former agricultural practices may also be encountered.

1.5 Geology and soils

1.5.1 The underlying geology is from the West Melbury Marly Chalk Formation (BGS, 2015).

1.5.2 The site lies on the junction of two overlying soils with the Blewbury association to the west and the Upton 2 association to the east. These both consist of well drained, calcareous, silty soils over argillaceous chalk. The Blewbury association is typical brown calcareous earth, while the Upton 2 association is a grey rendzina (Soil Survey of England and Wales, 1983).

1.5.3 Magnetometry carried out over similar geology and soil has produced good results. The site is, therefore, considered suitable for magnetic survey.

2 METHODOLOGY

2.1 Technical synopsis

2.1.1 Magnetometry survey records localised magnetic fields that can be associated with features formed by human activity. Magnetic susceptibility and magnetic thermoremnance are factors associated with the formation of localised fields. Additional details are set out below and within Appendix A.

2.1.2 Iron minerals within the soil may become altered by burning and the break down of biological material; effectively the magnetic susceptibility of the soil is increased, and the iron minerals become magnetic in the presence of the Earth's magnetic field. Accumulations of magnetically enhanced soils within features, such as pits and ditches, may produce magnetic anomalies that can be mapped by magnetic prospection.

2.1.3 Magnetic thermoremnance can occur when ferrous minerals have been heated to high temperatures such as in a kiln, hearth, oven etc. On cooling, a permanent magnetisation may be acquired due to the presence of the Earth's magnetic field. Certain natural processes associated with the formation of some igneous and metamorphic rock may also result in magnetic thermoremnance.

2.1.4 The localised variations in magnetism are measured as sub-units of the Tesla, which is a SI unit of magnetic flux density. These sub-units are nano Teslas (nT), which are equivalent to 10^{-9} Tesla (T).

2.2 Equipment configuration, data collection and survey detail

2.2.1 The detailed magnetic survey was carried out using a SENSYS MAGNETO®MXPDA 5 channel cart-based system. The instrument has 5 fluxgate gradiometers spaced 0.5m apart with readings recorded at 20 Hz. The gradiometers have a range of recording data between 0.1nT and 10,000nT. The system is linked to a Leica GS10 RTK GPS with data recorded

by SENSYS MAGNETO®MXPDA software on a rugged PDA computer system.

2.2.2 Data are collected along a series of parallel survey transects wherever possible. The length of each transect is variable and relates to the size of the survey area and other factors including ground conditions. A visual display allows accurate placing of transects and helps maintain the correct separation between adjacent traverses.

2.2.3 Data are not collected within fixed grids and data points are considered to be random even though the data are collected in a systematic manner covering all accessible areas (Aspinall, Gaffney and Schmidt, 2009).

2.3 Data processing and presentation

2.3.1 Magnetic data collected by the MAGNETO®MXPDA cart-based system are initially prepared using SENSYS MAGNETO®DLMGPS software. Survey tracks are analysed and georeferenced raw data (UTM Z30N) are then exported in ASCII format for further analysis and display using TerraSurveyor.

2.3.2 The data are collected between limits of ±10000nT and clipped for display. Data are interpolated to a resolution of effectively 0.5m between tracks and 0.12m along each survey track. A zero median traverse function is required in order to remove fixed offset values present within the sensors which do not undergo a zeroing procedure in the field. The approach ensures that the gradiometer sensors are very accurately aligned and fixed to the vertical magnetic field and are not influenced by localised magnetic fields or disturbed by vibration. Although a zero median traverse algorithm can remove anomalies aligned with the survey tracks, in practice this rarely occurs due to the use of long traverses, high resolution measurement and variability within the magnetic susceptibility of long linear features. A filtered image is displayed in Fig 04 where a high pass filter is applied to smooth data and remove slight variations and artefacts along survey tracks caused by highly magnetic responses.

2.3.3 Appendix C contains metadata concerning the survey and data attributes and is derived directly from TerraSurveyor. Reference should be made to Appendix B for further information on any processes, such as clipping, carried out on the data.

2.3.4 A TIF file is produced by TerraSurveyor software along with an associated world file (.TFW) that allows automatic georeferencing (OSGB36 datum) when using GIS or CAD software. The main form of data display used in the report is the minimally processed greyscale plot, with a filtered plot also shown.

2.3.5 The raster images are combined with base mapping using ProgeCAD Professional 2014, creating DWG file formats. All images are externally referenced to the CAD drawing in order to maintain good graphical quality.

The CAD plots are effectively georeferenced facilitating relocation of features using GPS, resection method, etc.

