

---

**LAND AT  
NORTHORPE TRAFALGAR FARM,  
GAINSBOROUGH ROAD, LINCOLNSHIRE  
(NOTF13)**

**GEOPHYSICAL SURVEY**

---

**Work undertaken for  
Acorus Rural Property Services**

**March 2013**

**Report produced by  
Andrew S. Failes BA (Hons) MA**

**OASIS Ref: archaeol1-146030  
National Grid Reference: SK 9600 9208**

APS Report No: **32/13**

**ARCHAEOLOGICAL  
PROJECT  
SERVICES**



## CONTENTS

<b>1.</b>	<b>SUMMARY</b> .....	<b>1</b>
<b>2.</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>2.1</b>	<b>DEFINITION OF AN EVALUATION</b> .....	<b>1</b>
<b>2.2</b>	<b>BACKGROUND</b> .....	<b>1</b>
<b>2.3</b>	<b>TOPOGRAPHY AND GEOLOGY</b> .....	<b>1</b>
<b>3.</b>	<b>GEOPHYSICAL SURVEY</b> .....	<b>1</b>
<b>3.1</b>	<b>METHODS</b> .....	<b>1</b>
<b>3.2</b>	<b>RESULTS</b> .....	<b>3</b>
<b>4.</b>	<b>DISCUSSION</b> .....	<b>3</b>
<b>5.</b>	<b>ACKNOWLEDGEMENTS</b> .....	<b>3</b>
<b>6.</b>	<b>PERSONNEL</b> .....	<b>3</b>
<b>7.</b>	<b>BIBLIOGRAPHY</b> .....	<b>3</b>
<b>8.</b>	<b>ABBREVIATIONS</b> .....	<b>4</b>

Appendix 1     The Archive

### List of Figures

Figure 1    General location map

Figure 2    Site location map

Figure 3    Location and layout of survey area

Figure 4    Minimally processed data greyscale plot

Figure 5    Minimally processed data trace plot

Figure 6    Processed data greyscale plot

Figure 7    Processed data greyscale plot overlain on base map

Figure 8    Interpretative plot

## 1. SUMMARY

*Detailed magnetic gradiometer survey was undertaken for Acorous Rural Property Services on land at Northorpe Trafalgar Farm, off Gainsborough Road in the Parish of Grayingham. The survey encompassed an area of c. 4ha.*

*Magnetometer survey identified few anomalies of potential archaeological origin. A small cluster of discrete positive anomalies to the southwest of the centre of the survey area and a single discreet positive anomaly to the northwest may represent cut features but no clear pattern is evident and little more can be said on the basis of form alone.*

*Magnetic disturbance is present in the southwestern corner of the field, but with the exception of occasional metal items in topsoil there is little indication of modern disturbance across the field as a whole.*

## 2. INTRODUCTION

### 2.1 Definition of an Evaluation

Geophysical survey is a non-intrusive method of archaeological evaluation. Evaluation is defined as ‘*a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate*’ (IFA 2008).

### 2.2 Background

Archaeological Project Services was

commissioned by *Acorous Rural Property Services* to undertake detailed magnetometer survey on land at Northorpe Trafalgar Farm, off Gainsborough Road, Grayingham, Lincolnshire. The survey was carried out on the 27<sup>th</sup> to 28<sup>th</sup> of February 2013.

### 2.3 Topography and Geology

The survey area at Northorpe Trafalgar Farm lies in the parish of Grayingham, Lincolnshire, 3km southwest of Kirton in Lindsey and 12km northeast of Gainsborough. The investigation area lies in a field to the east of a poultry farm (Fig 2), sloping gently down to the south and centred on National Grid Reference SK 9600 9208 (Fig. 2). It is situated at a height of c. 15m OD. Soils at the site are alluvial soils of the Flandrian Age, consisting of soft to firm consolidated silty clay (BGS 50000 scale digital geology).

## 3. GEOPHYSICAL SURVEY

### 3.1 Methods

Location and layout of the survey area is shown in Figure 3. The investigation area comprised a rectangular block of land c. 165m wide by 240m long, extending north from the southern field boundary and amounting to approximately 4ha in total. The field had been ploughed and harrowed and was in good condition for survey.

Survey was undertaken in accordance with English Heritage (2008) and IfA (2011) guidelines and codes of conduct. The survey grid was laid out using differential GPS equipment using Ordnance Survey correction data to allowing accurate positioning and relocation where necessary.

The magnetic survey was carried out using

a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. This records subtle changes in the magnetic field resulting from differing features in the soil. Changes as small as 0.2 nanoTesla (nT) in an overall field strength of c. 49,000nT can be accurately detected using this instrumentation, although in practice instrument interference and soil noise can limit sensitivity.

