A47 Blofield to North Burlingham Dualling

Scheme Number: TR010040

Volume 6
6.2 Environmental Statement Appendices
Appendix 6.2 – Geophysical and Metal Detector Survey

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

December 2020

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A47 Blofield to North Burlingham Development Consent Order 202[x]

ENVIRONMENTAL STATEMENT APPENDICES
Appendix 6.2 Geophysical and Metal Detector Survey

Regulation Number:	Regulation 5(2)(a)
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Rev 0	December / 2020	Application Issue

GEOPHYSICAL AND METAL DETECTOR SURVEY
A47 DUALLING BLOFIELD TO NORTH BURLINGHAM

Work Undertaken For
Scott Wilson

October 2006

Report Compiled by
Dale Trimble (APS)
with geophysical text supplied by
Simon Stowe (Stratascan)

Site Code and Accession Number **39847BVR**

A.P.S. Report No.**164/06**

ARCHAEOLOGICAL PROJECT SERVICES

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1. SUMMARY

A geophysical and metal detector survey was undertaken as part of investigation into the archaeological impact of the proposed dualling of the A47 between Blofield and North Burlingham, Norfolk.

Anomalies thought to be of possible archaeological origin were identified by the geophysical survey, although in many areas the results were dominated by the effects of a service pipe.

All of the metal finds recovered are likely to be of post medieval date, probably reflecting waste disposal and manuring of the fields. This implies the area was agricultural land, used as arable, during the post-medieval period.

2. BACKGROUND

Archaeological Project Services were contracted by Scott Wilson to undertaken a geophysical and metal detector survey along the route of the proposed dualling of the A47 between Blofield and North Burlingham, Norfolk.

Stratascan Ltd. undertook the geophysical survey between the 25th September and 5th October 2006. Archaeological Project Services undertook the metal detector survey on 2nd October 2006.

Areas intended for geophysical survey are shown in Figure 1. Only Area B located towards the west end of the route was subject to the metal detector survey.

3. GEOLOGY AND TOPOGRAPHY

A review of geological data suggests that the soil along the route is predominantly 'rich loam' with well-drained brown earth with approximately 0.5m of almost stone-free brown loam. A geotechnical investigation carried out in 2004 by A. F. Howland Associates determined that the solid geology consisted of the Lowestoft Till and Corton Formation containing unspecified organic material within it.

The only made ground identified along the route is associated with the existing road. However, a further geotechnical investigation identified evidence for worked ground to the north of the route and the possibility of other worked areas to the south (Edmund Nuttall Ltd & Scott Wilson Kirkpatrick & Co Ltd 2005). These workings were probably associated with the extraction of marl from the chalky Lowestoft Till. The report identified that some of these pits may exceed 4.0m in depth and are situated on the fringes of individual outcrops (ibid).

There is no evidence for alluvial, colluvial, fluvial or Aeolian deposits along the route corridor.

The route is located on a large spur of high ground between the courses of the rivers Yare and Bure.

4. ARCHAEOLOGICAL AND HISTORICAL BACKROUND

4.1 Previous Archaeological Investigations

Archaeological investigations which have not been carried out specifically for the A47 scheme, but which include information regarding the proposed development area include;

- Private excavation to the south of Blofield completed in 1977.
- Archaeological investigation to the southeast of Blofield carried out by the Norfolk Archaeological Unit (Penn 2000).

- Archaeological watching brief undertaken by the Norfolk Archaeological Unit during topsoil stripping for a water main (Ames 2003).

In 2005, Scott Wilson prepared the cultural heritage chapter for the draft Environmental Statement for the Scheme. The report assessed the archaeology, built heritage and the historic landscape of the proposed development area.

A number of reports and surveys have been undertaken both specifically for the proposed A47 dualling and as part of wider studies. Surveys directly related to the Scheme include:

- A47 – Scoping Report (Norfolk Archaeological Unit, November 2000);
- Oscar Faber/Maunsell, October 2001. GOMMMS *strategy level assessment*;
- Hyder Consulting, November 2002. GOMMMS *plan level appraisal*;
- *A47 Blofield to North Burlingham. Environmental Scoping Report.* Hyder Consulting (May 2003);
- *A47 Blofield to North Burlingham. Environmental Baseline Data Report*. Hyder Consulting (June 2003);
- Wallace, P., 2003. *An Archaeological Field Survey along the A47 proposed dualling route between Blofield and North Burlingham*. Norfolk Archaeological Unit Report No. 895.

4.2 Known Archaeological Remains and Historic Background

Evidence for prehistoric activity along the route corridor derives from a number of individual find spots as well as several sparse scatters of flint artefacts recovered from fieldwalking. The earliest evidence for activity in the proposed development area dates from the Mesolithic period where a large number of flint artefacts were discovered to the southwest of Blofield (Wymer 1977, 204). Neolithic artefacts have been uncovered at various points along the route and evidence for Bronze Age activity has been identified in a series of cropmarks interpreted as ring ditches situated to the north of North Burlingham.

A significant cluster of prehistoric sites and finds occurs to the south of Blofield, adjacent to the now canalised Run Dike watercourse, a tributary of the river Yare. These include Neolithic stone axes and flints and ring ditches of probable early Bronze Age date. A series of remnant burnt flint mounds were also located alongside the Run Dike during insertion of a pipeline.

Approximately 400m north of the A47 and at the west end of the area of investigation between Plantation Farm and High Noon Farm are cropmarks of a sub-rectangular enclosure, a possible Iron Age fort, set within a field system suggested in the HER as Roman in date (HER 18130). This lies east of an area where several artefacts of Roman date have been recovered by metal detectorists (HER 25651) Other Iron Age and Roman settlement is present, as attested by quantities of metal work recovered by detector users chiefly well to the south of the road scheme. The quantities and distributions of metalwork suggest significant metal detector usage

in the area. It is not known if the route of the new carriageway has been detected. If it has there are no known finds there. However, there is an HER record (25248) listing the discovery of late Saxon and medieval metalwork which lies very close to the area in which the metal detector survey was undertaken for this project.

Aside from standing structures (churches) the medieval and later periods are characterised in the SMR by chance finds of pottery. This includes post medieval and Late Saxon pottery collected during the construction of the original Blofield bypass, but otherwise unprovenanced. Not recorded on the SMR is the ridge and furrow, remnants of the medieval system of farming, which occur intermittently on the north side of the A47. Also unrecorded are the parish boundaries between Blofield and Lingwood and North Burlingham. Such boundaries were usually formalised by the 10th century and are sometimes marked by earthen banks. No obvious trace exists along the proposed stretch of dualling.

Blofield and North Burlingham are thought to have their origins in the early medieval period as both are mentioned in the Domesday Survey. The early medieval focus for Blofield was on the southern edge of the present town and as such, will not be directly impacted by the proposed scheme. North Burlingham, however, was thought to have been a more extensive settlement at this time and may have extended southwards, beyond the A47. A number of Saxon metal artefacts were identified by metal detectorists in a field to the south of the A47 and may be indicative of a Saxon settlement.

During the medieval period, the settlements of Blofield, Burlingham and Lingwood all expanded, with Burlingham dividing into two parishes, St. Peter and St. Andrew. The A47 was the primary route through Blofield and North Burlingham and may have been a turnpike road.

The majority of land between the three settlements was in agricultural use during the medieval period, but despite the documentary evidence, the archaeological evidence for settlement in this period is scant, with fieldwalking recovering few finds. Most of the archaeological evidence from this period has been found in and around the medieval churches within each village. In Blofield, a medieval quarry pit was discovered during a watching brief along with other isolated pottery and metal finds. In Burlingham, a silver coin, and pottery sherds were found in isolated contexts along with other finds scattered to the north of the village including a lava millstone and a harness ornament. Within Lingwood, all the medieval artefacts were recovered to the north of the modern settlement indicating that the centre of the village shifted southwards in the post-medieval period. The artefacts included a cluster of metal objects found to the north of the church.

The villages along the route corridor experienced a very slow rate of change throughout the post-medieval period, with the majority of changes occurring in the 20th century. Enclosure occurred in the late 18th century, and after the Second World War, a programme of large-scale removal of hedgerows was undertaken, dramatically altering the landscape.

The most obvious new feature within the local landscape in recent times is the bypass road running to the south of North Burlingham which was constructed in 1969 to alleviate traffic flow through the village. Also, the Blofield Bypass was constructed in 1983 to ease traffic through Blofield.

During the post-medieval period, the village of Blofield expanded to the north and became the biggest town along the route corridor. A number of archaeological finds have been identified in the surrounding area dating from the post-medieval period including a number of pottery sherds and evidence for a possible tile kiln.

The village of North Burlingham began to shrink in the post-medieval period. The population of the two parishes fell due to the rise in industrialisation. The church of St Peter collapsed in 1906, leaving only the church of St Andrew to serve both parishes. A number of pottery fragments and metal objects have been found in the vicinity of the village dating from this period.

Lingwood changed little during the post-medieval period. The entire settlement began to shift southwards to occupy its present day position and the village became home to the Blofield Union Workhouse in 1866. There are very few archaeological finds from this period in the area of Lingwood.

5. PROJECT OBJECTIVES

5.1 Geophysical Survey

As defined in the project design the objectives of the geophysical survey were:

- to establish the presence or absence of any archaeological anomalies within the proposed area of development
- to define the extent of any such anomalies
- to characterise, of possible, any such anomalies
- to relate any identified anomalies with the results of the metal detector survey and aerial photograph analysis
- to provide supporting information in order to inform the mitigation strategy for the development if possible

Detailed methodology and results can be found in Appendix 1.

5.2 Metal Detector Survey

As defined in the project design written by Scott Wilson on behalf of the Highways agency the objectives of the metal detector survey were

- to identify/confirm the presence of Anglo-Saxon activity within the defined area of the proposed balancing ponds (Area B Figure); as suggested by previous finds
- to record the position and distribution of metal objects recovered from a rapid survey of the topsoil
- to correlate the results of this survey with the results of other fieldwork to establish the presence of absence of Anglo-Saxon activity, its potential date, range and nature

Detailed Methodology and results can be found in Appendix 2.

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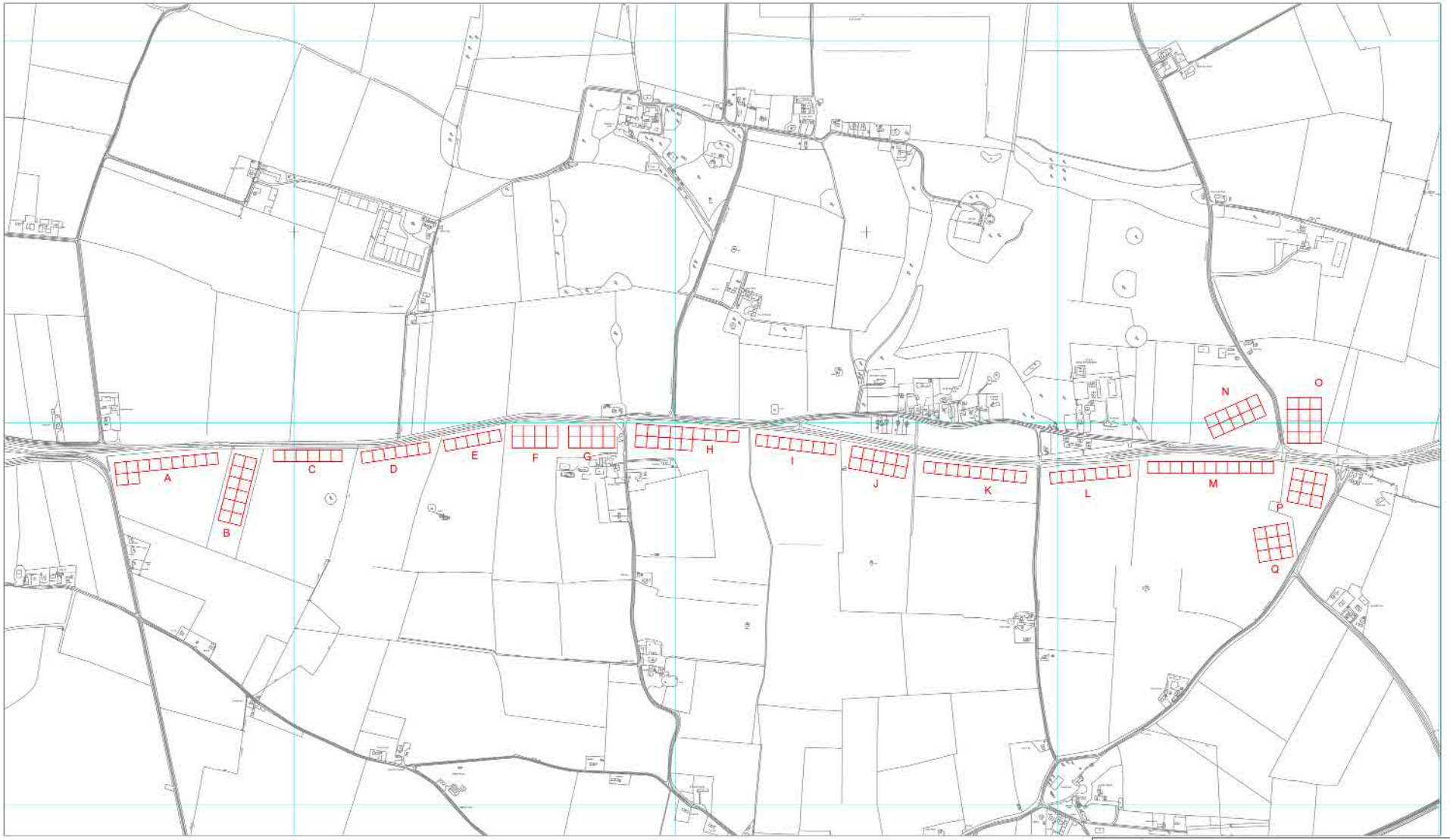

Archaeological Project Services

Project Name: A47 Dualling Blofield to North Hurlingham

Scale 1:15000	Drawn by: DT	Report No: 164/06

Figure 1. Location of Survey Areas

Appendix 1

GEOPHYSICAL SURVEY

STRATASCAN

Geophysical Survey Report

A47 Blofield to North Burlingham, Norfolk

for

Archaeological Project Services

October 2006

J2225.

Richard Smalley BA (Hons) AIFA

Document Title:	**Geophysical Survey Report** **A47 Blofield to North Burlingham, Norfolk.**
Client:	**Archaeological Project Services**
Stratascan Job No:	**J2225**
Techniques:	**Detailed magnetic survey (gradiometry)**
National Grid Ref:	**TG 360 100**

Field Team:	**Lee Moorhead, MSc. Alec Philips BSc.**
Project Manager:	**Simon Stowe BSc. (Hons)**
Report written by:	**Simon Stowe BSc. (Hons)**
CAD illustration by:	**Richard Smalley BA (Hons) AIFA,** **Simon Haddrell BEng. (Hons) AMBCS** **Simon Stowe BSc. (Hons)**
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LIST OF FIGURES

1 SUMMARY OF RESULTS

The geophysical survey undertaken over approximately 14ha of agricultural land between Blofield and North Burlingham has identified a number of anomalies of possible archaeological origin. However, many of the survey areas have been affected by the presence of a modern service running the length of the site.

2 INTRODUCTION

2.1 Background synopsis

Stratascan were commissioned by Archaeological Project Services to undertake a geophysical survey of an area outlined for development of the A47.

2.2 Site location

The site is located between Blofield and North Burlingham, Norfolk at OS ref. TG 360 100.

2.3 Description of site

The survey area consists of approximately 14ha of agricultural land running parallel with the current route of the A47. Areas A, I and J could not be surveyed due to the planting of crops. However, as the modern pipeline also passes through these areas will not be surveyed in future due to the severe magnetic disturbance.

2.4 Geology and soils

The underlying geology is Norwich Crag, Red Crag and Chillesford Clay (British Geological Survey South Sheet, Fourth Edition Solid, 2001). The overlying soils are known as Wick 2 soils which are a type of Glaciofluvial and Aeolian drift and till. These consist of deep well drained coarse loamy soils, often stoneless. Some similar soils with slowly permeable subsoils and slight seasonal waterlogging (Soil Survey of England and Wales, Sheet 4 Eastern England).

2.5 Site history and archaeological potential

Please refer to section 4.2 of the main APS report.

2.6 Survey objectives

The objective of the survey was to locate any features of possible archaeological significance in order that they may be assessed prior to development.

2.7 Survey methods

Detailed magnetic survey (gradiometry) was used as an efficient and effective method of locating archaeological anomalies. More information regarding this technique is included in the Methodology section below.

3 METHODOLOGY

3.1 Date of fieldwork

The fieldwork was carried out over 9 days from 25th September 2006 to 5th October 2006. Weather conditions during the survey were mainly dry with a few days of rain.

3.2 Grid locations

The location of the survey grids has been plotted in Figure 2 together with the referencing information. Grids were set out using a Leica 705auto Total Station. OS grid references have been provided for the baselines in Figures 2, 3 and 4.

3.3 Survey equipment

The magnetic survey was carried out using a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame. Each sensor has a 1m separation between the sensing elements increasing the sensitivity to small changes in the Earth's magnetic field.

3.4 Sampling interval, depth of scan, resolution and data capture

3.4.1 Sampling interval

Readings were taken at 0.25m centres along traverses 1m apart. This equates to 3600 sampling points in a full 30m x 30m grid.

3.4.2 Depth of scan and resolution

The Grad601-2 has a typical depth of penetration of 0.5m to 1.0m. This would be increased if strongly magnetic objects have been buried in the site. The collection of data at 0.25m centres provides an appropriate methodology balancing cost and time with resolution.

3.4.3 Data capture

The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each job, data is transferred to the office for processing and presentation.

3.5 Processing, presentation of results and interpretation

3.5.1 Processing

Processing is performed using specialist software known as *Geoplot 3*. This can emphasise various aspects contained within the data but which are often not easily seen in the raw data. Basic processing of the magnetic data involves 'flattening' the background levels with respect to adjacent traverses and adjacent grids. 'Despiking' is also performed to remove the anomalies resulting from small iron objects often found on agricultural land. Once the basic processing has flattened the background it is then possible to carry out further processing which may include low pass filtering to reduce 'noise' in the data and hence emphasise the archaeological or man-made anomalies.

The following schedule shows the basic processing carried out on all processed gradiometer data used in this report:

1. *Despike* (useful for display and allows further processing functions to be carried out more effectively by removing extreme data values)

   Geoplot parameters:
   X radius = 1, y radius = 1, threshold = 3 std. dev.
   Spike replacement = mean

2. *Zero mean grid* (sets the background mean of each grid to zero and is useful for removing grid edge discontinuities)

Geoplot parameters:
Threshold = 0.25 std. dev.

3. *Zero mean traverse* (sets the background mean of each traverse within a grid to zero and is useful for removing striping effects)

Geoplot parameters:
Least mean square fit = off

3.5.2 Presentation of results and interpretation

The presentation of the data for each site involves a print-out of the raw data both as greyscale (Figures 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 and 55) and trace plots (Figures 6, 7, 11, 12, 16, 17, 21, 22, 26, 27, 31, 32, 36, 37, 41, 42, 46, 47, 51, 52, 56 and 57), together with a greyscale plot of the processed data (Figures 8, 13, 18, 23, 28, 33, 38, 43, 48, 53 and 58). Magnetic anomalies have been identified and plotted onto the 'Abstraction and Interpretation of Anomalies' drawing for the site (Figure 9, 14, 19, 24, 29, 34, 39, 44, 49, 54 and 59).