2.3.6 An abstraction and interpretation is offered for all geophysical anomalies located by the survey. Anomalies are abstracted using colour coded points, lines and polygons. All plots are scaled to landscape A3 for paper printing. A brief summary of each anomaly, with an appropriate reference number, is set out in list form within the results (Section 3) to allow a rapid and objective assessment of features within the survey area.

2.3.7 A digital archive is produced with this report, see Appendix D below. The main archive is held at the offices of Archaeological Surveys Ltd.

3 RESULTS

3.1 General assessment of survey results

3.1.1 The detailed magnetic survey was carried out over 0.8ha within a single plot of land.

3.1.2 Magnetic anomalies located can be generally classified as positive linear anomalies of an uncertain origin, linear anomalies of an agricultural origin, areas of magnetic debris and disturbance and strong discrete dipolar anomalies relating to ferrous objects. Anomalies located within each survey area have been numbered and are described in 3.4 below.

3.2 Statement of data quality

3.2.1 Data are considered representative of the magnetic anomalies present within the site. High magnitude magnetic disturbance and debris in the southern part of the site has produced some minor data artefacts that were removed by the use of a high pass filter. The highly magnetic material has the potential to obscure weak anomalies, although none are present in the immediate vicinity.

3.3 Data interpretation

3.3.1 The list of sub-headings below attempts to define a number of separate categories that reflect the range and type of features located during the survey. A basic explanation of the characteristics of the magnetic anomalies is set out for each category in order to justify interpretation, a basic key is indicated to allow cross referencing to the abstraction and interpretation plot. CAD layer names are included to aid reference to associated digital files (.dwg/.dxf). Sub-headings are then used to group anomalies with similar characteristics.

Report sub-heading CAD layer names and plot colour	Description and origin of anomalies
Anomalies with an uncertain origin AS-ABST MAG POS LINEAR UNCERTAIN	The category applies to a range of anomalies where there is not enough evidence to confidently suggest an origin. Anomalies in this category may well be related to archaeologically significant features, but equally relatively modern features, geological/pedological features and agricultural features should be considered. Positive anomalies are indicative of magnetically enhanced soils that may form the fill of 'cut' features or may be produced by accumulation within layers or 'earthwork' features; soils subject to burning may also produce positive anomalies.
Anomalies with an agricultural origin AS-ABST MAG RIDGE AND FURROW	The anomalies are often linear and form a series of parallel responses or are parallel to extant land boundaries. Where the response is broad, former ridge and furrow is likely; narrow response is often related to modern ploughing.
Anomalies associated with magnetic debris AS-ABST MAG DEBRIS AS-ABST MAG STRONG DIPOLAR	Magnetic debris often appears as areas containing many small dipolar anomalies that may range from weak to very strong in magnitude. It often occurs where there has been dumping or ground make-up and is related to magnetically thermoremnant materials such as brick or tile or other small fragments of ferrous material. This type of response is occasionally associated with kilns, furnace structures, or hearths and may therefore be archaeologically significant. Strong discrete dipolar anomalies are responses to ferrous objects within the topsoil.
Anomalies with a modern origin AS-ABST MAG DISTURBANCE	The magnetic response is often strong and dipolar indicative of ferrous material and may be associated with extant above surface features such as wire fencing, cables, pylons etc.. Often a significant area around such features has a strong magnetic flux which may create magnetic disturbance; such disturbance can effectively obscure low magnitude anomalies if they are present. Fluxgate sensors may respond erratically and with hysteresis adjacent to strong magnetic sources.

Table 1: List and description of interpretation categories

3.4 List of anomalies

Area centred on OS NGR 387391 150712, see Figures 03 - 05.

Anomalies with an uncertain origin

(1) - The survey area contains a number of short or fragmented weakly positive linear anomalies. Some appear to have been truncated by ridge and furrow (2); however, due to their weak and poorly defined response, it is not possible to determine if they relate to cut features or natural features.

Anomalies with an agricultural origin

(2) - A number of parallel linear anomalies relate to former ridge and furrow cultivation.

Anomalies associated with magnetic debris

(3) - The western half of the site contains widespread magnetic debris. The response is strongly magnetic indicating that ferrous material is present and it is likely that this is related to the construction of the adjacent hospital.

(4) - Strong, discrete, dipolar anomalies are a response to ferrous and other magnetically thermoremant objects within the topsoil.

Anomalies with a modern origin

(5) - Magnetic disturbance is a response to ferrous material within the adjacent fence and buildings.

4 CONCLUSION

4.1.1 The detailed magnetometer survey located a number of short, or fragmented positive linear anomalies in the eastern part of the site. Although it is possible that some have been truncated by the former ridge and furrow also evident within the results, it is not possible to determine if they relate to cut features with an anthropogenic origin, or naturally formed features.