The mapping of anomalies in a systematic manner allows interpretation of the type of material present beneath the surface. Strong magnetic anomalies are generated by buried iron-based objects or by kilns or hearths, usually resulting in a bipolar (positive/negative) response. More subtle positive anomalies representing pits and ditches can be seen where these contain more topsoil which is normally richer in magnetic iron oxides and provides a contrast with the natural subsoil (but this can vary depending on the nature of the underlying deposits). A negative anomaly may result from upcast bank material. Wall foundations can also show as negative anomalies where the stone is less magnetic than the surrounding soil, or as stronger positive and negative anomalies if of brick, but are not always responsive to the technique. It should be noted that not all features will be responsive and absence of anomalies does not necessarily indicate absence of archaeological features.

Magnetometers measure changes in the Earth's magnetic field. With two sensors configured as a gradiometer the recorded values indicate the difference between two magnetic measurements separated by a fixed distance. The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame with a 1m separation between the sensing elements giving a strong response to deep anomalies.

#### *Sampling interval and data capture*

Readings were taken at 0.25m centres along traverses 1m apart. This equates to 3600 sampling points in a full 30m x 30m grid. The Grad 601 has a typical depth of penetration of 0.5m to 1.0m although a greater range is possible where strongly magnetic objects have been buried in the site.

Readings are logged consecutively into the data logger which is downloaded daily either into a portable computer whilst on site or directly to the office computer. At the end of each job, data is transferred to the office for processing and presentation.

#### *Processing and presentation of results*

Processing is performed using specialist ArcheoSurveyor software. 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 (Destripe or zero mean traverse). Despiking is also performed to reduce the effect of the anomalies resulting from small iron objects often found on agricultural land. Further processing can then be carried out which may include low pass filtering to reduce 'noise' in the data and hence emphasise the archaeological or man-made anomalies.

The following are the processing techniques carried out on the processed gradiometer data used in this report:

1. DeStripe (sets the background mean of each traverse within a grid to zero and is useful for removing striping effects)
2. Despike (useful for display and allows further processing functions to be carried out more effectively by removing extreme

data values)

Parameters: X radius = 1; Y radius = 1;  
Threshold = 3SD; Spike replacement = mean

3. Clip (excludes extreme values allowing better representation of detail in the mid range): -3 to 3nT.

### 3.2 Results

The presentation of the data for the site involves a print-out of the raw or minimally processed data as greyscale and trace plots (Figs 4, 5; clipped for display but otherwise unprocessed), together with greyscale plots of the processed data (Figs 6, 7). Magnetic anomalies have been identified and plotted onto an interpretative drawing (Fig. 8) and are described below.

#### *Discrete positive anomalies*

A cluster of discrete positive anomalies **A**, towards the southwest of the centre of the survey area and a single discrete positive anomaly **B** to the northwest have been highlighted. These possibly indicate cut features, although no clear pattern is evident and little more can be said on the basis of form alone.

#### *Modern/magnetic disturbance*

Strong bipolar responses occur in the southwestern corner of the field and probably represent modern disturbance.

#### *Iron spikes (discrete bipolar anomalies)*

Iron items within the topsoil give a distinctive localised bipolar (strong positive with associated strong negative) response. Such items usually derive from relatively recent management or agricultural use of the land – broken or discarded pieces of agricultural machinery or other modern debris. These are widely scattered across the site

### 4. DISCUSSION

Magnetometer survey identified few anomalies of potential archaeological origin. A number of discrete positive anomalies towards the central western area of the survey area and a single discrete positive anomaly to the northwest may represent cut features but no clear pattern is evident and little more can be said on the basis of form alone.

Magnetic disturbance is present in the southwest corner of the survey area, but with the exception of occasional metal items in the topsoil there is little indication of modern disturbance across the field as a whole. A possible faint area of magnetic disturbance was also recorded on a northeast-southwest alignment extending from the centre of the site which may represent a change in natural geology.

### 5. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Henry Doble who commissioned the project on behalf of Acorus Rural Property Services. Steve Malone (APS) edited the report along with Tom Lane (APS).

### 6. PERSONNEL

Project coordinator: Steve Malone  
Geophysical Survey: Andrew Failes, Jonathon Smith  
Survey processing and reporting: Steve Malone, Andrew Failes

### 7. BIBLIOGRAPHY

Clark, A., 1996 *Seeing Beneath the Soil*, London, 2<sup>nd</sup> edn.