4 RESULTS

4.1 Area B

Positive linear anomalies are evident within the central region of this survey area. These anomalies are likely to represent cut features of possible archaeological origin. A discrete positive anomaly can be noted in the south western corner of Area B. This feature has been interpreted as a possible pit and may be of an archaeological nature.

The results in the northern limits of this survey area are dominated by the presence of magnetic debris suggesting that some form of ground disturbance has taken place. A bipolar anomaly in the south of this area is likely to represent a buried ferrous object.

4.2 Area F

The data from Area F is greatly affected by disturbance from the metallic service that runs through the site. However a number of cut features of possible archaeological origin are evident in the form of positive linear and area anomalies.

4.3 Area K

As with Area F, the majority of the data in Area K is dominated by magnetic disturbance. However, a number of positive linear anomalies have been identified. Two of these seem to be related to agricultural activity. The westernmost anomaly, however, may be of an archaeological origin. Bipolar anomalies in the east of the survey area indicate the presence of buried ferrous objects.

4.4 Area L

Magnetic variation of a possible geological or pedological origin can be seen across the entirety of Area L. Three positive area anomalies indicating the presence of cut features may suggest archaeological activity in the western limits of this survey area.

4.5 Area M

A single positive, curvilinear anomaly runs approximately north to south across this area. This anomaly represents a cut feature of possible archaeological origin. Three areas of magnetic disturbance observed in the corners of the area may be related to pedological variations.

4.6 Area N

A number of positive linear anomalies are evident running approximately east to west across the centre of Area N. These anomalies are likely to represent agricultural activity taking place on site. Two positive linear anomalies of possible archaeological origin have been noted in the northern limits of this survey area. A discrete positive anomaly interpreted as a possible pit can be seen in the south western limits.

4.7 Area O

Positive linear anomalies representing cut features of possible archaeological origin are evident across this survey area. A small positive area anomaly can also be noted in the eastern limits. Two weak positive area anomalies are also evident within Area O. The origin of these anomalies remains unknown. Two discrete positive anomalies indicating possible pits have been identified in the southern limits of the survey area.

A negative linear anomaly is evident running approximately north-south through this survey area. This anomaly may represent a possible former earthwork or bank.

4.8 Area P

A positive area anomaly flanked by two negative linear anomalies, suggesting some form of bank and ditch arrangement, is evident in the eastern limits of this survey area.

A possible pit may also be noted in close proximity to this feature. Bipolar anomalies indicate the presence of buried ferrous objects.

4.9 Area Q

The data collected in Area Q is dominated by the magnetic disturbance created by the modern service. However, a number of positive area anomalies, indicating cut features of possible archaeological origin have also been identified.

4.10 Areas C, D, E G and H

The gradiometer data collected in these areas is dominated by magnetic disturbance from a service that runs along the length of the survey area. Any subtle features of archaeological origin that may be present will have been masked by this disturbance.

5 CONCLUSION

The gradiometer data collected over approximately 14ha of agricultural land between Blofield and North Burlingham, Norfolk has been greatly affected by the presence of a modern service running the length of the survey area. However, a number of anomalies have been identified that suggest archaeological activity on site.

Positive linear and area anomalies have been evident in a number of survey areas and represent cut features, such as ditches, possibly of an archaeological origin. Negative linear and area anomalies indicating possible former banks or earthworks have also been identified in a number of the survey areas.

APPENDIX A – Basic principles of magnetic survey

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremnant* material.

Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremnance is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremnant archaeological features can include hearths and kilns and material such as brick and tile may be magnetised through the same process.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically either 0.5 or 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried field. The difference between the two sensors will relate to the strength of a magnetic field created by a buried feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity, disturbance from modern services etc.

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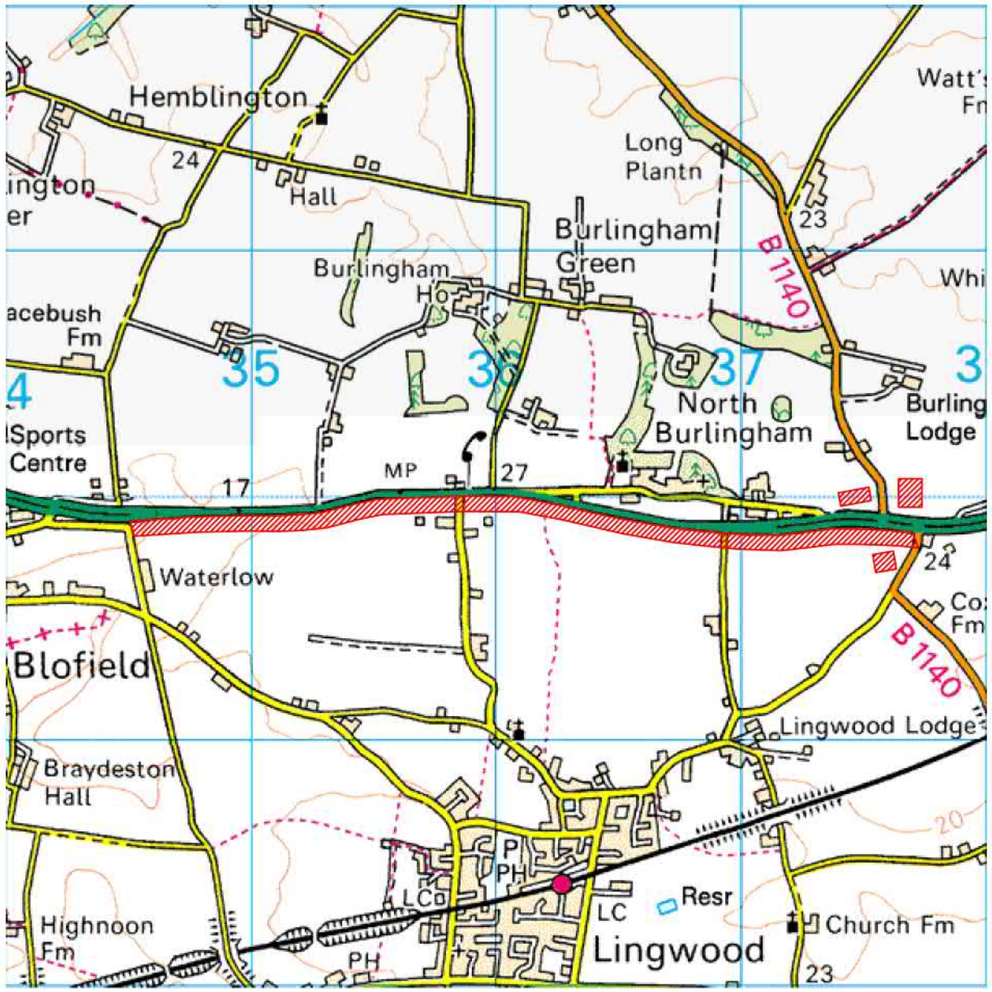

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Amendments

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Site centred on NGR TG 360 100

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
LOCATION PLAN OF SURVEY AREA

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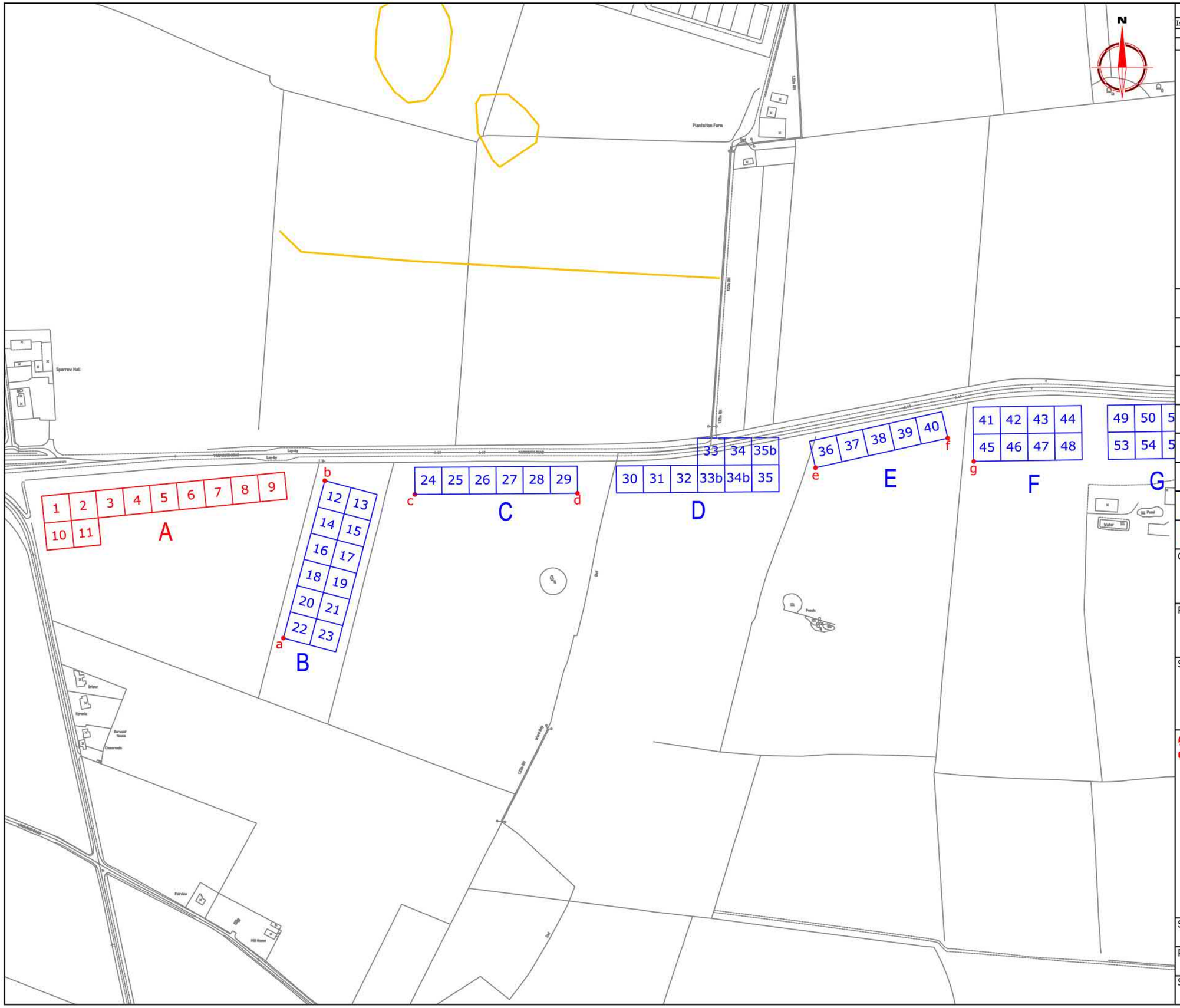

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Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
SITE PLAN SHOWING LOCATION OF SURVEY GRIDS AND REFERENCING -WESTERN LIMITS

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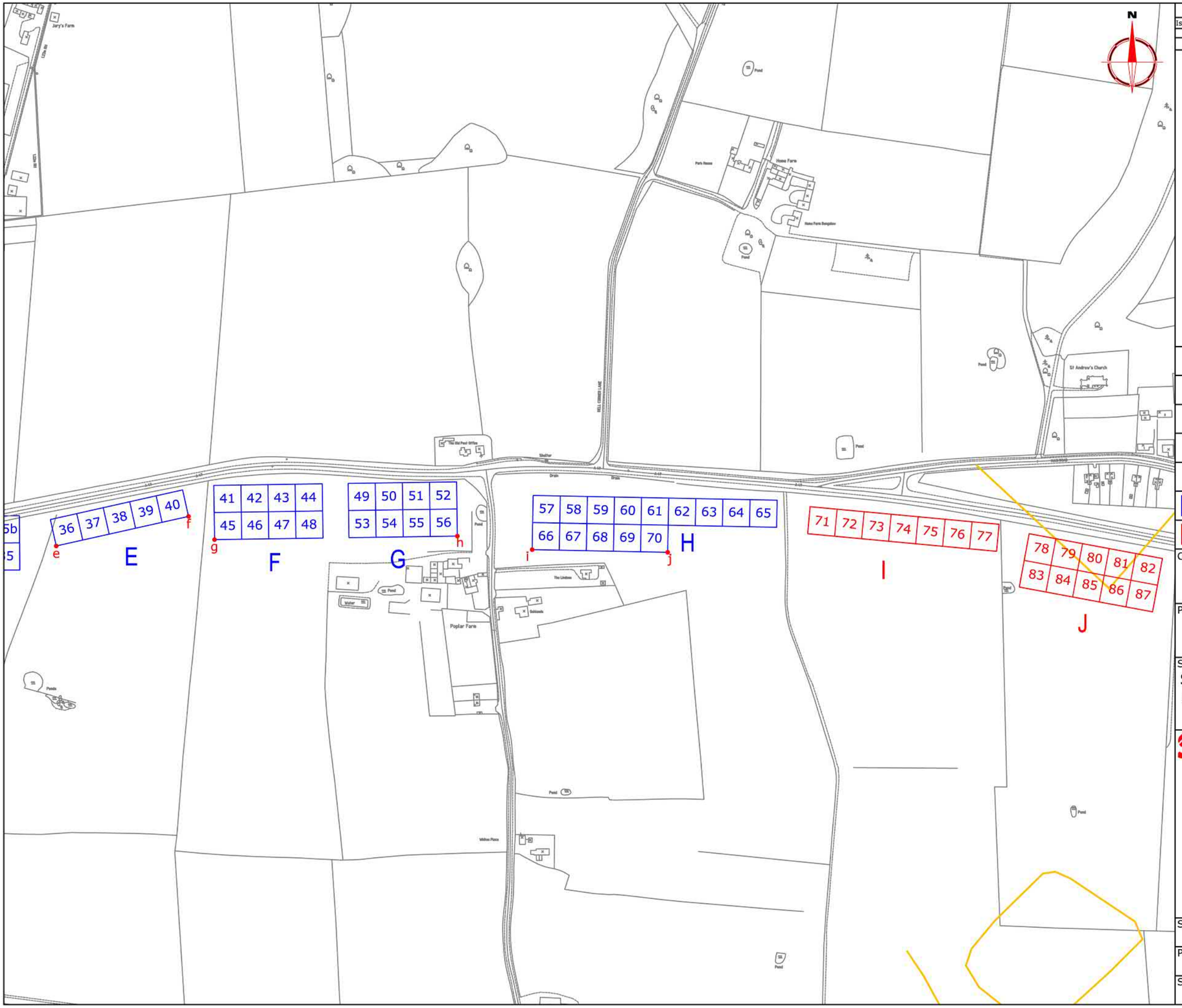

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Client
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Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
SITE PLAN SHOWING LOCATION OF SURVEY GRIDS AND REFERENCING -CENTRAL AREA

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33	Survey grids- unable to survey

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
SITE PLAN SHOWING LOCATION OF SURVEY GRIDS AND REFERENCING -EASTERN LIMITS

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Scale 1:4000 (0m 40 80 120 160 200)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEPT 06	RAJS	04

YARMOUTH ROAD

Lay-by

Lay-by

A 47

N

B

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client

APS

Project Title Job No. 2225

GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject

PLOT OF RAW GRADIOMETER DATA - AREA B

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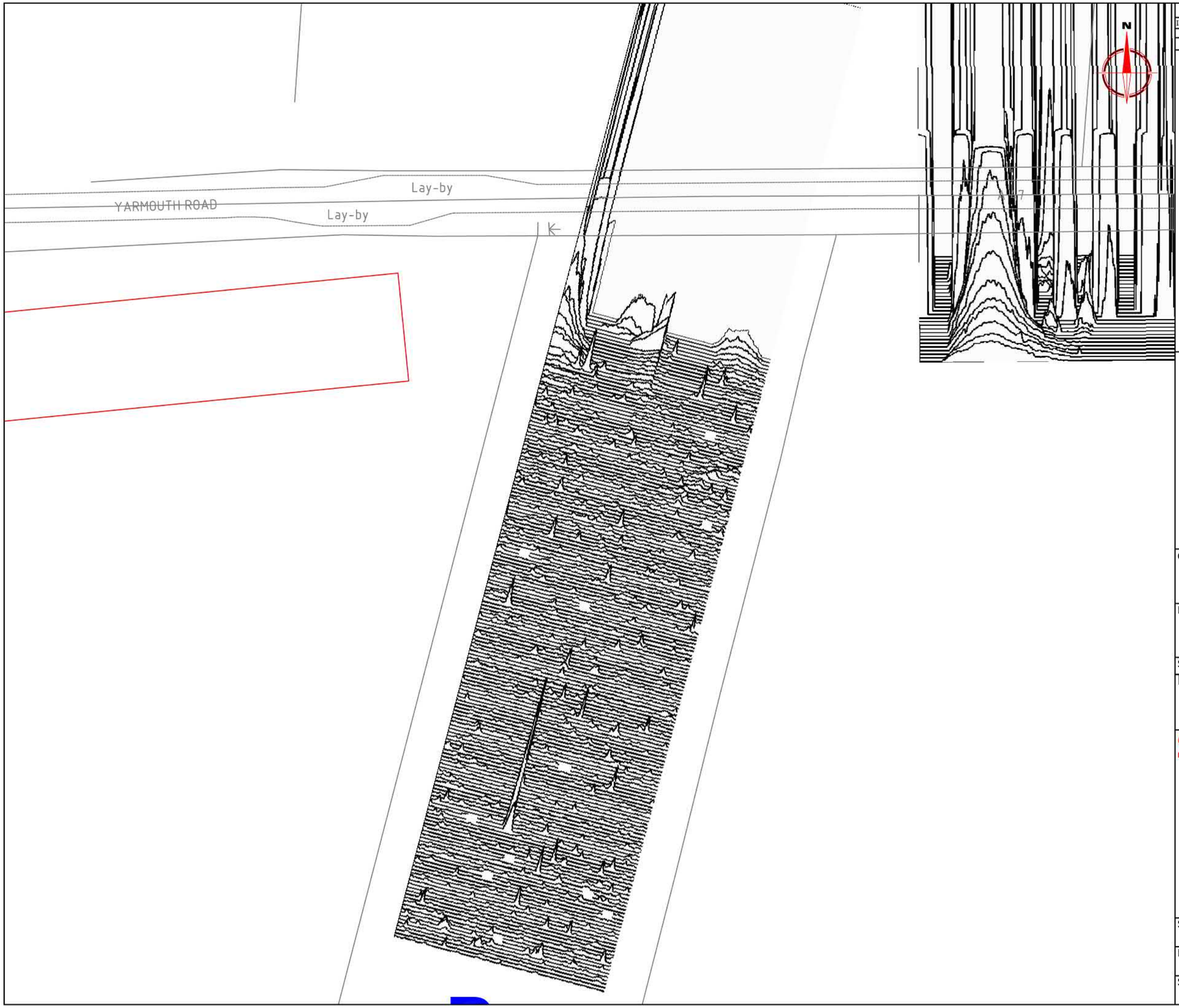
REGISTERED ORGANISATION IFA

Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	05



Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA
SHOWING POSITIVE VALUES
AREA B