4.1.2 The site contains numerous ferrous objects and widespread magnetic debris, particularly across the western half. This material may be associated with construction of the adjacent hospital.

5 REFERENCES

Aspinall, A., Gaffney, C. and Schmidt, A., *Magnetometry for Archaeologists*. Lanham (US), AltaMira Press.

British Geological Survey, 2015. *Geology of Britain viewer, 1:50 000 scale [online]* available from http://mapapps.bgs.ac.uk/geologyofbritain/home.html [accessed 13/4/2015].

Chartered Institute for Archaeologists, 2014. *Standard and Guidance for archaeological geophysical survey*. IfA, University of Reading.

English Heritage, 2008. *Geophysical survey in archaeological field evaluation. Research and Professional Service Guideline No.1.* 2nd ed. Swindon: English Heritage.

Institute for Archaeologists, 2002. *The use of Geophysical Techniques in Archaeological Evaluations*. IfA Paper No. 6. IfA, University of Reading.

Michael Heaton Heritage Consultants, 2015. *Westbury Hospital, Westbury, Wiltshire, Archaeological Desk-Based Assessment.* Unpublished typescript report.

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

Appendix A – basic principles of magnetic survey

Iron minerals are always present to some degree within the topsoil and enhancement associated with human activity is related to increases in the level of magnetic susceptibility and thermoremnant material.

Magnetic susceptibility is an induced magnetism within a material when it is in the presence of a magnetic field. This can be thought of as effectively permanent due to the presence of the Earth's magnetic field.

Thermoremnant magnetism occurs when ferrous material is heated beyond a specific temperature known as the Curie Point. Demagnetisation occurs at this temperature with re-magnetisation by the Earth's magnetic field upon cooling.

Enhancement of magnetic susceptibility can occur in areas subject to burning and complex fermentation processes on biological material; these are frequently associated with human settlement. Thermoremnant features include ovens, hearths, and kilns. In addition thermoremnant material such as tile and brick may also be associated with human activity and settlement.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil can create an area of enhancement compared with surrounding soils and subsoils into which the feature is cut. Mapping enhanced areas will produce linear and discrete anomalies allowing an assessment and characterisation of hidden subsurface features.

It should be noted that areas of negative enhancement can be produced from material having lower magnetic properties compared to the topsoil. This is common for many sedimentary bedrocks and subsoils which were often used in the construction of banks and walls etc. Mapping these 'negative' anomalies may also reveal archaeological features.

Magnetic survey or magnetometry can be carried out using a fluxgate gradiometer and may be referred to as gradiometry. The SENSYS gradiometer is a passive instrument consisting of two fluxgate sensors mounted vertically 65cm apart. The instrument is carried about 10-20cm above the ground surface and the upper sensor measures the Earth's magnetic field as does the lower sensor but this is influenced to a greater degree by any localised buried field. The difference between the two sensors will relate to the strength the magnetic field created by the buried feature.

There are a number of factors that may affect the magnetic survey and these include soil type, local geology and previous human activity. Situations arise where magnetic disturbance associated with modern services, metal fencing, dumped waste material etc., obscures low magnitude fields associated with archaeological features.

Appendix B – data processing notes

Clipping

Minimum and maximum values are set and replace data outside of the range with those values. Extreme values are removed improving colour or greyscale contrast associated with data values that may be archaeologically significant. It has been found that clipping data to ranges between ±20nT and ±10nT often improves the appearance of features associated with archaeology. Different ranges are applied to data in order to determine the most suitable for anomaly abstraction and display.

Zero (destripe) Median/Mean Traverse

The median (or mean) of each traverse is calculated ignoring data outside a threshold value, the median (or mean) is then subtracted from the traverse. The process is used to equalise differences between the baseline value of gradiometer sensors.

High Pass Filtering

A mathematical process used to remove low frequency anomalies relating to survey tracks and modern agricultural features.

Appendix C – survey and data information

Mag minimally processed data

COMPOSITE
Filename: J601-mag-proc.xcp
Description: Imported as Composite from: J601-mag.asc
Instrument Type: Sensys DLMGPS
Units: nT
UTM Zone: 30U
Survey corner coordinates (X/Y): OSGB36
Northwest corner: 387340.248607004, 150776.323829302 m
Southeast corner: 387454.128607004, 150649.843829302 m
Collection Method: Randomised
Sensors: 5
Dummy Value: 32702

Source GPS Points: 324000

Dimensions
Composite Size (readings): 949 x 1054
Survey Size (meters): 114 m x 126 m
Grid Size: 114 m x 126 m
X Interval: 0.12 m
Y Interval: 0.12 m

Stats
Max: 4.00
Min: -4.00
Std Dev: 2.06
Mean: 0.01
Median: 0.02
Composite Area: 1.4404 ha
Surveyed Area: 0.6983 ha

PROGRAM
Name: TerraSurveyor
Version: 3.0.23.0

Processes: 2
1 Base Layer
2 Clip from -4.00 to 4.00 nT

GPS based Proce4
1 Base Layer.
2 Unit Conversion Layer (Lat/Long to OSGB36).
3 DeStripe Median Traverse:
4 Clip from -5.00 to 5.00 nT

Mag filtered data

COMPOSITE
Filename: J601-mag-proc-hpf.xcp
Description: Imported as Composite from: J601-mag.asc
Instrument Type: Sensys DLMGPS
Units: nT
UTM Zone: 30U
Survey corner coordinates (X/Y):OSGB36
Northwest corner: 387340.248607004, 150776.323829302 m
Southeast corner: 387454.128607004, 150649.843829302 m
Collection Method: Randomised
Sensors: 5
Dummy Value: 32702

Source GPS Points: 324000

Dimensions
Composite Size (readings): 949 x 1054
Survey Size (meters): 114 m x 126 m
Grid Size: 114 m x 126 m
X Interval: 0.12 m
Y Interval: 0.12 m

Stats
Max: 4.00
Min: -4.00
Std Dev: 1.86
Mean: 0.02
Median: -0.01
Composite Area: 1.4404 ha
Surveyed Area: 0.6983 ha

Processes: 2
1 Base Layer
2 Clip from -4.00 to 4.00 nT

GPS based Proce5
1 Base Layer.
2 Unit Conversion Layer (Lat/Long to OSGB36).
3 DeStripe Median Traverse:
4 Clip from -5.00 to 5.00 nT
5 High pass Uniform (median) filter: Window dia: 300

Appendix D – digital archive

Archaeological Surveys Ltd hold the primary digital archive at their offices in Wiltshire. Data are backed-up onto an on-site data storage drive and at the earliest opportunity data are copied to CD ROM for storage on-site and off-site.

A printed copy of the report and a PDF copy will be supplied to the Wiltshire Historic Environment Record. The report will also be uploaded to the Online AccesS to the Index of archaeological investigationS (OASIS).

Archive contents:

Geophysical data - path: J601 Wesbury Hospital \Data				
Path and Filename	**Software**	**Description**	**Date**	**Creator**
westhspl1\MX\ .prm .dgb .disp	Sensys MXPDA	Proprietary data formats representing magnetometer survey traverses logged to a PDA.	30/03/15	D.J.Sabin
westhspl1\MX\J601-mag.asc	Sensys DLMGPS	ASCII CSV (tab) file representing survey area in eastings, northings (UTM Z30N), magnetic measurement, traverse file and sensor number.	30/03/15	D.J.Sabin
Mag\comps\J601-mag-.xcp	TerraSurveyor 3.0.23.0	Composite data file derived from ASCII CSV.	30/03/15	D.J.Sabin
Mag\comps\J601-mag-proc.xcp	TerraSurveyor 3.0.23.0	Processed composite data file (zmt and clipping to ±4nT).	30/03/15	D.J.Sabin
Mag\comps\J601-mag-proc-hpf.xcp	TerraSurveyor 3.0.23.0	Processed composite data file (zmt, clipping to ±4nT and high pass median filter applied).	30/03/15	D.J.Sabin
Graphic data - path: J601 Westbury Hospital\Data				
Mag\graphics\ J601-mag-proc.tif	TerraSurveyor 3.0.23.0	TIF file showing a minimally processed greyscale plot clipped to ±4nT.	01/04/15	K.T.Donaldson
Mag\graphics\ J601-mag-proc.tfw	TerraSurveyor 3.0.23.0	World file for georeferencing TIF to OSGB36.	01/04/15	K.T.Donaldson
Mag\graphics\ J601-mag-proc-hpf.tif	TerraSurveyor 3.0.23.0	TIF file showing a high pass filtered greyscale plot clipped to ±4nT.	01/04/15	K.T.Donaldson
Mag\graphics\ J601-mag-proc-hpf.tfw	TerraSurveyor 3.0.23.0	World file for georeferencing TIF to OSGB36.	01/04/15	K.T.Donaldson
CAD data - path: J601 Westbury Hospital\CAD				
J601 version 1.dwg	ProgeCAD 2014	CAD file for creating plots of greyscales, abstraction, interpretation and mapping. Grid coordinates as OSGB. AutoCAD 2010 format.	08/04/15	K.T.Donaldson
Text data - path: J601 Westbury Hospital\Documentation				
J601 report.odt	OpenOffice.org 3.0.1 Writer	Report text as an Open Office document.	23/03/15	K.T.Donaldson