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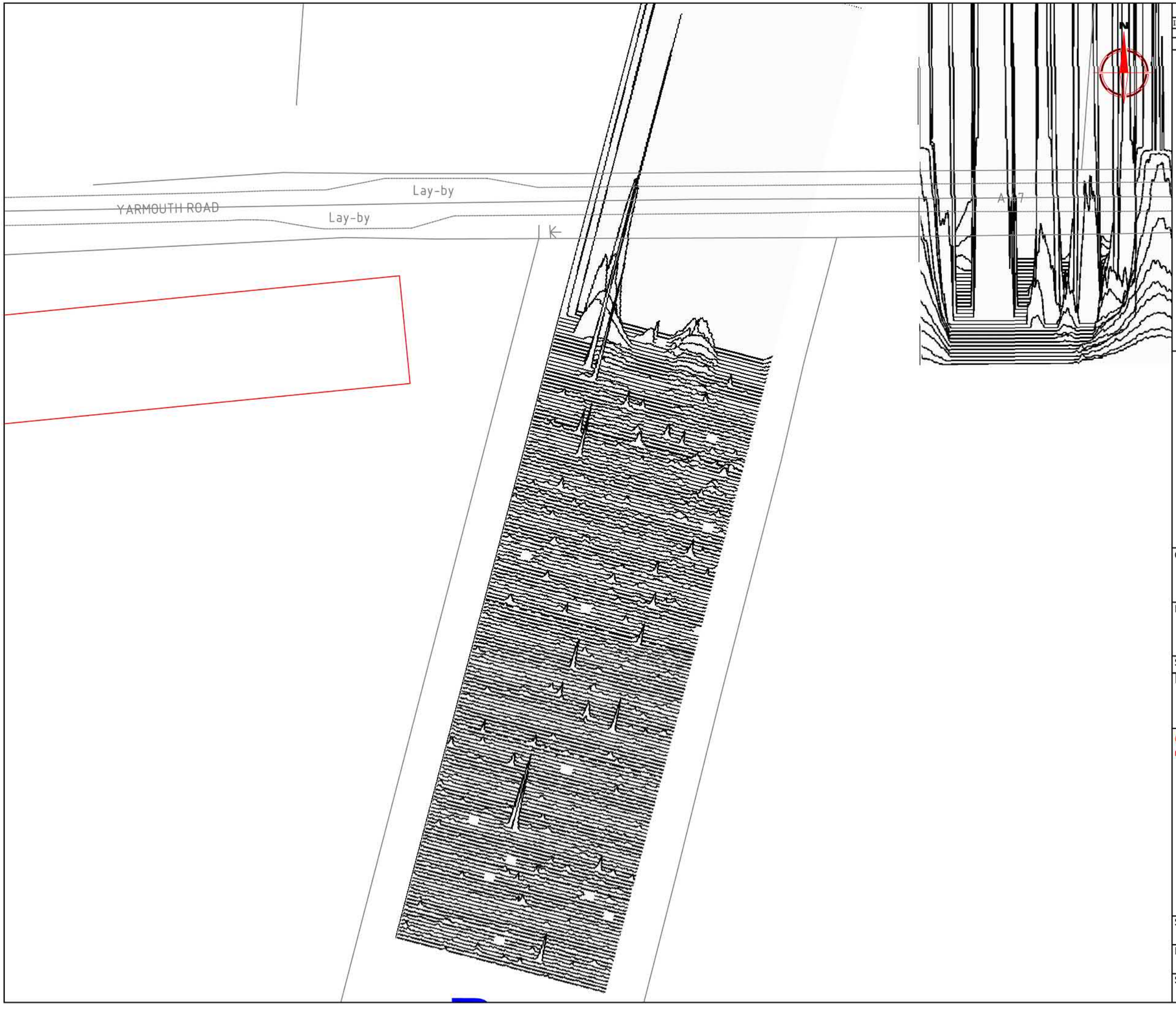
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	06



Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA B

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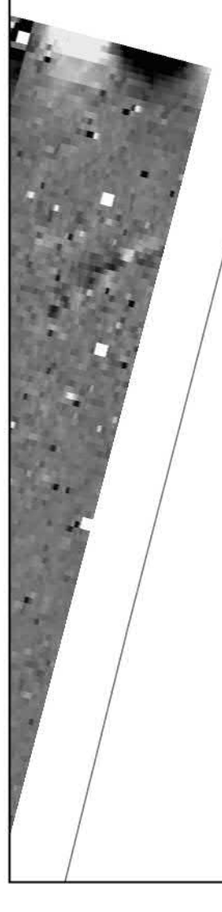
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	07



A 47

A 47

YARMOUTH ROAD

C

Def

N

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA C

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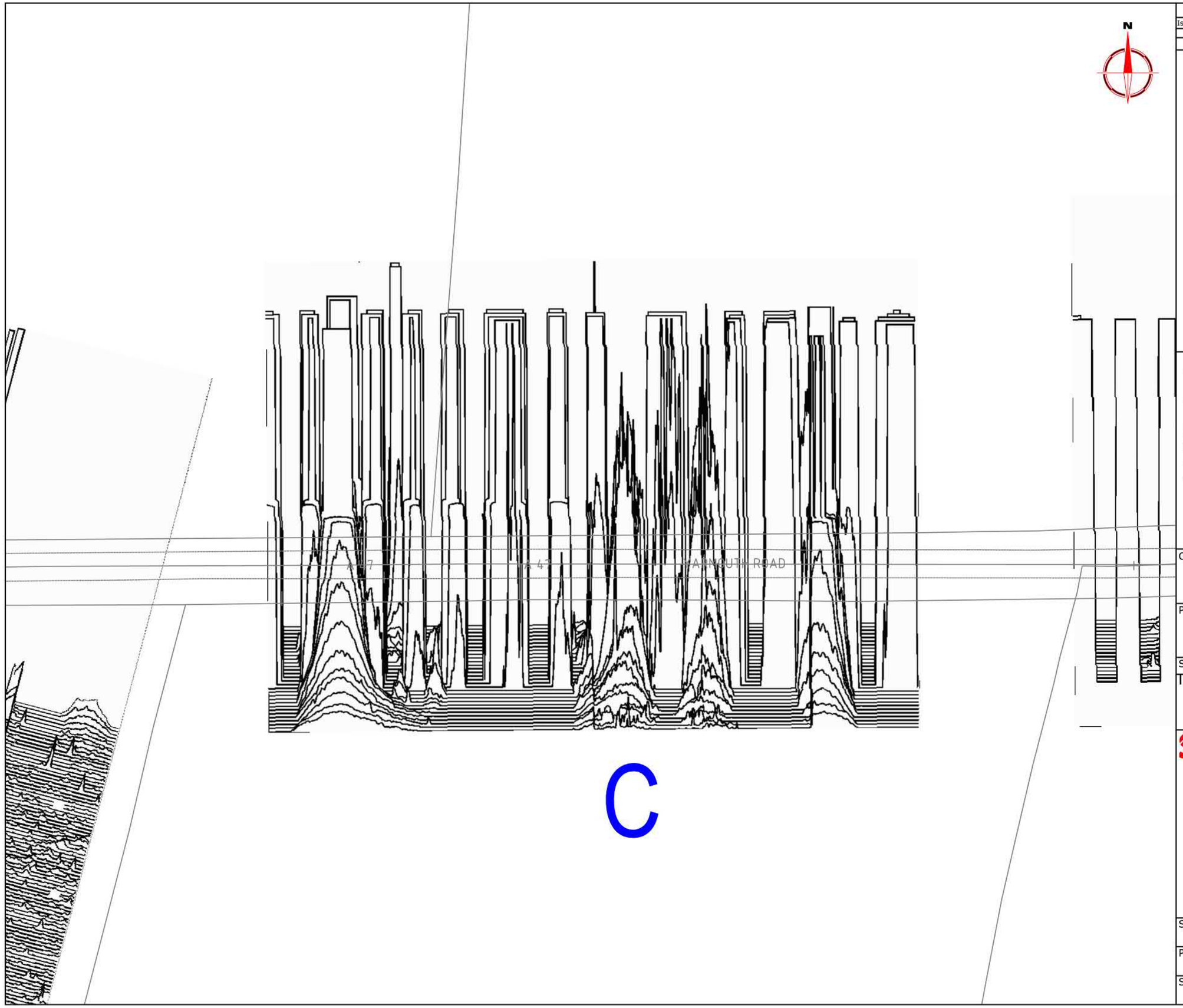
REGISTERED ORGANISATION IFA

Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	08



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING POSITIVE VALUES AREA C

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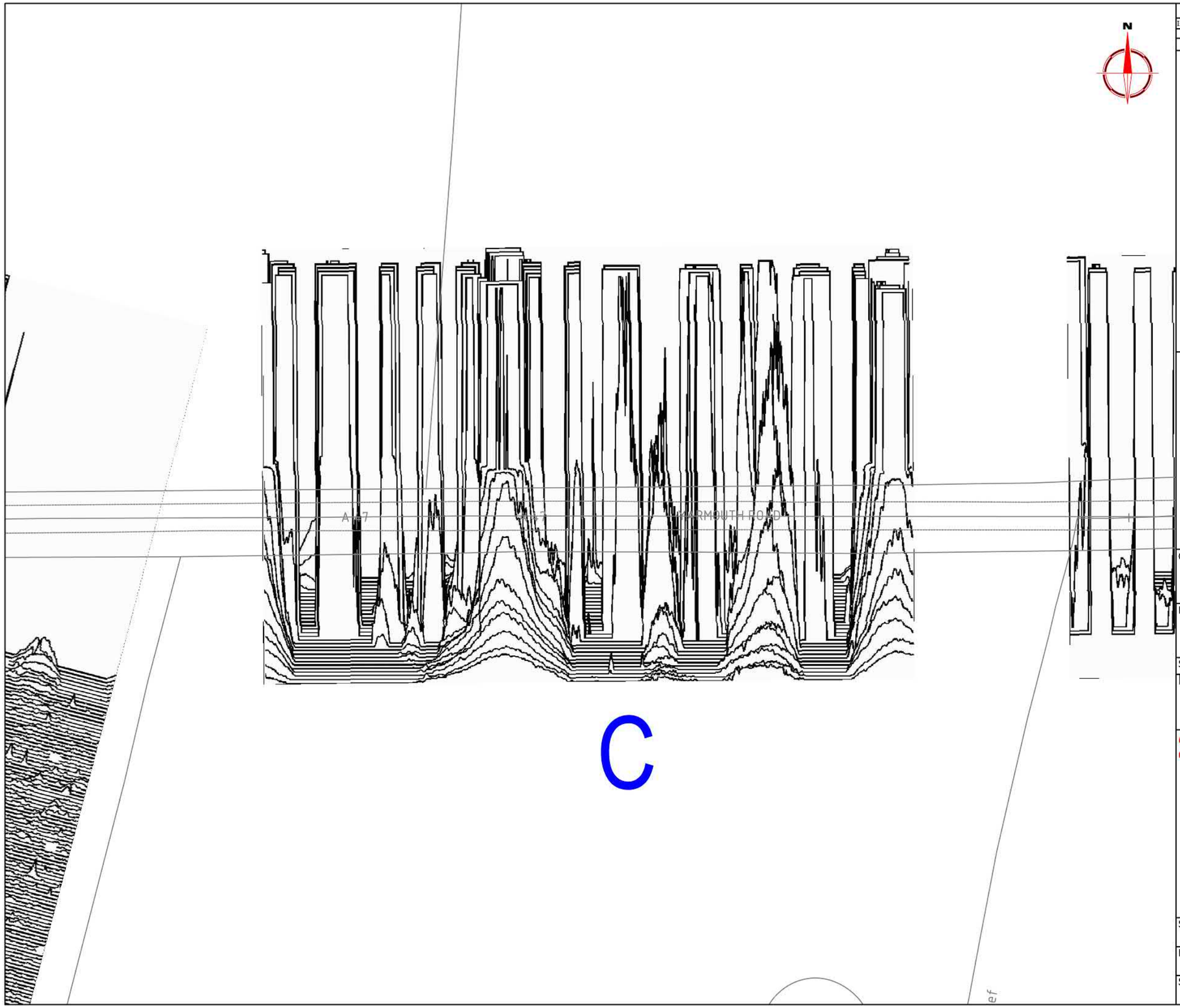
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	09



Amendments		
Issue No.	Date	Description
3	DEC 06	TITLE
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA C

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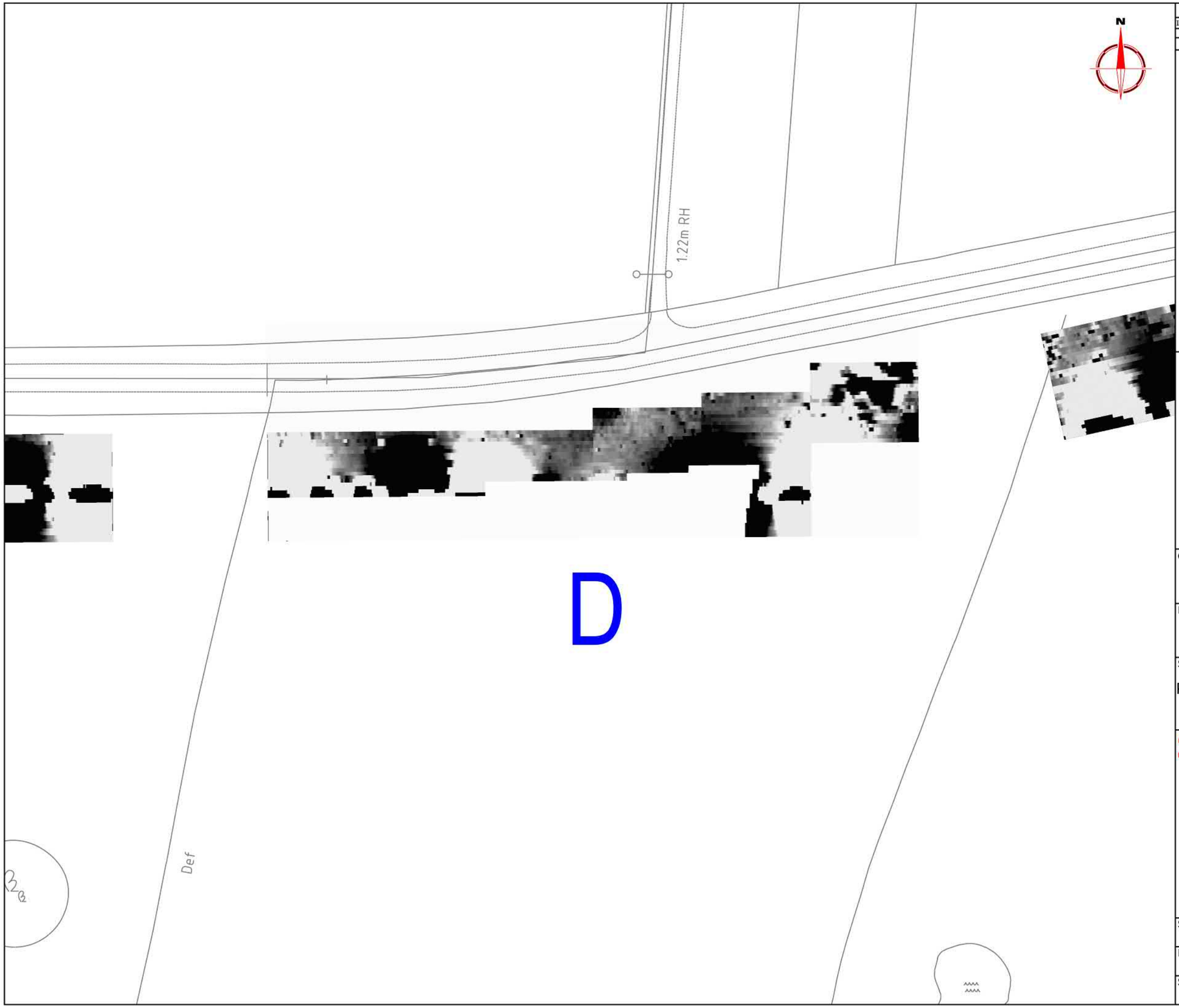
Scale 1:1000 — 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	03
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	10



Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA D

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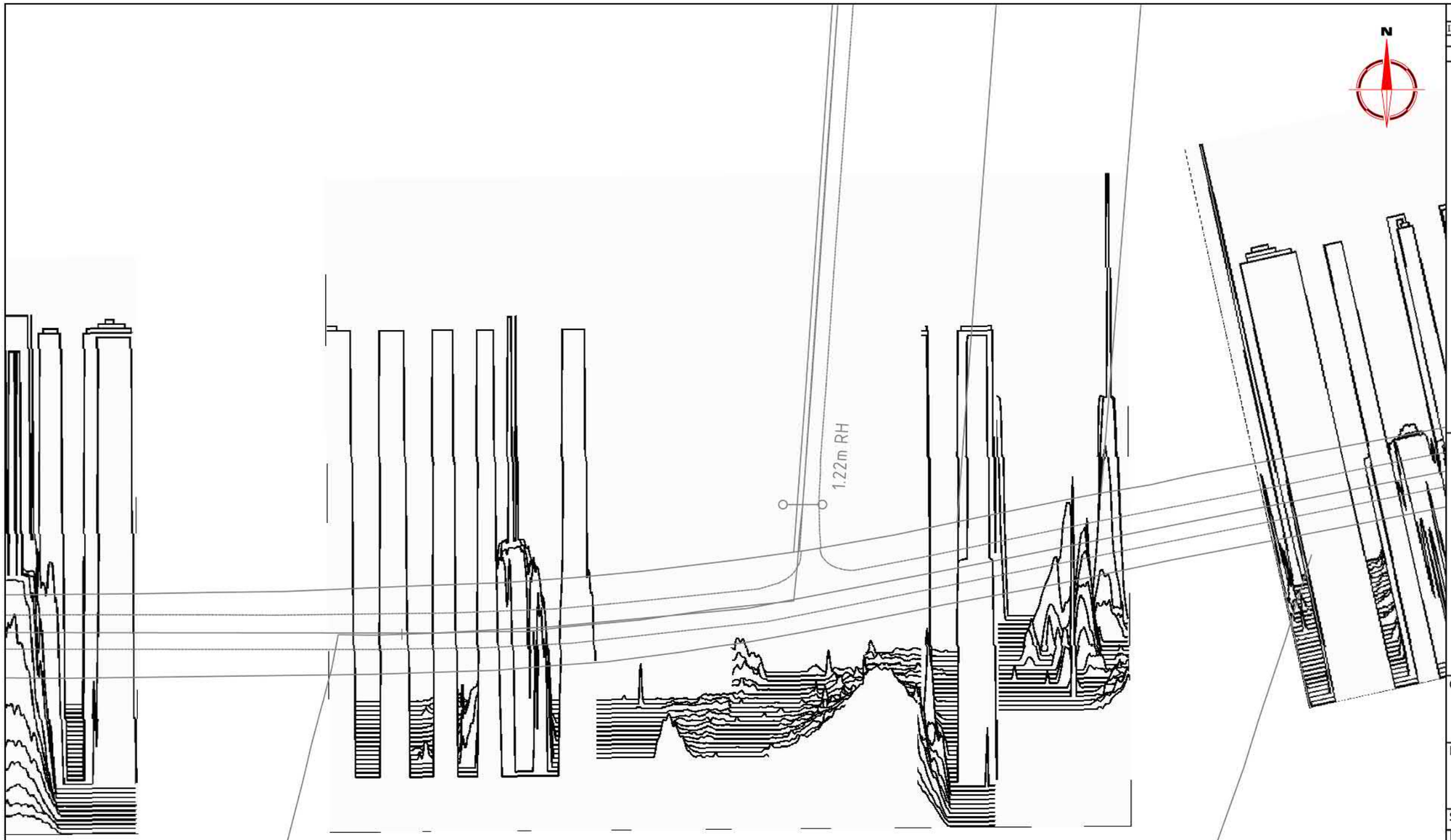
REGISTERED ORGANISATION IFA

Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	11



D

Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING POSITIVE VALUES AREA D

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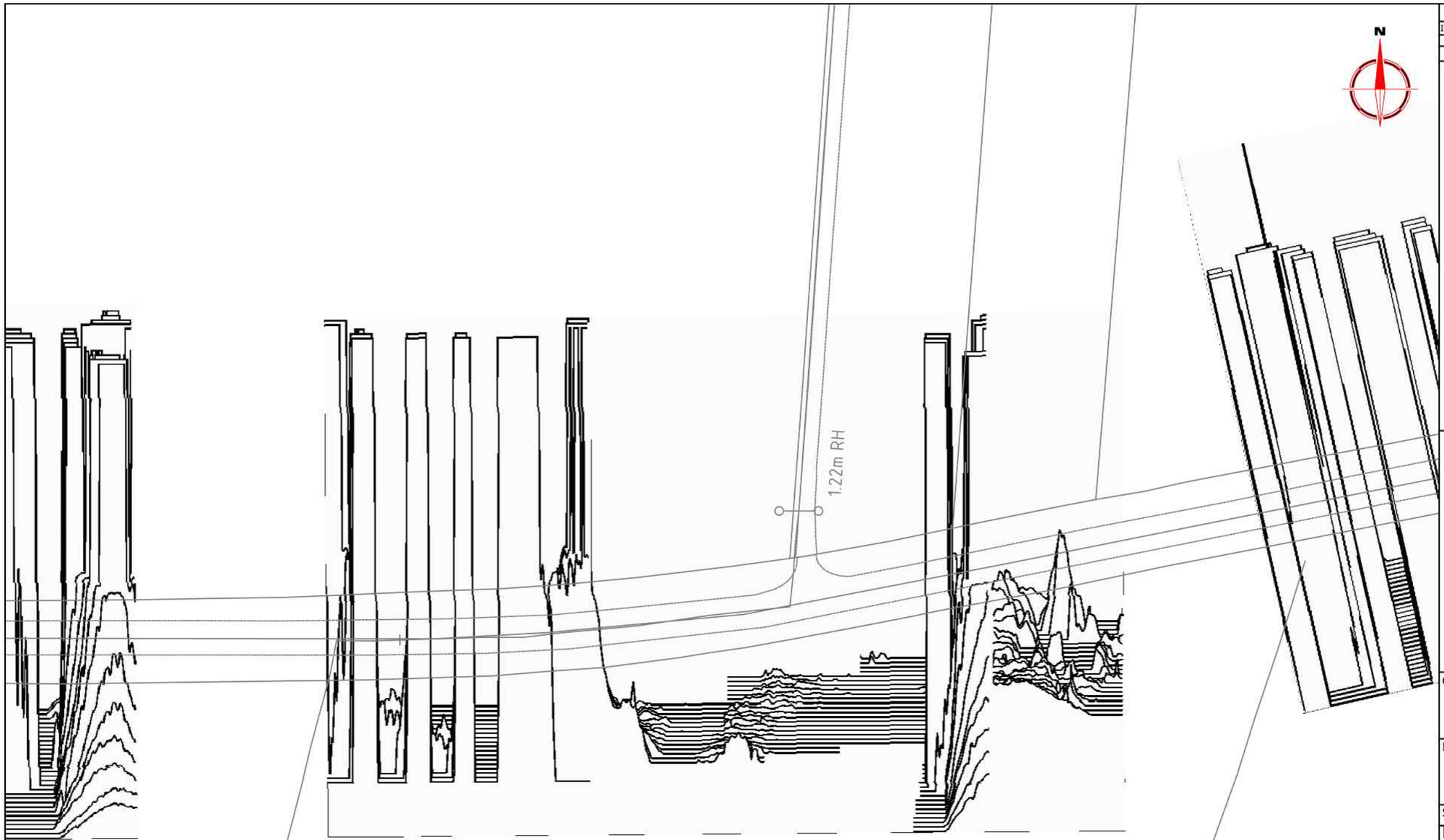
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	12



D

Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA D

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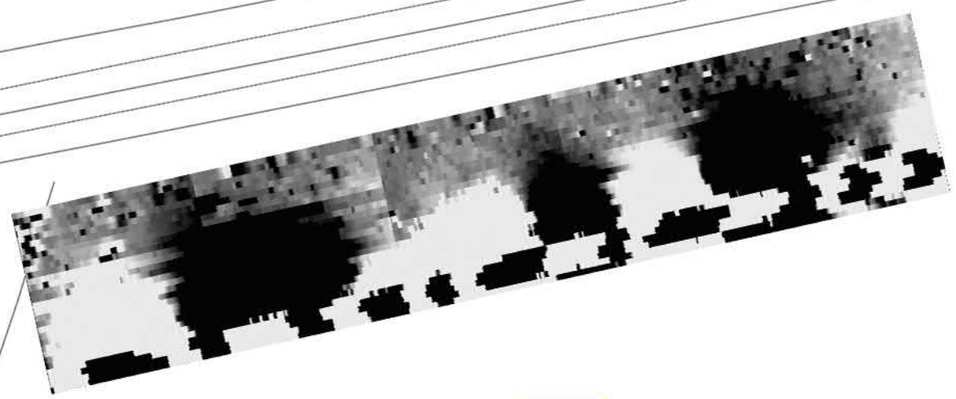
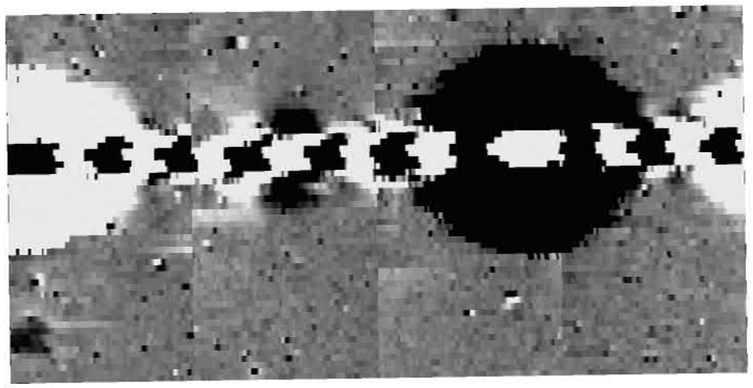
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	13



E



F

A47

A47

N

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA E & F

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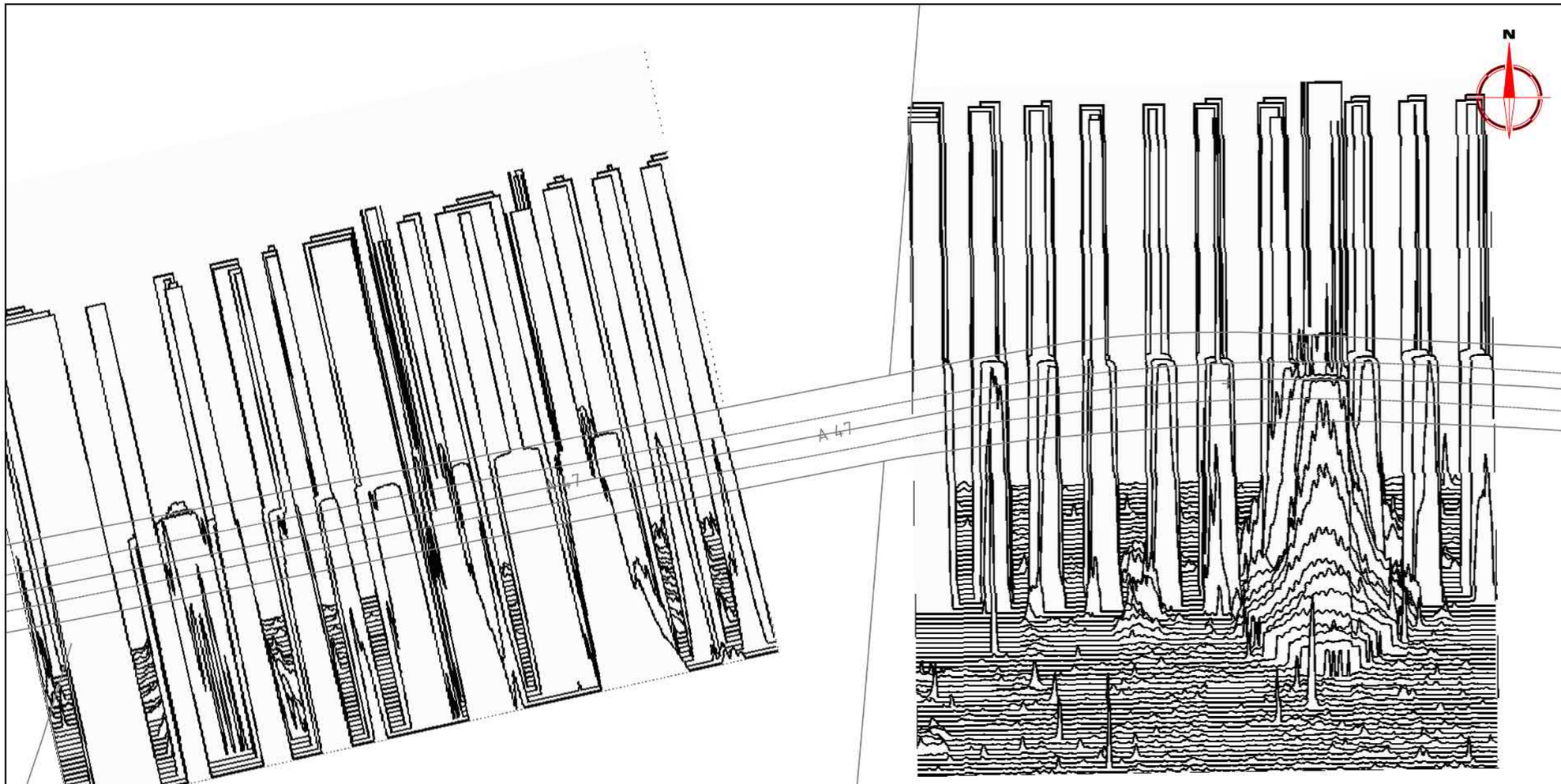
Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	14



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA
SHOWING POSITIVE VALUES
AREA E & F

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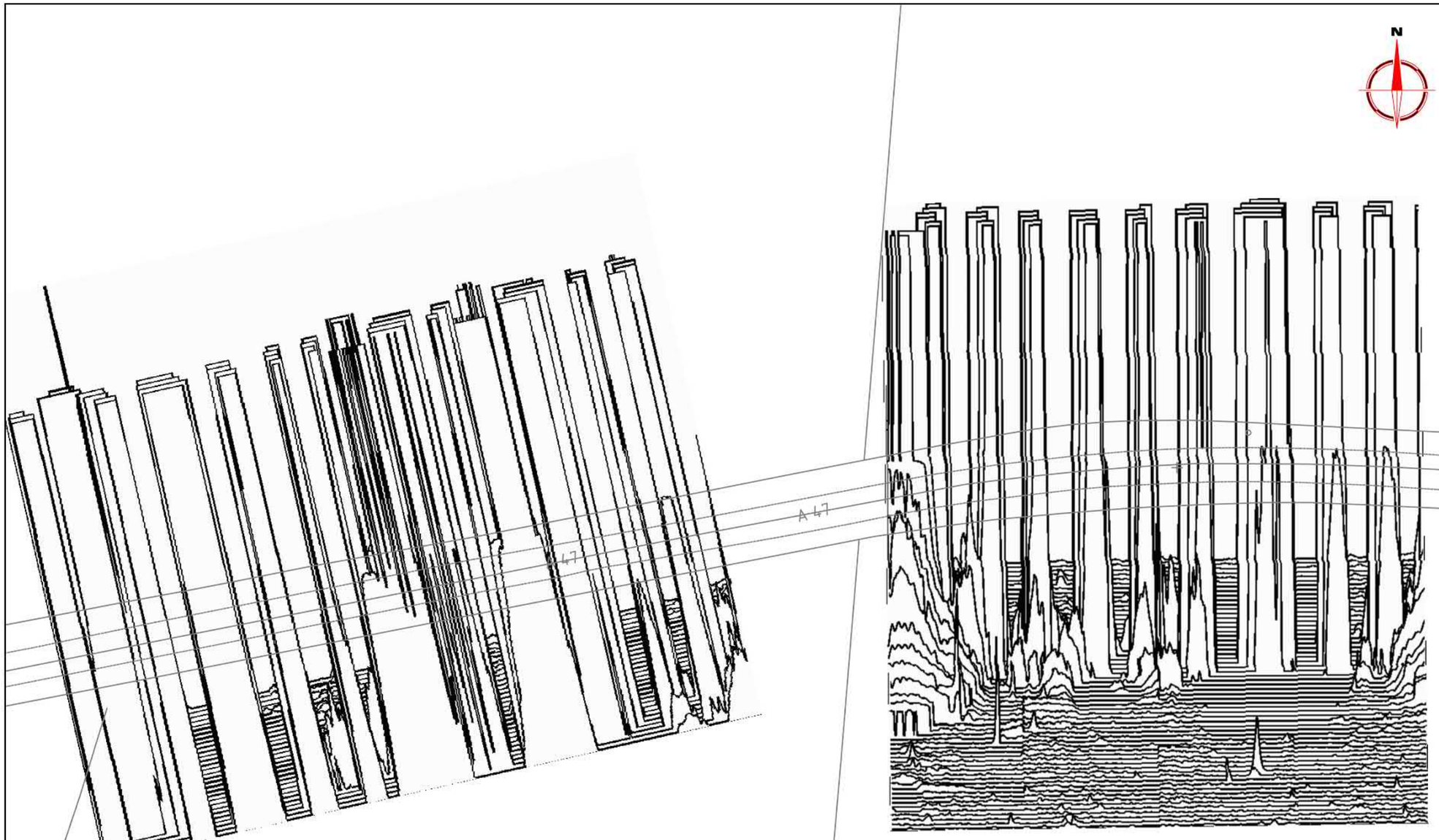
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	15



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA E & F

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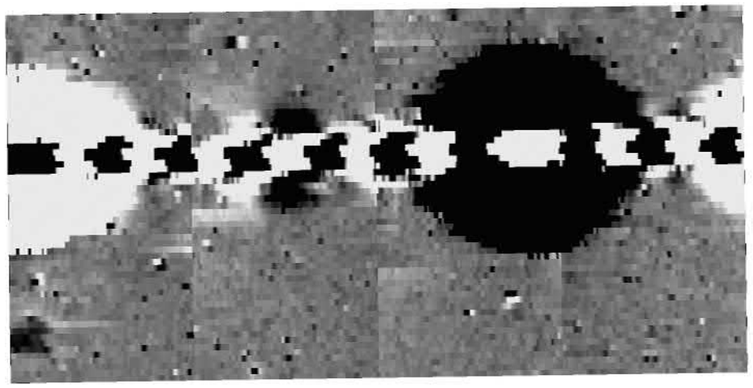
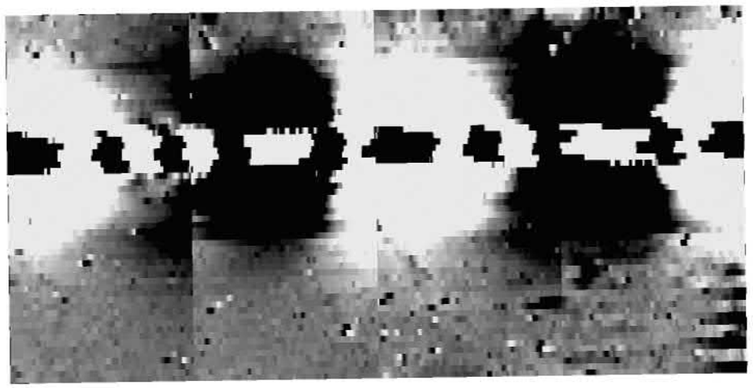
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	16





F

G

A47

The Old Post Office

Pond

Water

Pond

Poplar Farm

N

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA F & G

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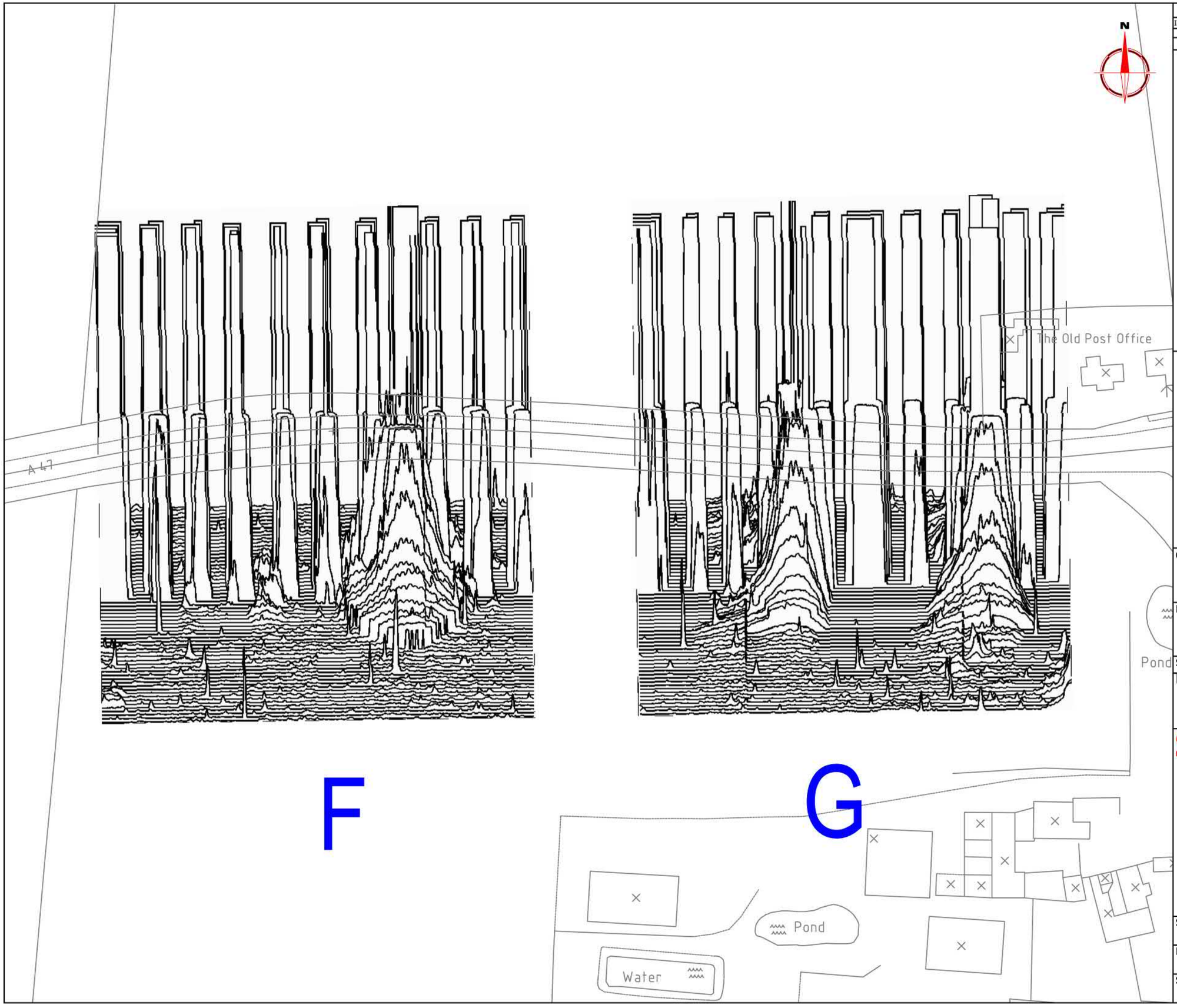
REGISTERED ORGANISATION IFA

Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	17



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA
SHOWING POSITIVE VALUES
AREAS F & G

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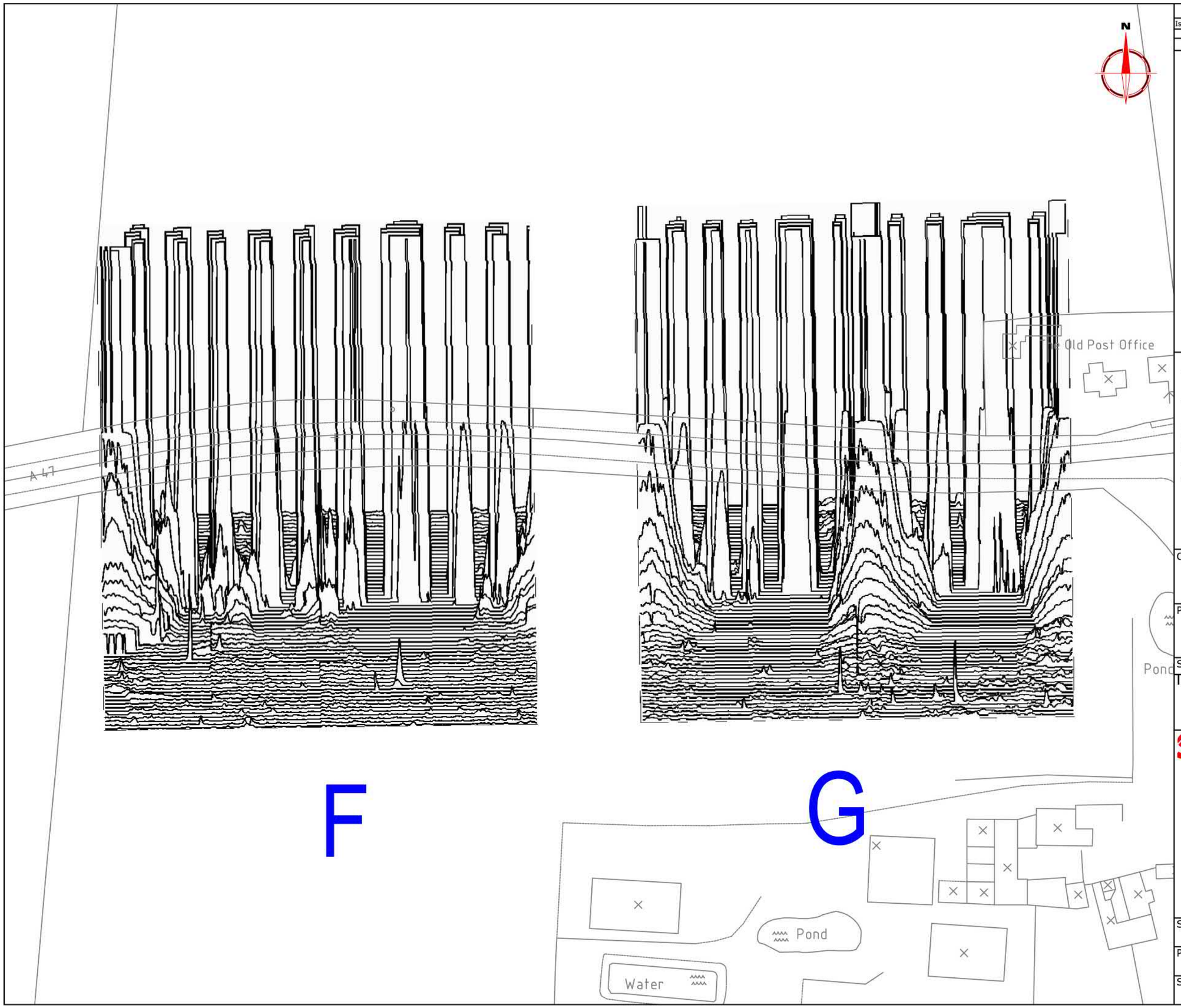
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	18



Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREAS F & G

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Scale 1:1000 — 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	19

Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA H

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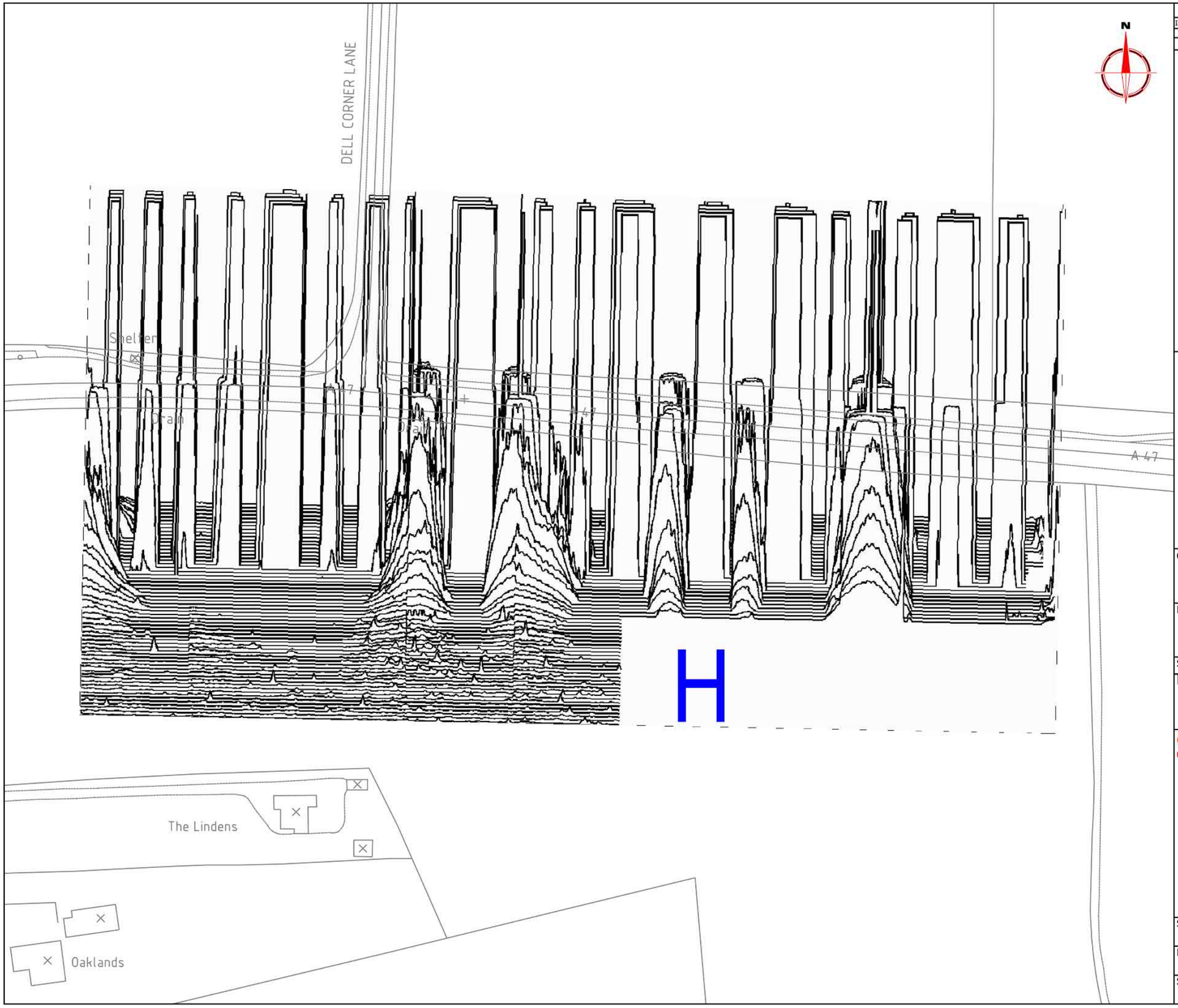
Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	20



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING POSITIVE VALUES AREA H

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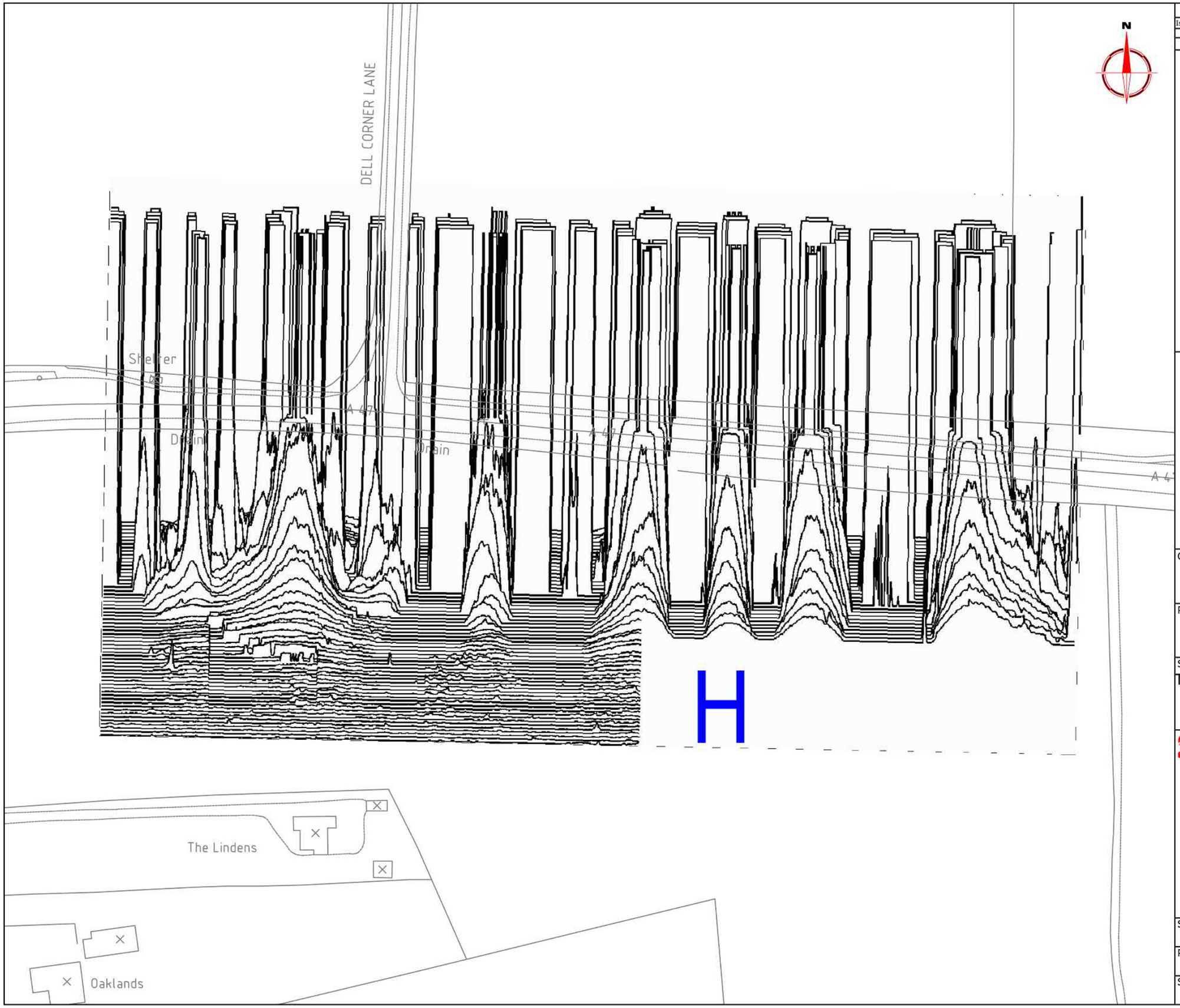
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	21



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA H

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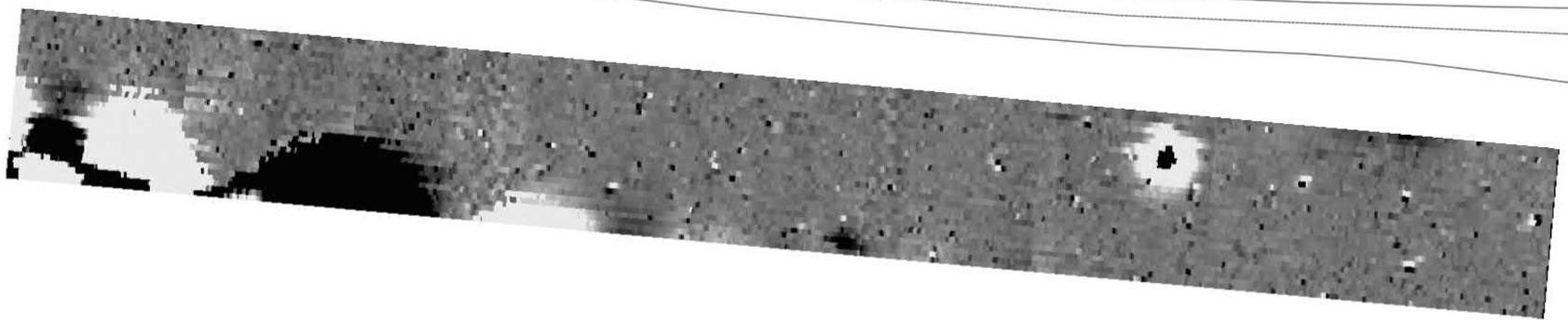
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	22

MAIN ROAD



K

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA K

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Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	23

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA
SHOWING POSITIVE VALUES
AREA K

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Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	24

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA K

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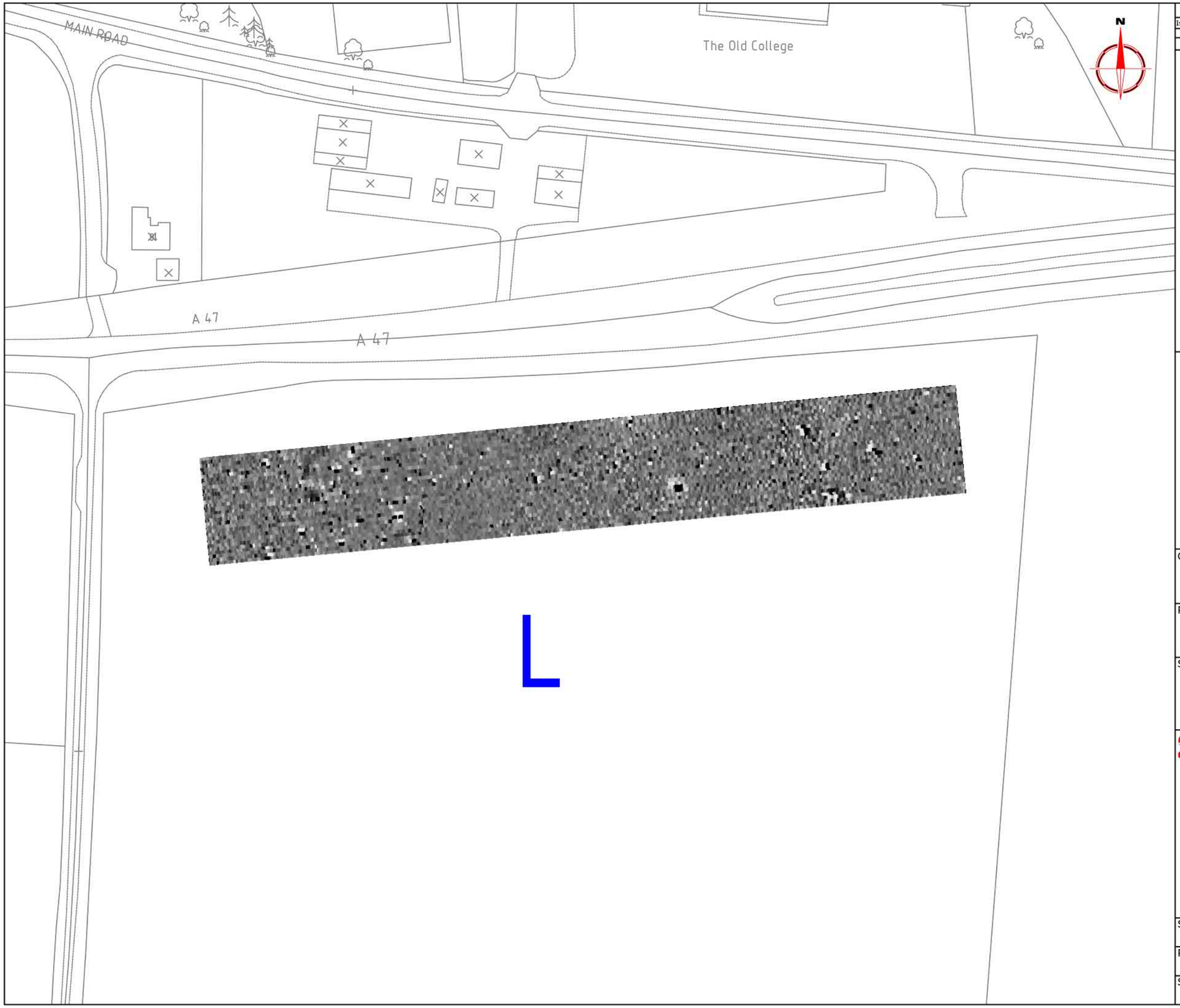
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	25

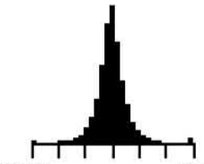


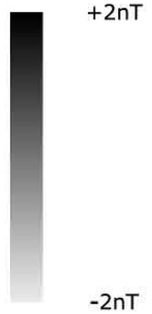
Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)





Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA -AREA L

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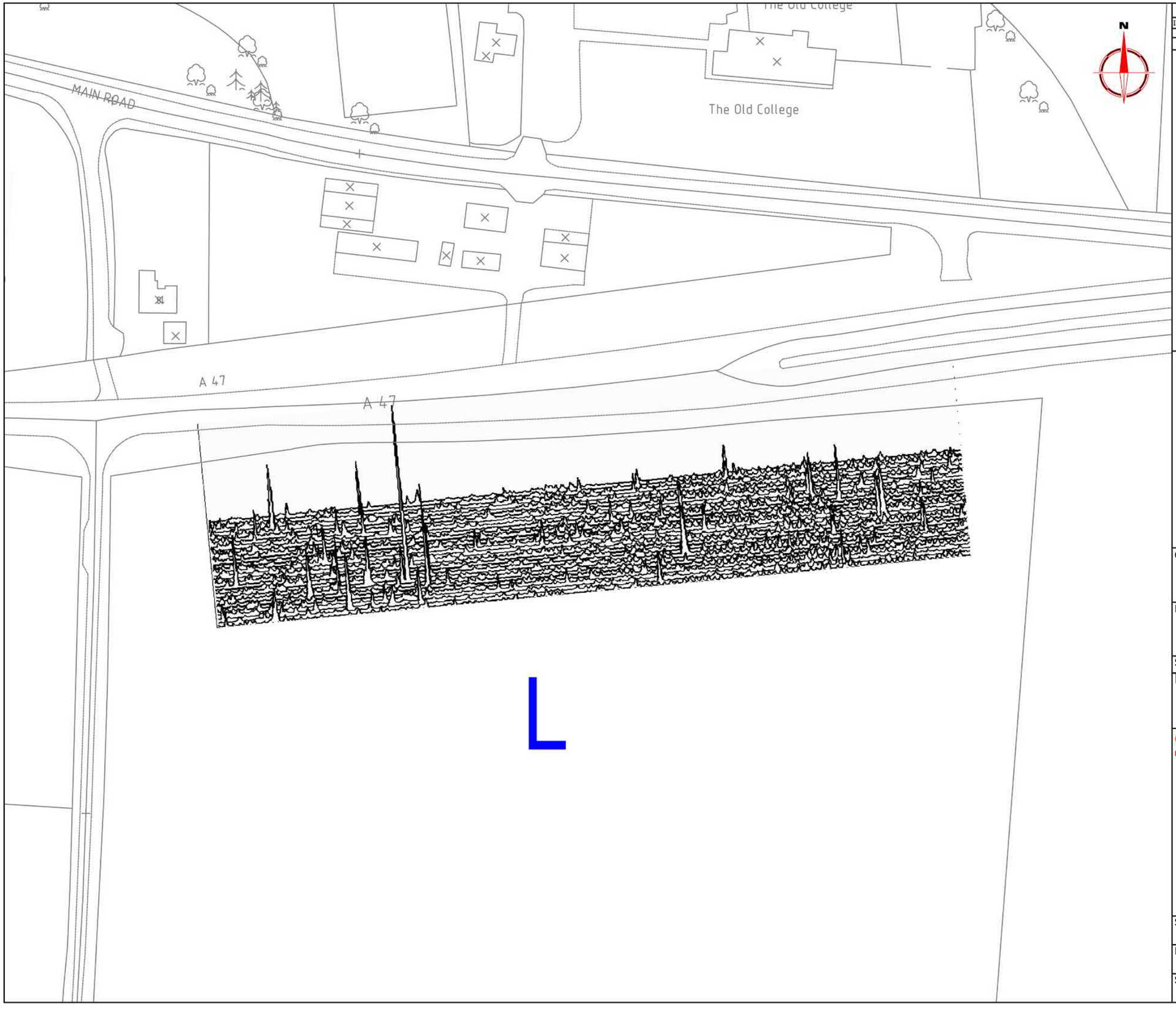
Scale 1:1000 — 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	26



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING POSITIVE VALUES AREA L

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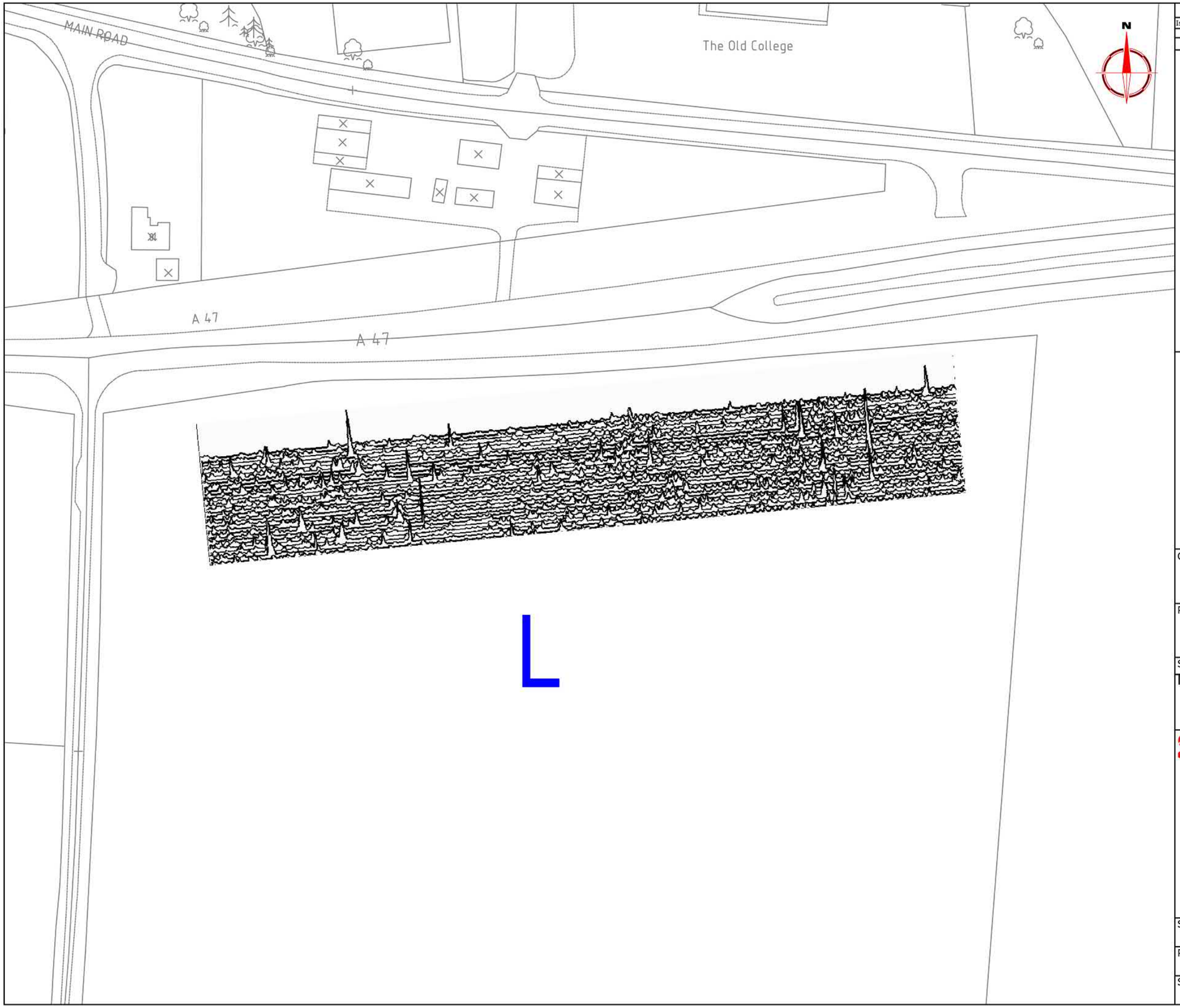
Scale 1:1000 — 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	27



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA L

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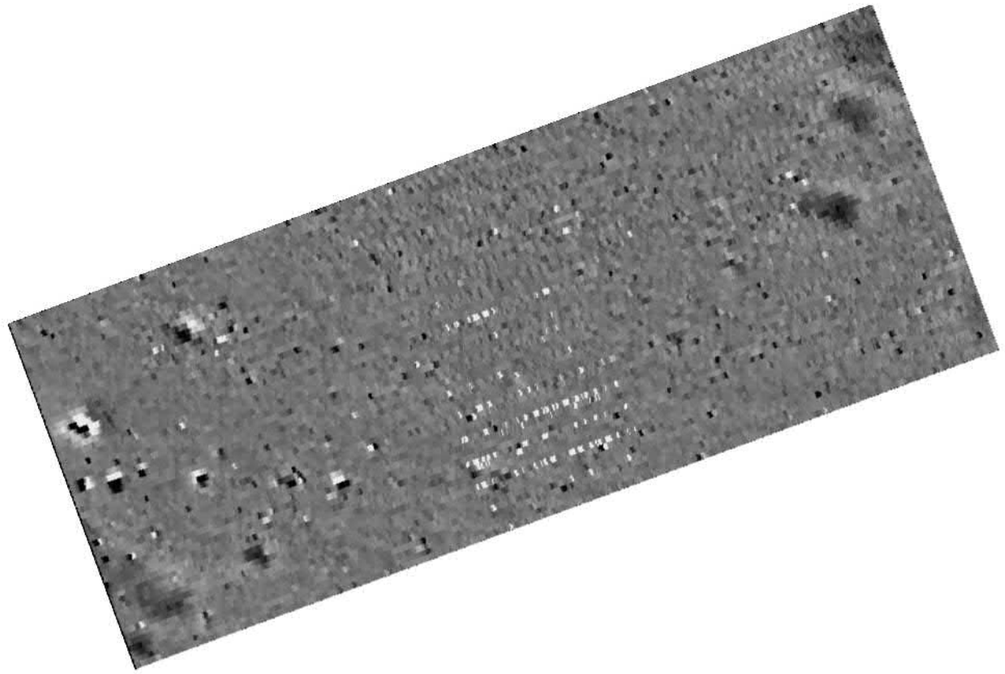
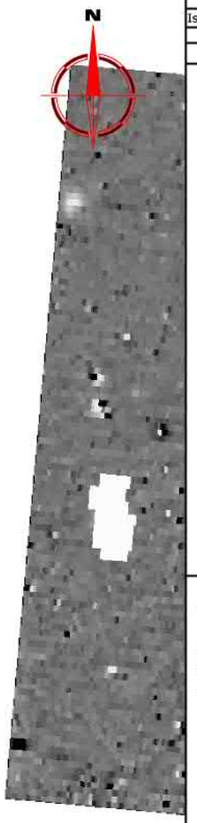
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	28

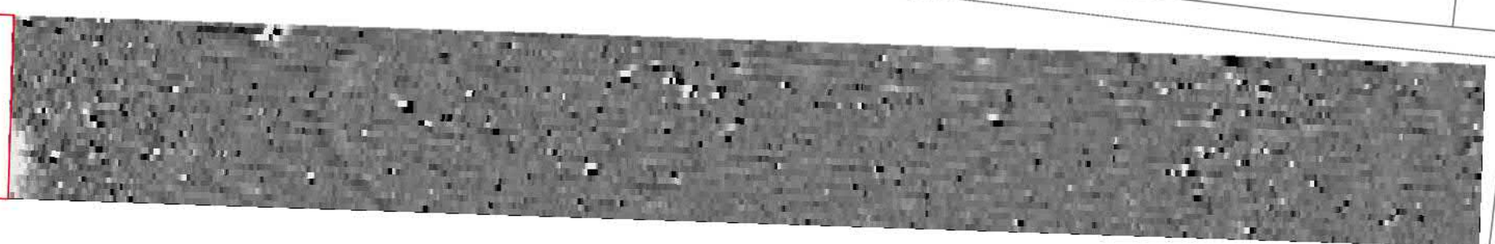
N





B 1140 SOUTH WALSHAM ROAD

B 1140



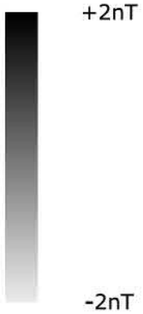
M

Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)



Client
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Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA M & N

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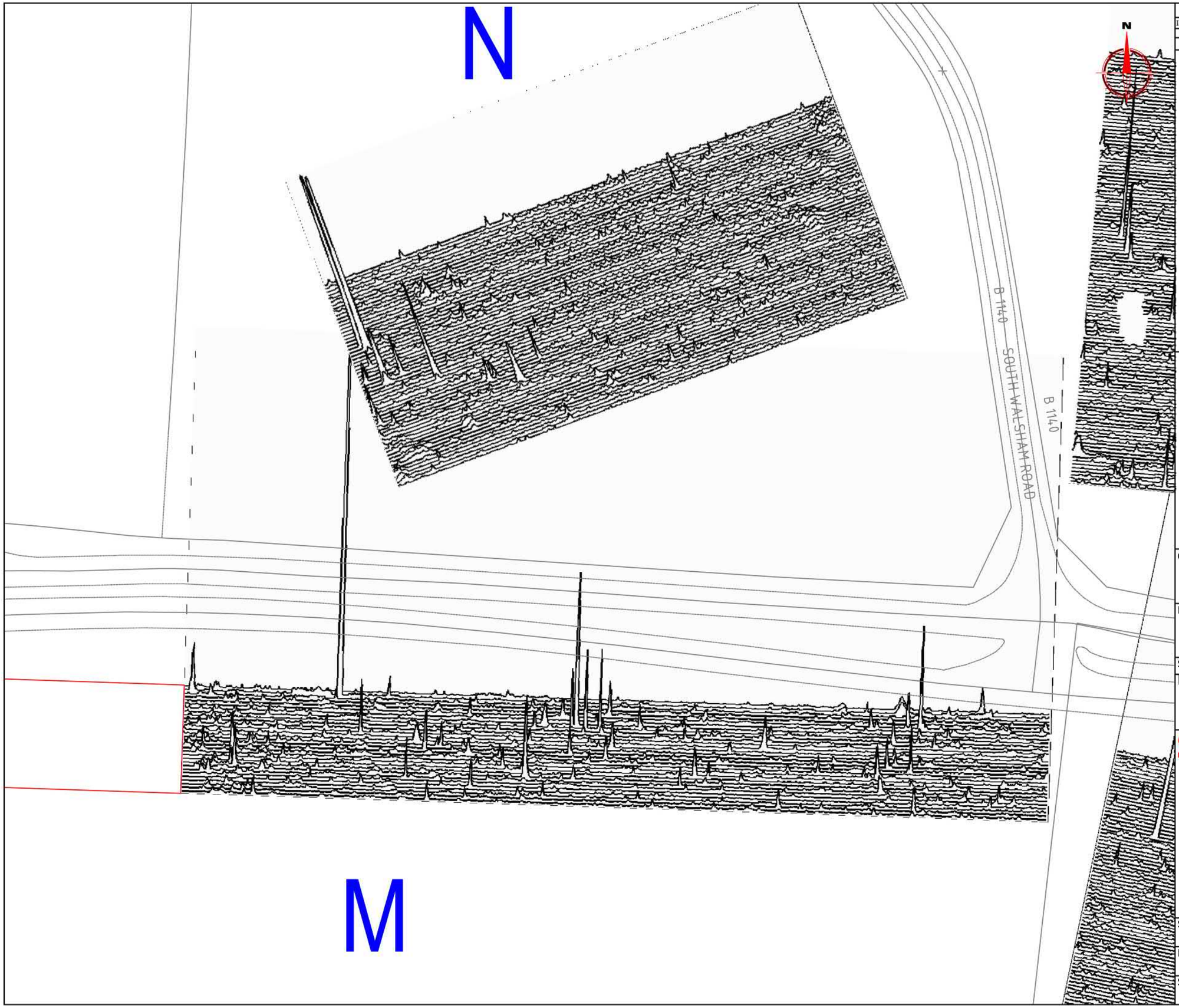
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	29



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING POSITIVE VALUES AREA M & N

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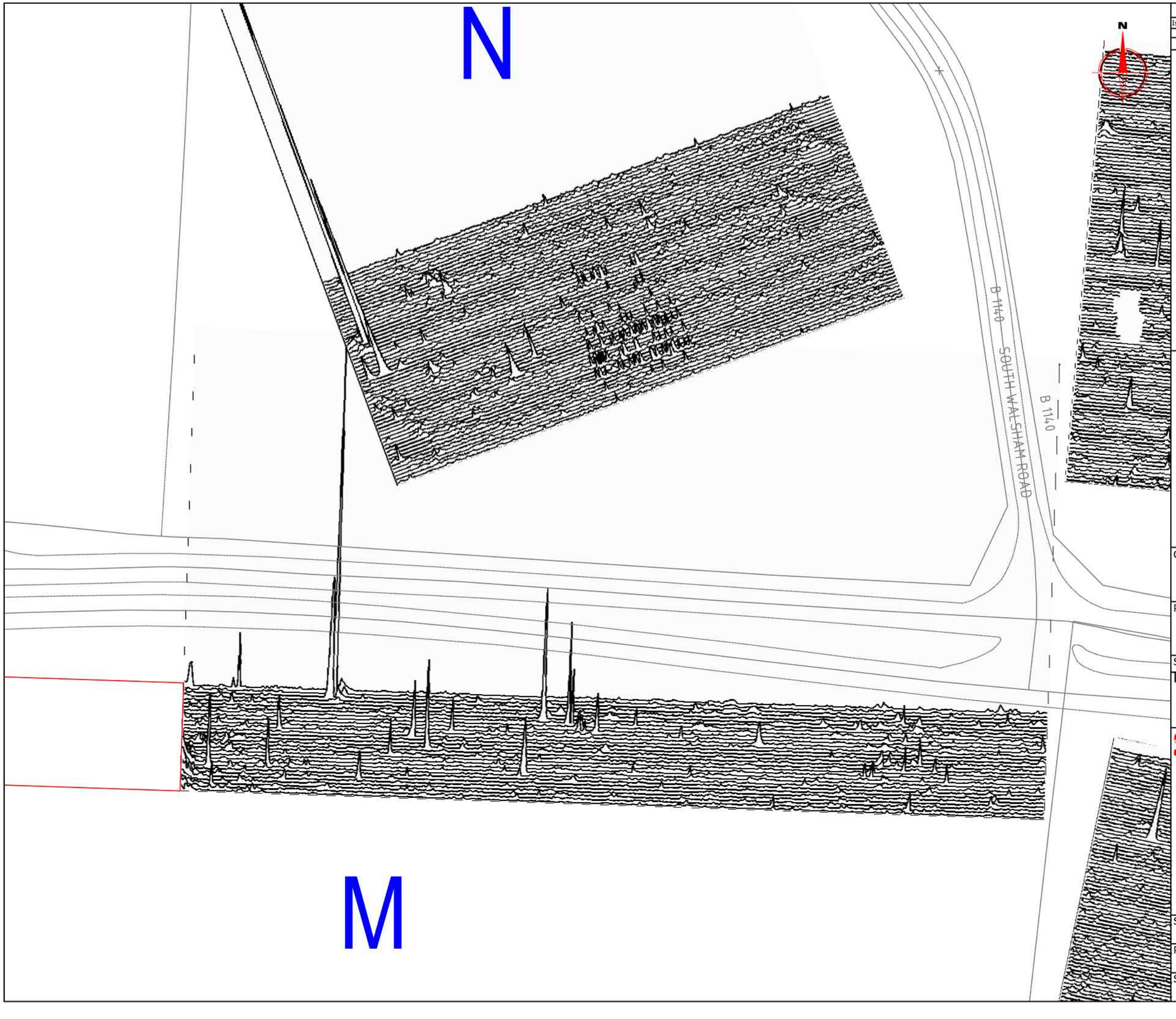
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	30



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING NEGATIVE VALUES AREA M & N