Appendix E – copyright and intellectual property

Archaeological Surveys Ltd

Geophysical Survey
Westbury Hospital
Westbury
Wiltshire

Map of survey area

Survey location

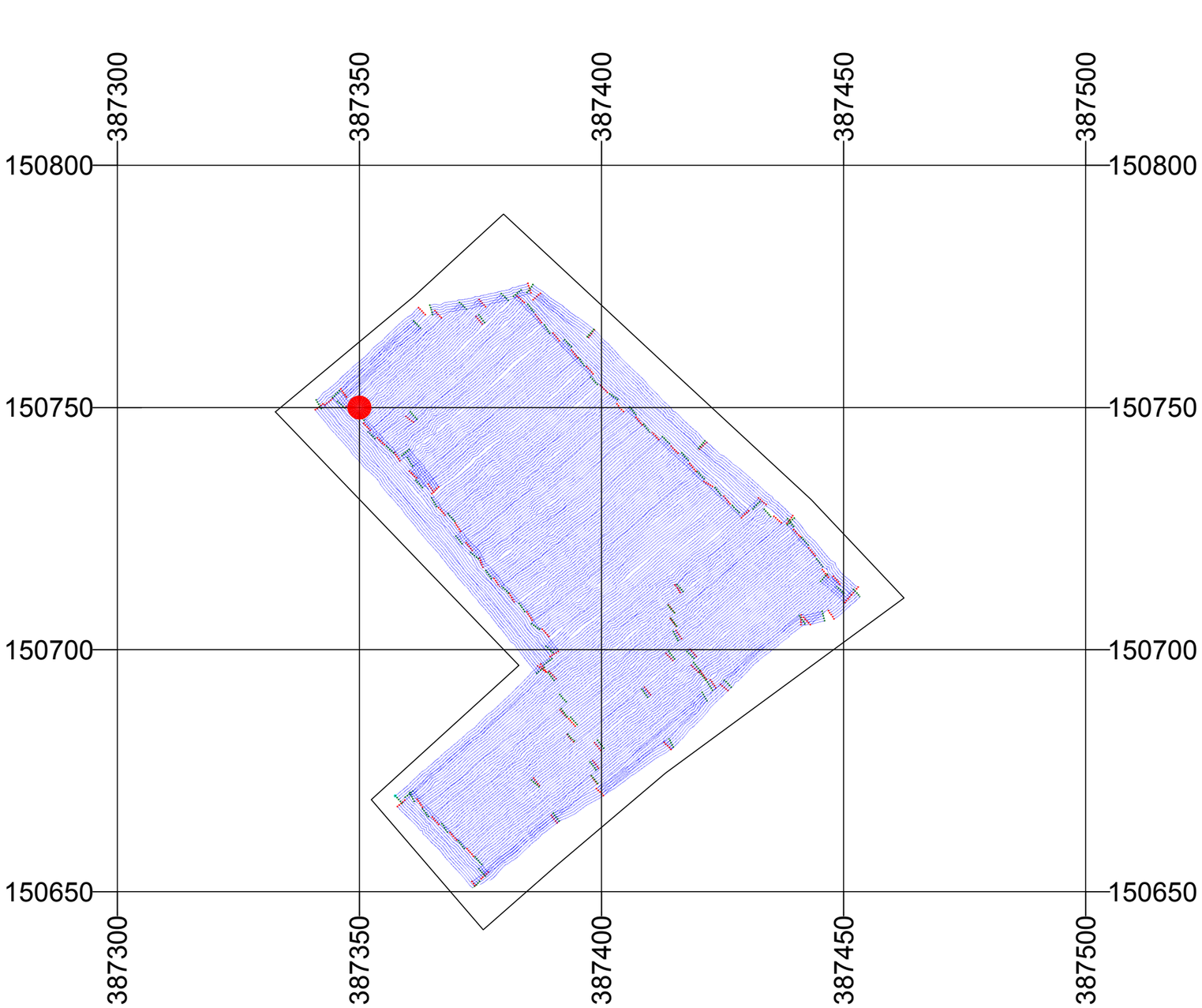
Site centred on OS NGR
ST 87391 50712

SCALE 1:25 000

0m 500m 1000m

SCALE TRUE AT A3

FIG 01



Archaeological Surveys Ltd

Geophysical Survey
Westbury Hospital
Westbury
Wiltshire

Referencing information

Referencing grid to OSGB36 datum at 50m intervals

Data collected at 20Hz and georeferenced to ETRS89 zone 30 with conversion to OSGB36 using OSTN02