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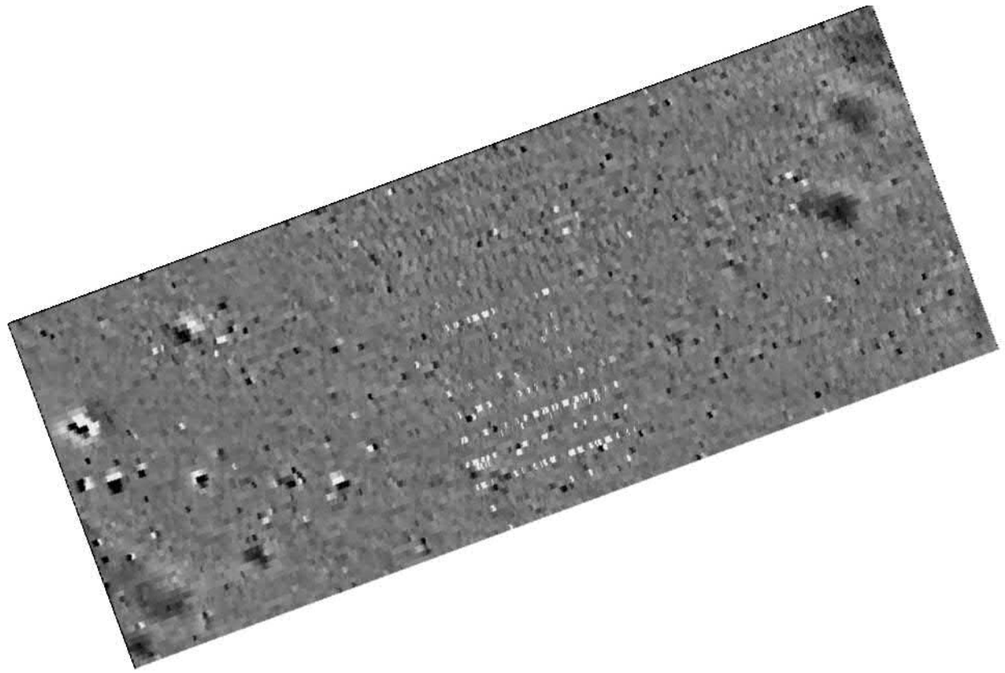
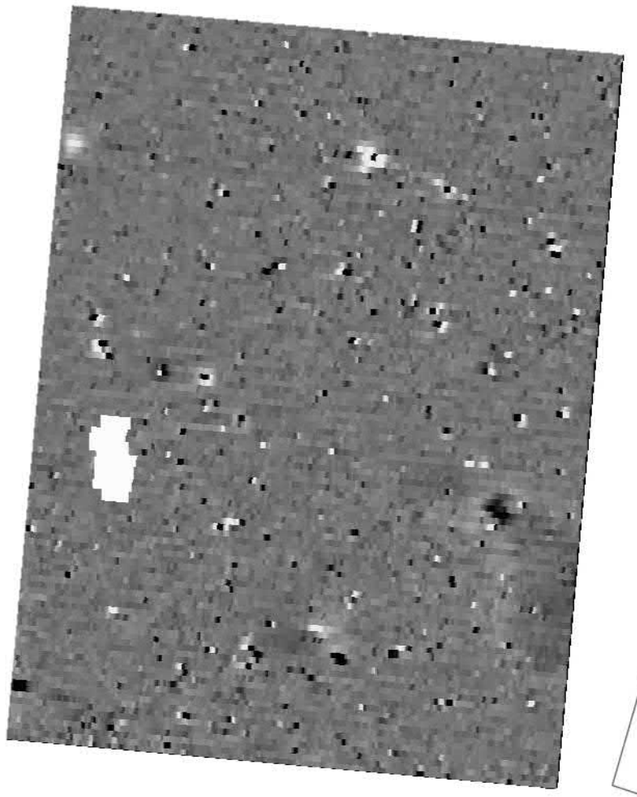
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	31

N

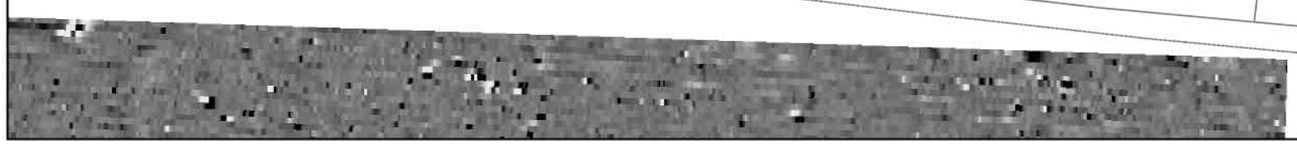
O





B 1140 SOUTH WALSHAM ROAD

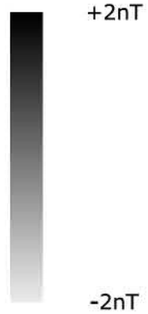
B 1140



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)



Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA N & O

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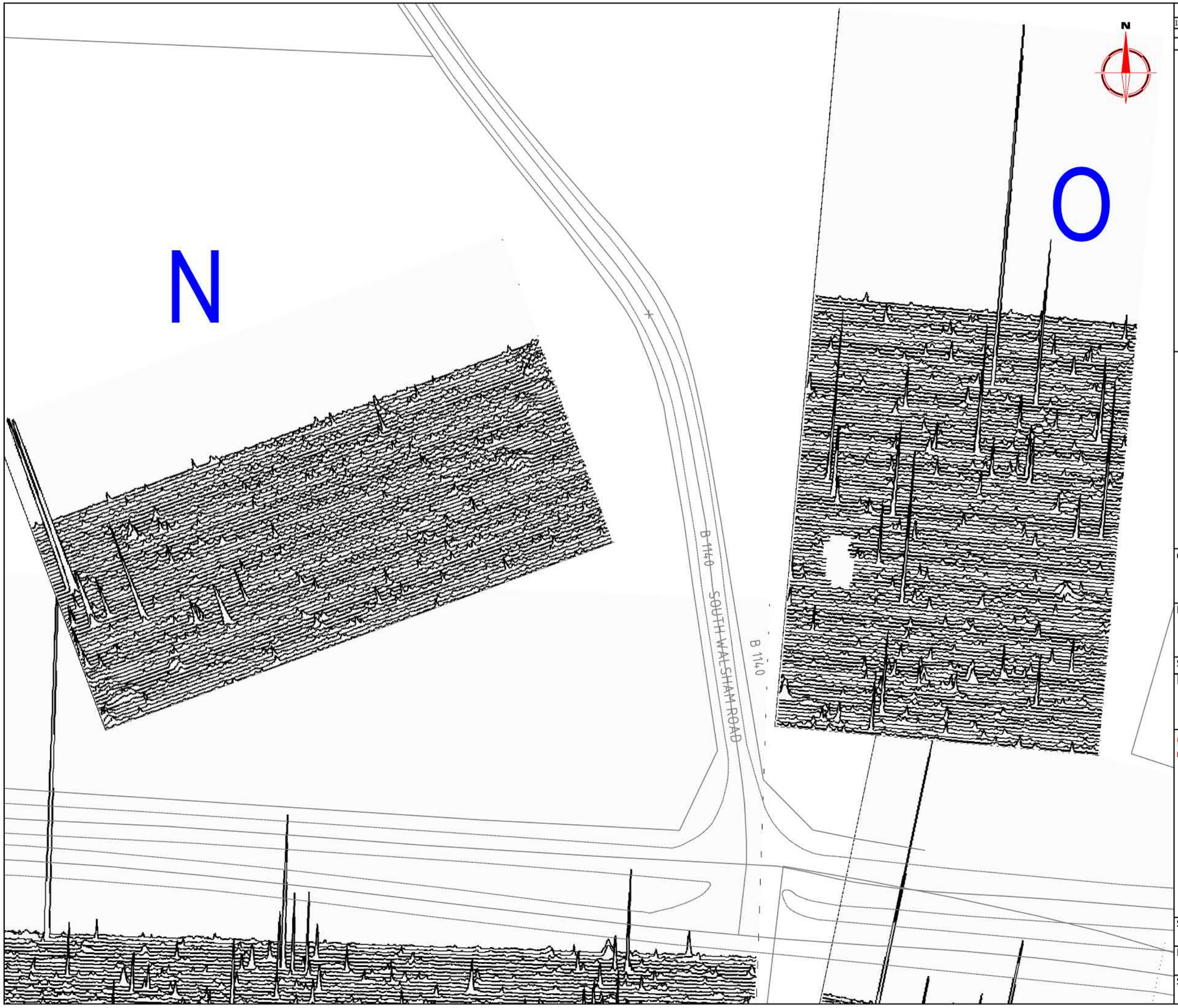
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	32



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA SHOWING POSITIVE VALUES AREA N & O

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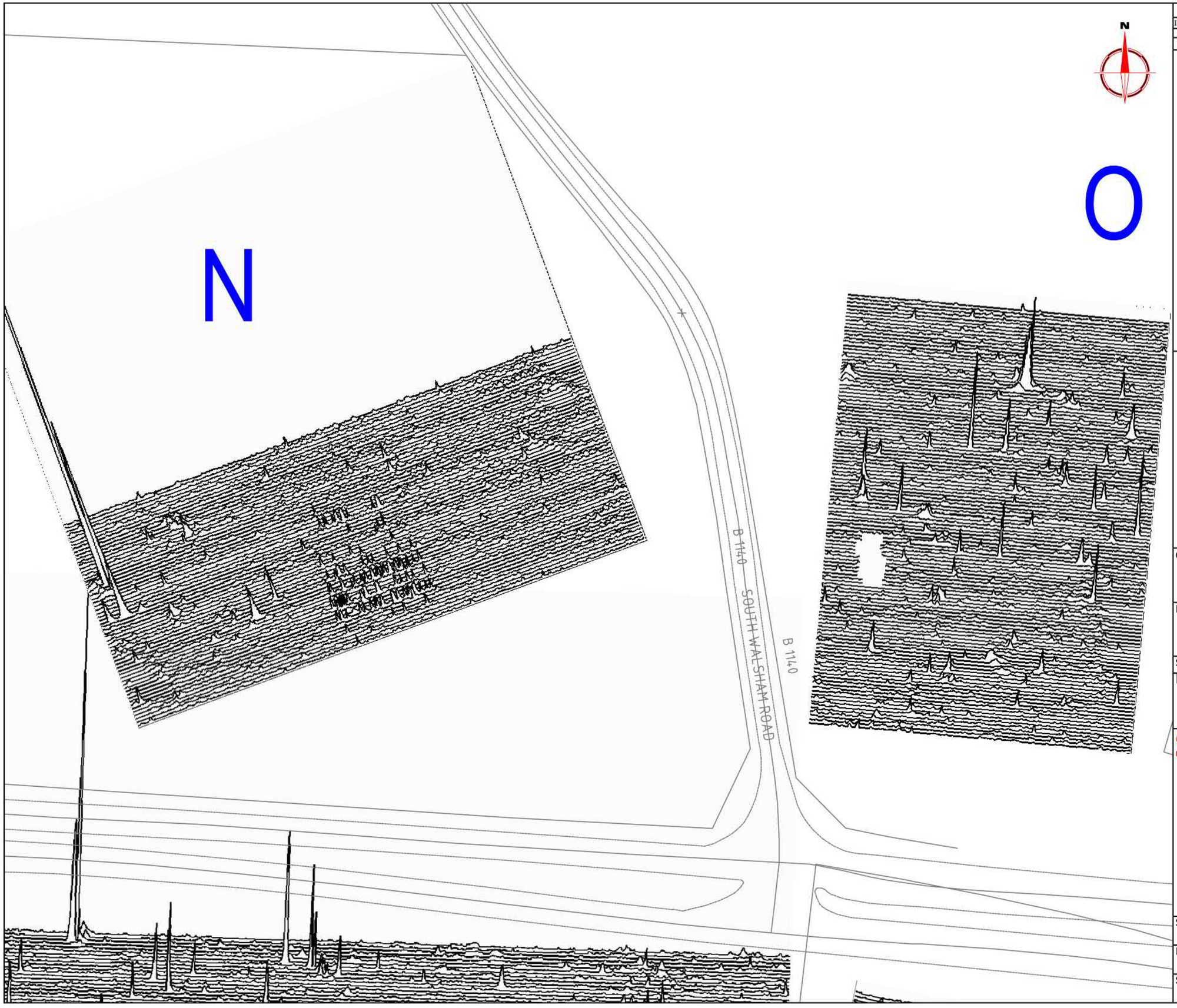
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	33



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA
SHOWING NEGATIVE VALUES
AREA N & O

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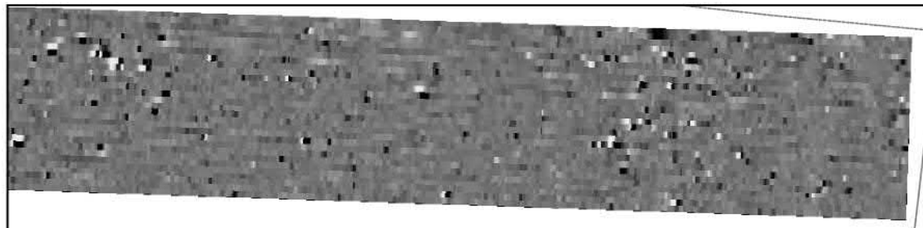
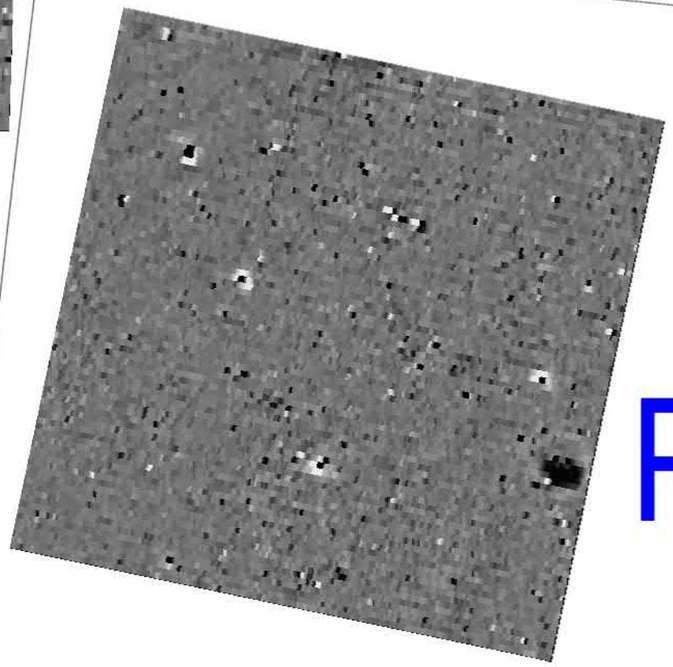
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	34





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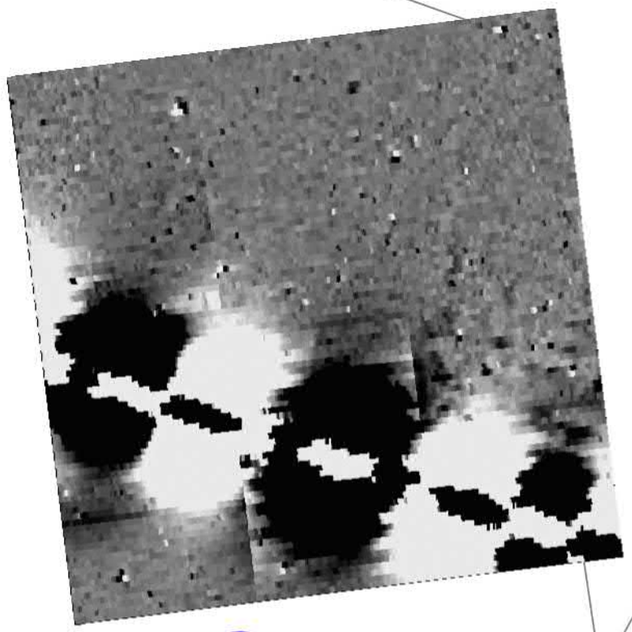

Q

N

Th

Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

Maximum +2nT (black)
Minimum -2nT (white)

-3SD +3SD

+2nT

-2nT

Client
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Project Title Job No. 2225
GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject
PLOT OF RAW GRADIOMETER DATA - AREA P & Q

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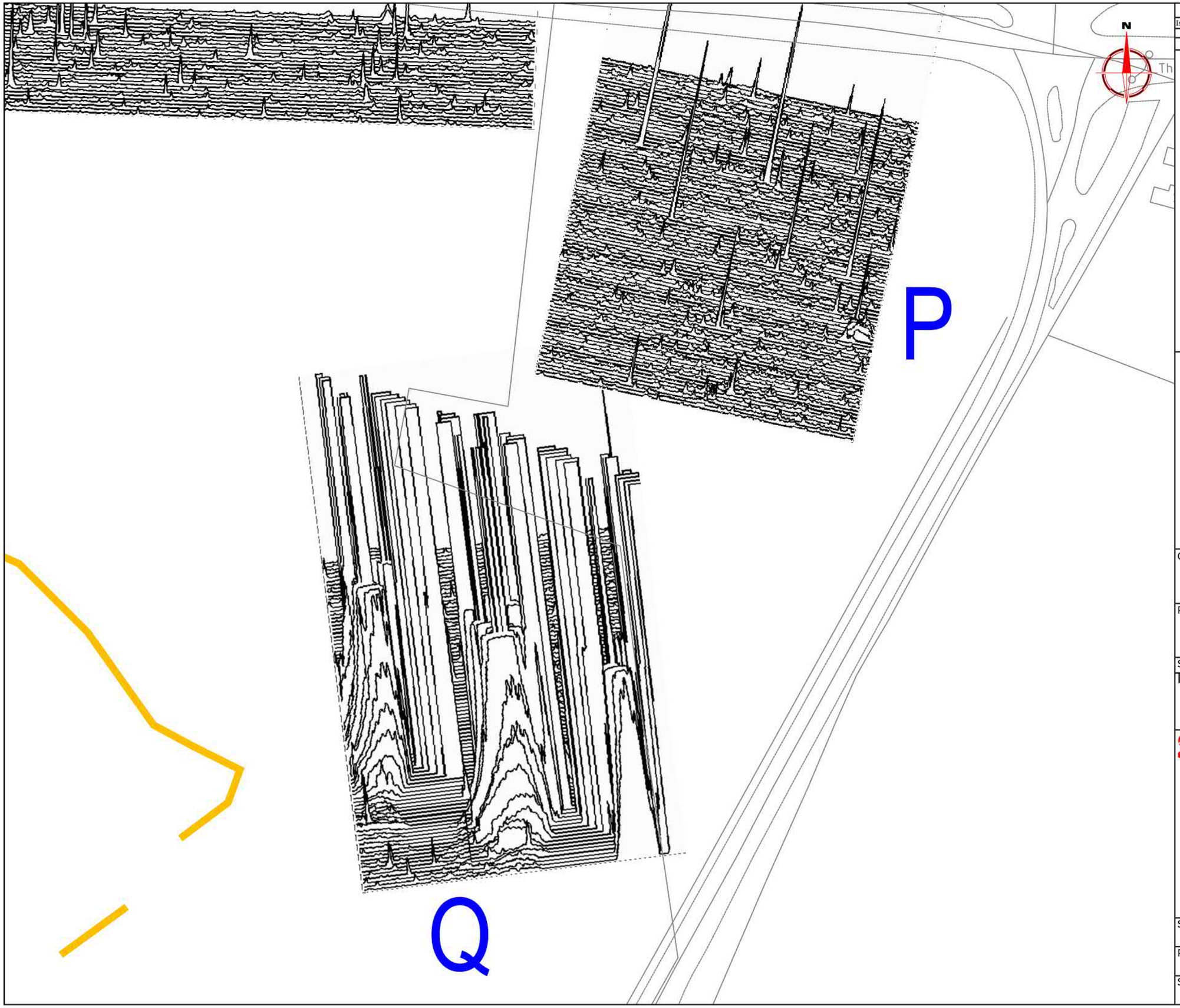
Scale 1:1000 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS/SDH	35