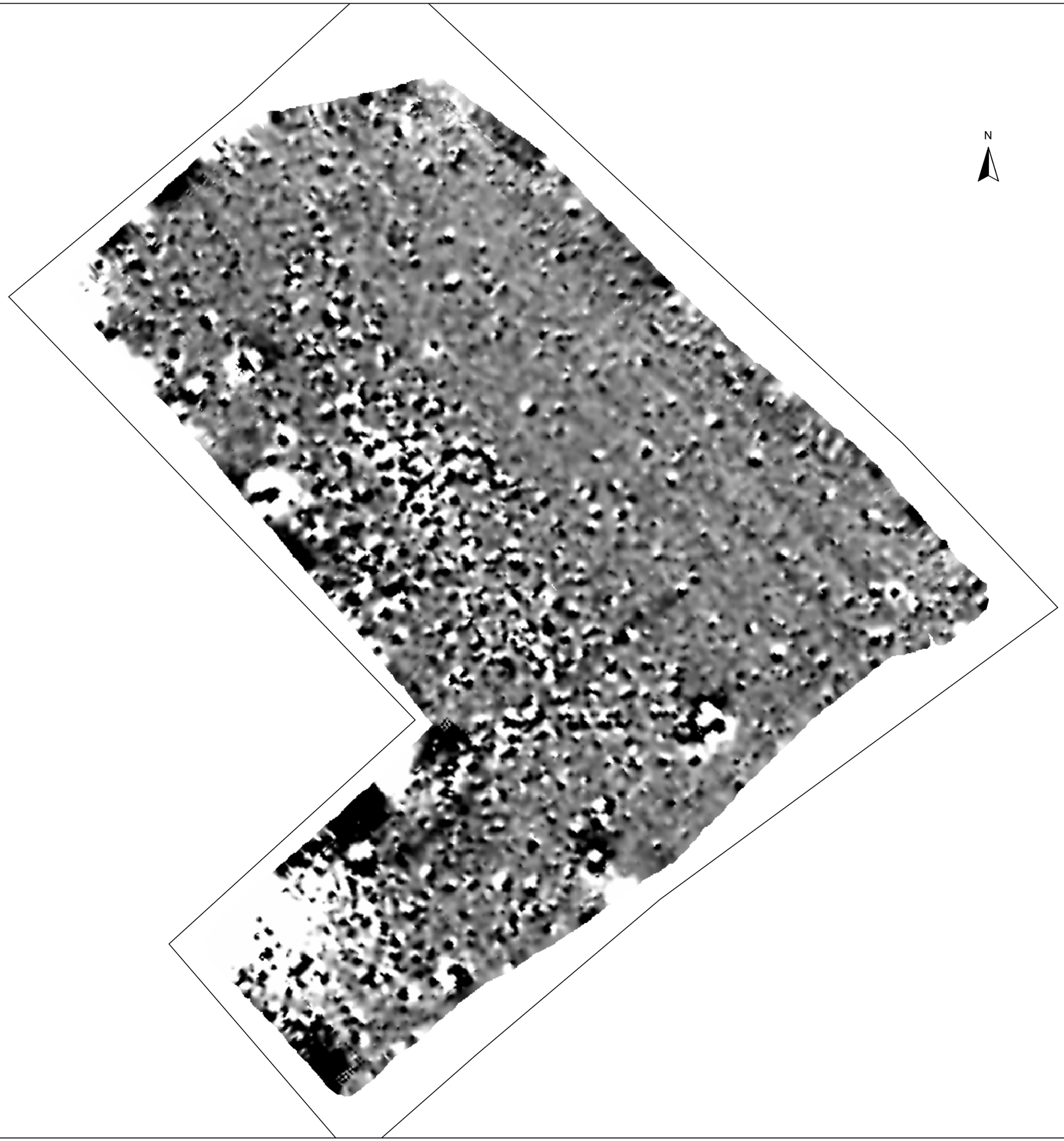
- 387350 150750
- Survey tracks
- Survey track start
- Survey track stop