Amendments		
Issue No.	Date	Description
-	-	
		-

Plotting parameters

+40nT

(*Positive values displace above the trace line. Hidden values have not been plotted*)

200nT
160nT
120nT
80nT
40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA
SHOWING POSITIVE VALUES
AREA P & Q

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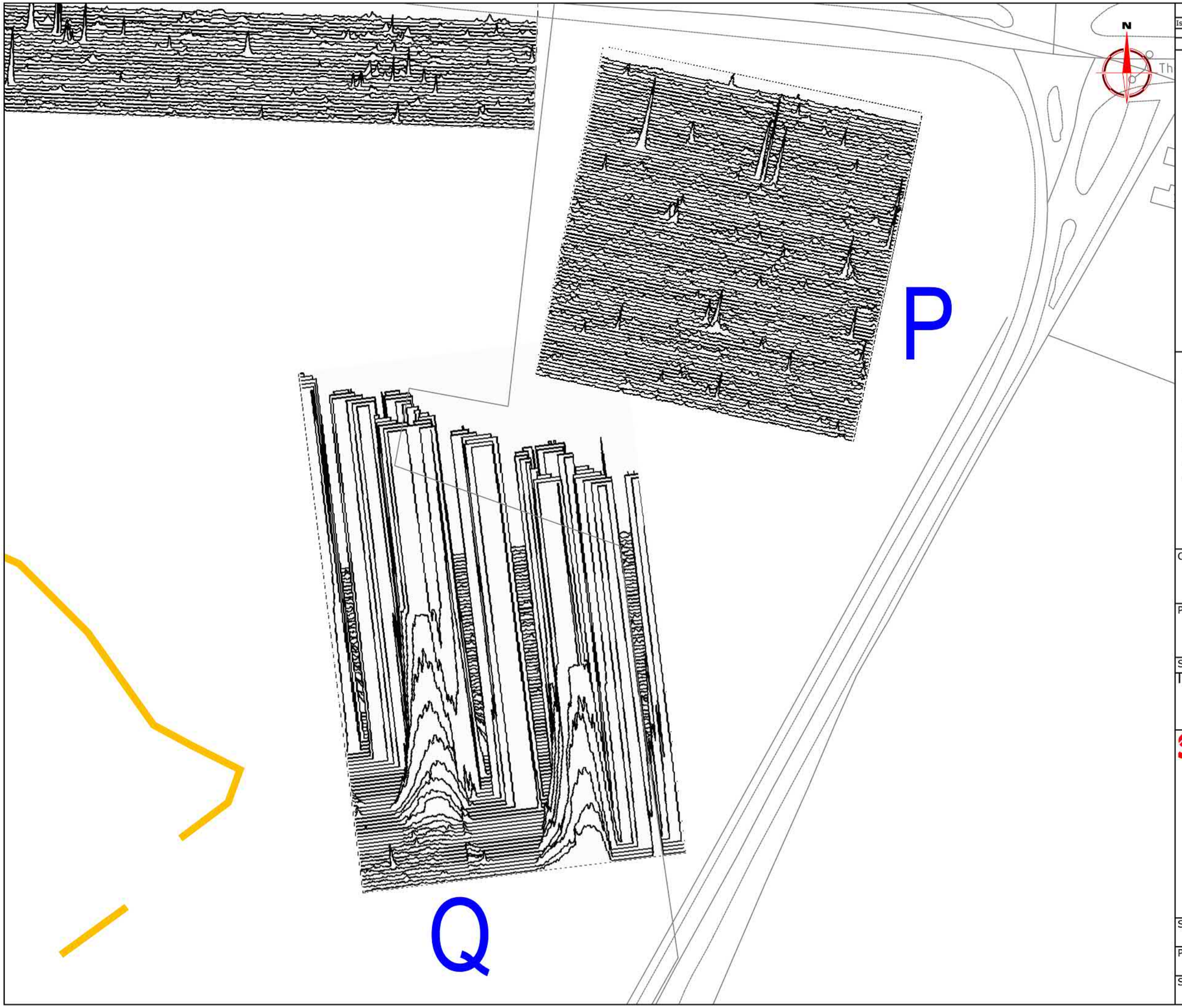
Scale 1:1000 — 0m 10 20 30 40 50

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	36



Amendments

Issue No.	Date	Description
-	-	
		-

Plotting parameters

-40nT

(*Negative values displace above the trace line. Hidden values have not been plotted*)

-200nT
-160nT
-120nT
-80nT
-40nT
0nT

Client
ARCHAEOLOGICAL PROJECT SERVICES

Project Title — Job No. 2225
GEOPHYSICAL SURVEY -A47
BLOFIELD TO N. BURLINGHAM

Subject
TRACE PLOT OF GRADIOMETER DATA
SHOWING NEGATIVE VALUES
AREA P & Q

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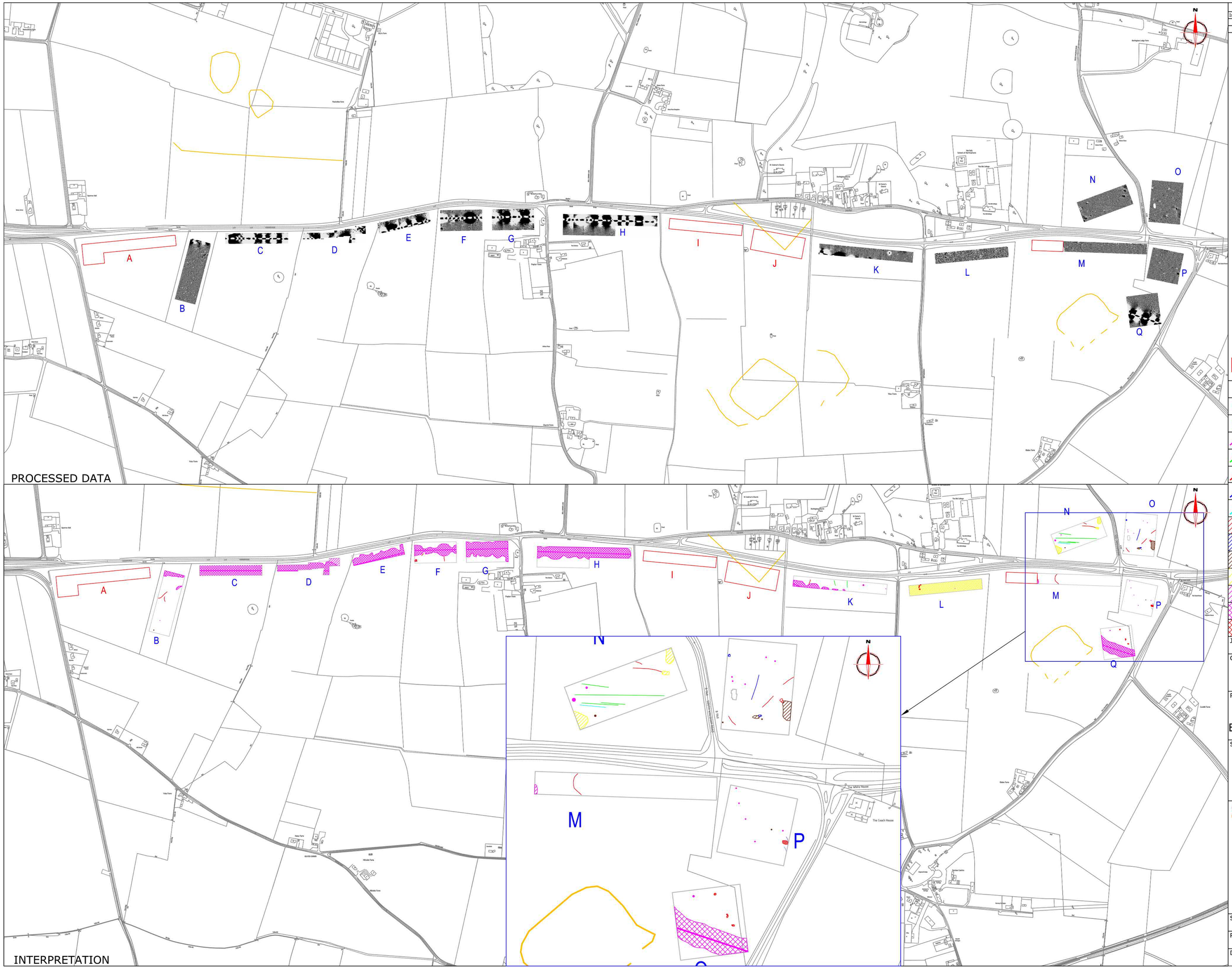
Scale 1:1000 (0m 10 20 30 40 50)

Plot	Checked by	Issue No.
A3	SAS	02
Survey date	Drawn by	Figure No.
SEP 06	RAJS / SDH	37

PROCESSED DATA



INTERPRETATION

Amendments

Issue No.	Date	Description
-	-	-
		-

Area not surveyed

KEY

- Discrete positive anomaly - possible pit
- Positive anomaly with associated negative response - ferrous object
- Magnetic disturbance - associated with pipe/cable
- Positive linear anomaly - agricultural mark
- Positive linear anomaly - cut feature of possible archaeological origin
- Negative linear anomaly- possible former earthwork or bank
- Linear anomaly - possibly related to land drains
- Positive area anomaly- cut feature of possible archaeological origin
- Negative area anomaly- possible former earthwork or bank
- Weak positive area anomaly of unknown origin
- Area of magnetic variation - possible geological/pedological response
- Area of magnetic debris - evidence of ground disturbance
- Area of magnetic disturbance- associated with pipe/cable
- Positive area anomaly- cut feature of possible archaeological origin

Job No.	Survey Date
2225	SEPT 06

Client

ARCHAEOLOGICAL PROJECT SERVICES

Project Title

GEOPHYSICAL SURVEY -A47 BLOFIELD TO N. BURLINGHAM

Subject

PROCESSED DATA AND INTERPRETATION OF GRADIOMETER ANOMALIES-

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REGISTERED ORGANISATION IFA

Scale		
1:5000	0m 100 200 300m	
Plot: A1	Checked by: PPB	Issue No.: 02
Date: DEC 06	Drawn by: SDH	Figure No.: 38

APPENDIX 2

METAL DETECTOR SURVEY

METAL DETECTOR SURVEY
A47 DUALLING BLOFIELD TO NORTH BURLINGHAM

Work Undertaken For
Scott Wilson

October 2006

Report Compiled by
Dale Trimble (APS)

ARCHAEOLOGICAL PROJECT SERVICES

Site Code and Accession Number **39847BVR**

CONTENTS

List of Figures

1.0 BACKROUND AND METHODOLOGY

The metal detector survey was undertaken within Area B as shown in Figure 1 of the main report. Peter Rillings, an independent metal detectorist recommended by Andrew Rogerson, head of the Norfolk Museums Portable Antiquities Scheme, undertook the survey under the supervision of Rachael Hall, Project Officer from Archaeological Project Services.

Positions of all detected finds within the 1.8ha area were plotted using a survey grade GPS system (Fig 1). The position of all recorded finds was recorded on to hand held data logger via a direct bluetooth connection with the GPS system. Ordnance Survey coordinates for all collected finds are shown in Table 1. The pre-existing geophysical survey grid was used to ensure correlation between the two surveys. Only after completion of the geophysical survey was the metal detecting undertaken.

Due to the presence of stubble on the field it was not always possible to survey with the head of the metal detector close to the ground surface.

2.0 RESULTS

A total of 26 artefacts were recovered. Two signals thought to be from lead objects, and one from iron, were unexcavated as these were thought to be beneath the depth of the topsoil (Table 2). Gary Taylor of Archaeological Project Services undertook the spot dating and finds identification.

Although in some cases precise identification was not possible, the assemblage is predominantly, if not entirely, post-medieval in date and probably constitutes general waste or manuring scatter. This, in turn, implies the area was agricultural land, used as arable, during the post-medieval period.

No concentrations of artefacts were evident, although finds were more numerous in the eastern half of the surveyed area. No artefacts of Anglo-Saxon date were recovered.

None of the finds are worthy of further conservation, drawing or photographing. As the Norfolk Museums Service has indicated to APS that they do not accept for deposition unexceptional items of post-medieval and late post-medieval date, all of the artefacts will be offered for return to landowners and discarded if declined.

3. CONCLUSIONS

No significant metal artefacts were recovered during the metal detector survey of Area B. Most, if not all, recovered items are of post medieval date and likely to have arrived in the area through waste disposal or manuring activities. This, in turn, implies the area was agricultural land, used as arable, during the post-medieval period

Table 1. Ordnance Survey Coordinates of recorded metalwork

39847BVR Metal Detected Finds

Plot No.	Os easting	Os northing
12	309756.5131	634857.9456
21	309851.1169	634857.9038
22	309880.235	634865.2382
23	309909.2604	634872.577
25	309887.629	634836.2026
26	309858.5996	634828.8174
27	309829.4705	634821.4448
28	309800.4002	634814.0207
29	309771.3453	634806.6466
30	309742.1633	634799.3304
31	309817.8297	634867.8164
32	309894.91	634859.4971
34	309894.465	634873.9305
35	309855.6633	634862.4839
36	309834.8835	634864.8003
37	309818.1534	634860.6941
38	309817.704	634860.4638
39	309808.8898	634858.6283
43	309798.9969	634847.164
44	309919.2098	634833.7807
45	309912.0735	634844.491
46	309914.2537	634849.228
47	309891.1642	634866.5999
48	309858.5415	634839.6434

Table 2. 39847BVR Metal Detected Finds

Plot No.	Material	Description	Date	Comments
12	Cu alloy	rectangular strip, rolled over to form tube	LPM	
21	Pb	amorphous lump		
22	Pb	disk, raised rim on 1 side	LPM	
23	Cu alloy	coin, halfpenny, type as of 1672-1775	PM	illegible
25	Cu alloy	sheet, possibly circular; possibly rolled-over edge		
26	Pb	sheet/melt		
27	Cu alloy	buckle fragment	PM	
28	Cu alloy	buckle	PM	
29	Cu alloy	button, hexagonal, incised rose pattern	PM	
30	Cu alloy	ferrule, rivet holes, lathe-turned incised lines	LPM	
31	Cu alloy	button	PM	
32	Cu alloy	suspension hook	LPM	
34	Cu alloy	coin, halfpenny, 1939	LPM	
35	Cu alloy	rectangular strip, 46mm x 11mm x 3mm, tapers at one end		
36	Cu alloy	buckle fragment	PM	
37	Cu alloy	coin? halfpenny?, type as of 1672-1775	LPM	illegible
38	Cu alloy?	mount/fitting; rivet hole, excised sections (furniture hinge?)	PM	
39	Cu alloy	button	PM	
43	Cu alloy	coin, halfpenny, George II, 1729-54	PM	very worn
44	Pb	sprue?/nail?		
45	Pb	rivet?		
46	Cu alloy	buckle, no pin	PM	
47	Cu alloy	triangular casting - strap loop??		
48	Cu alloy	buckle, from shoe/small strap	PM	
49	Cu alloy	possible vessel foot, cast; leaded	Med/PM	
50	Cu alloy	machinery part?	PM	

Notes/Abbreviations

Cu	Copper
Pb	Lead
Med	Medieval (c. 1000-1500 AD)
PM	Post-medieval (c. 1500-1850 AD)
LPM	Late post-medieval (c. 1850-present)

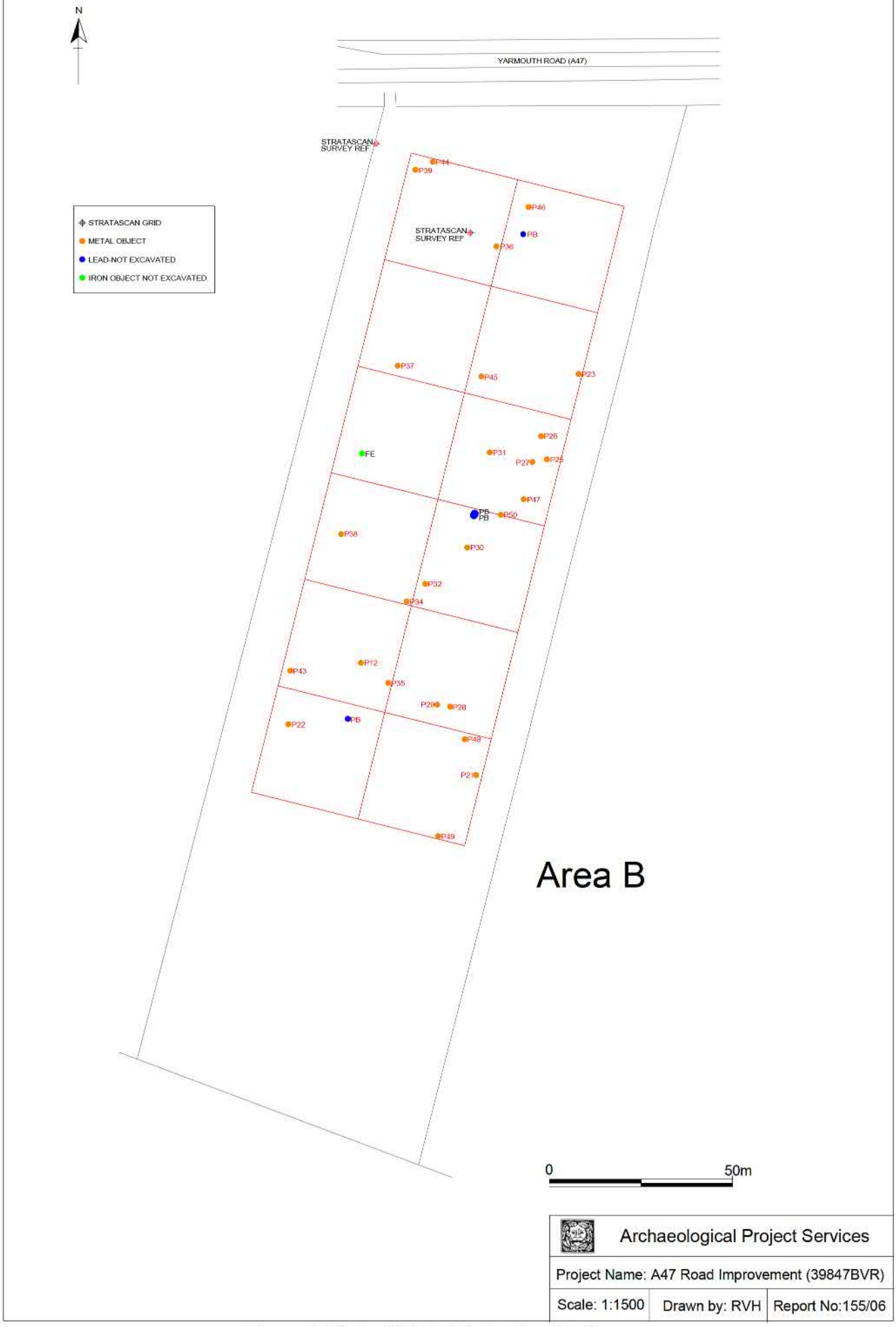

Figure 1 Plotted Metal Detecting Finds