SCALE 1:1000

0m 10 20 30 40 50m

SCALE TRUE AT A3

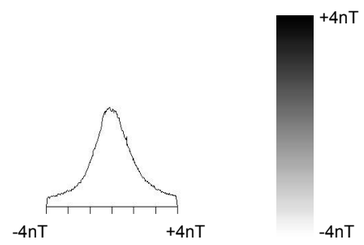
FIG 02



Archaeological Surveys Ltd

Geophysical Survey
Westbury Hospital
Westbury
Wiltshire

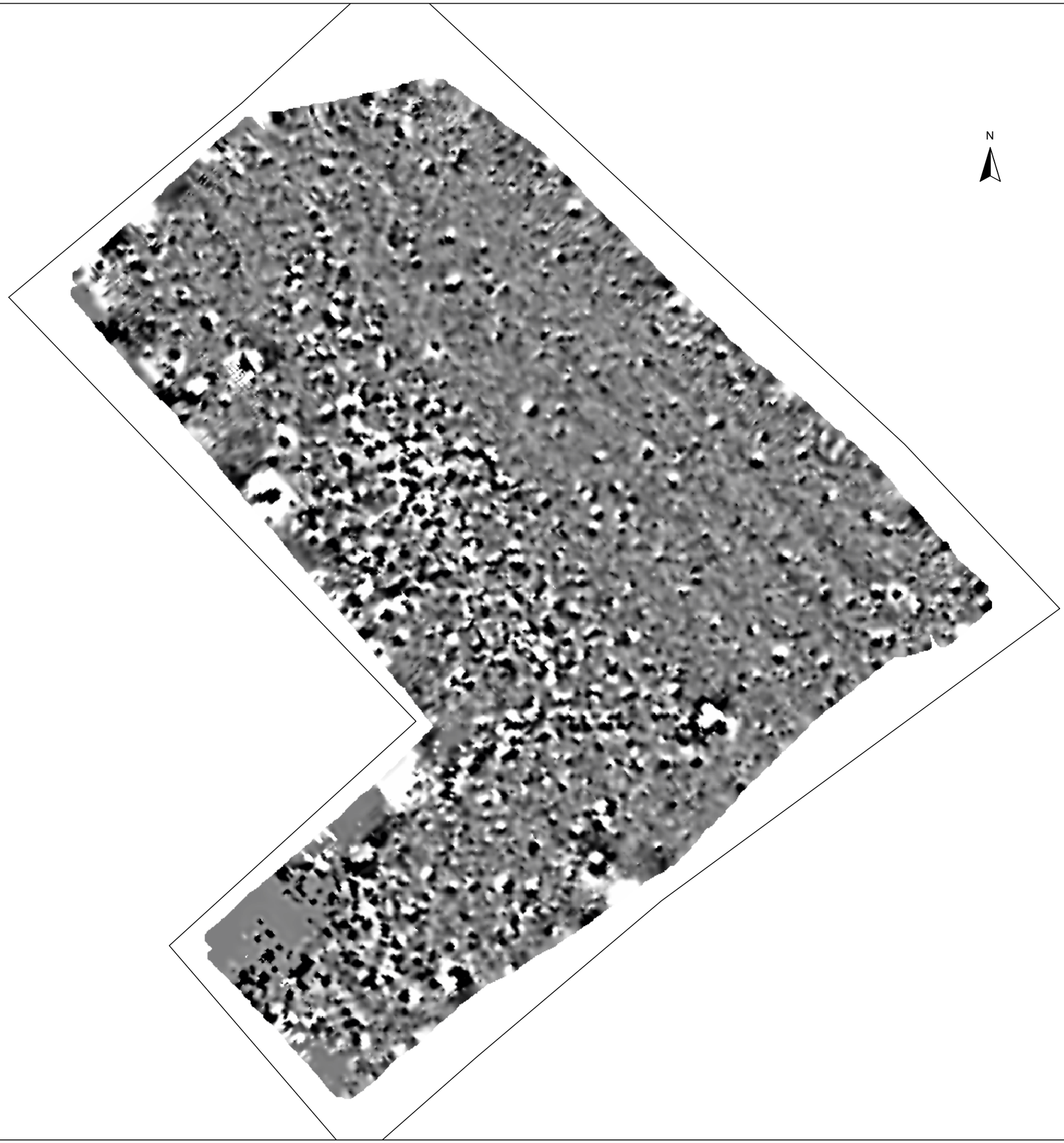
Greyscale plot of minimally processed magnetometer data



SCALE 1:500

SCALE TRUE AT A3

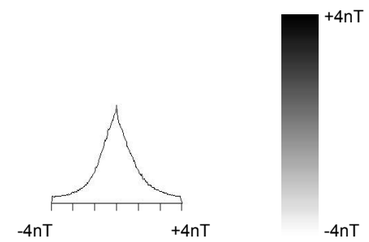
FIG 03



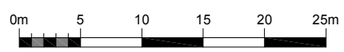
Archaeological Surveys Ltd

Geophysical Survey
Westbury Hospital
Westbury
Wiltshire

Greyscale plot of filtered magnetometer data

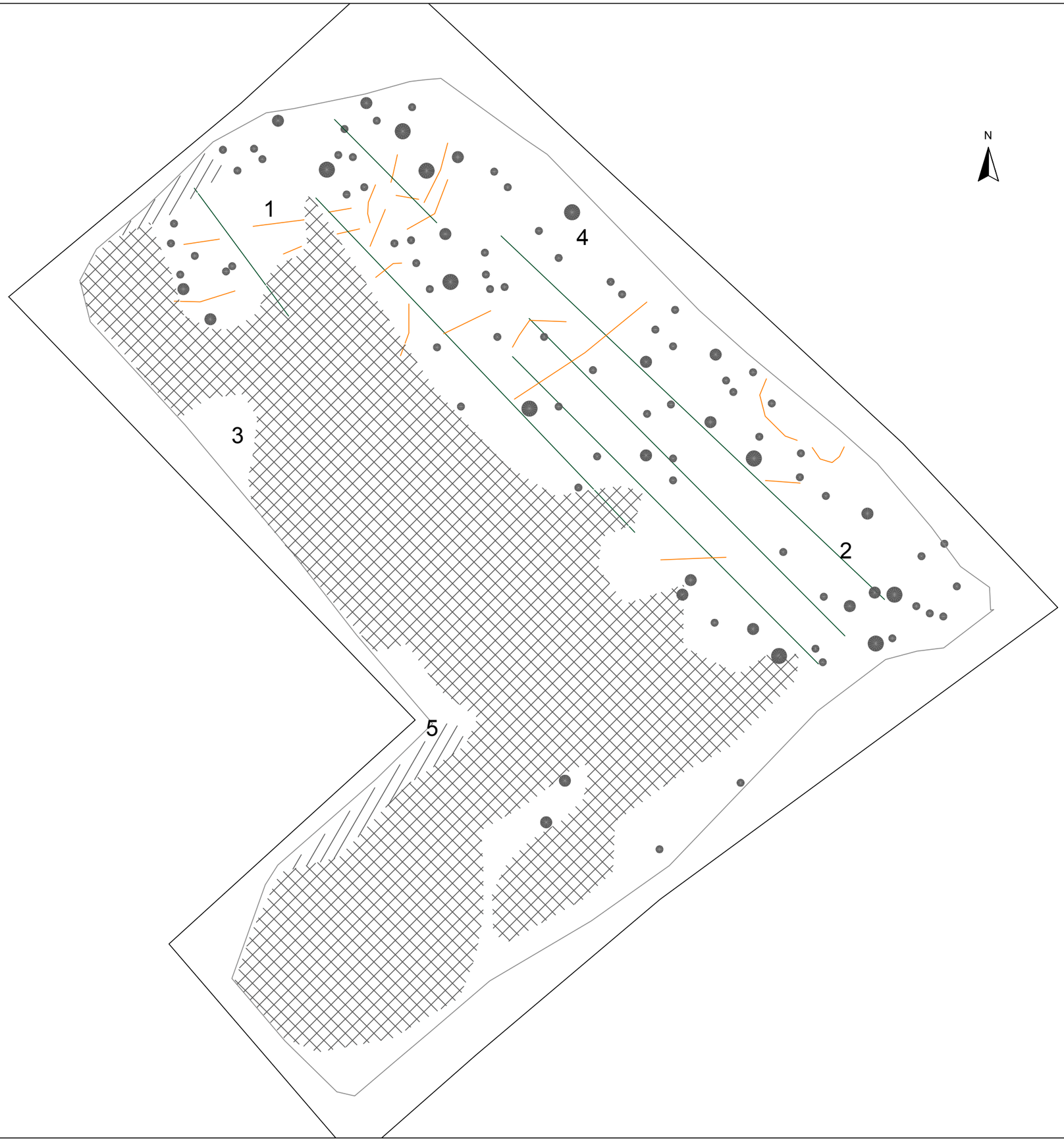


SCALE 1:500



SCALE TRUE AT A3

FIG 04



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Westbury Hospital
Westbury
Wiltshire

Abstraction and interpretation of magnetometer anomalies

- Positive linear anomaly - possible ditch-like feature
- Linear anomaly - ridge and furrow
- Magnetic debris - spread of magnetically thermoremnant/ferrous material
- Magnetic disturbance from ferrous material
- Strong dipolar anomaly - ferrous object

SCALE 1:500

0m 5 10 15 20 25m

SCALE TRUE AT A3

FIG 05