English Heritage, 2008 *Geophysical*

*Survey in Archaeological Field Evaluation.*

Hodge, C.A.H., Burton, R.G.O., Corbett, W.M., Evans, R. and Seale, R.S., 1984 *Soils and their use in Eastern England*, Soil Survey of England and Wales **13**

IfA, 2008 *Standard and Guidance for Field Evaluation.*

IfA, 2011 *Standard and Guidance for Geophysical Survey.*

## **8. ABBREVIATIONS**

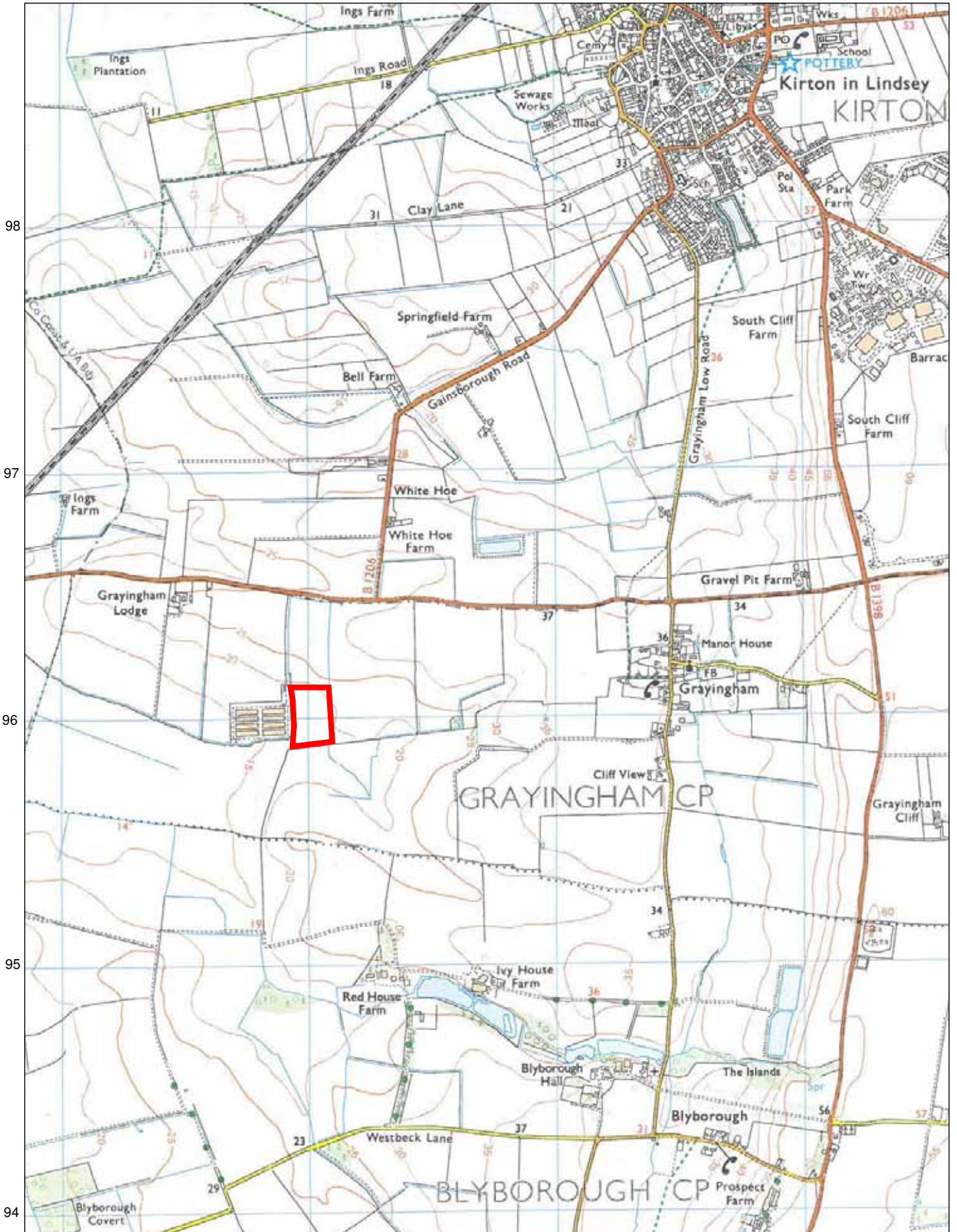
APS Archaeological Project Services

BGS British Geological Survey

IfA Institute for Archaeologists



Figure 1: General Location Plan



SK



- Site location



Archaeological Project Services

Project Name: Northorpe Trafalgar Farm (NOTF13)

Scale 1:20000 Drawn by: AF Report No: 32/13

Reproduced from the Ordnance Survey 1:25000 map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright. HTL Licence No 100020146

Figure 2 - Site location



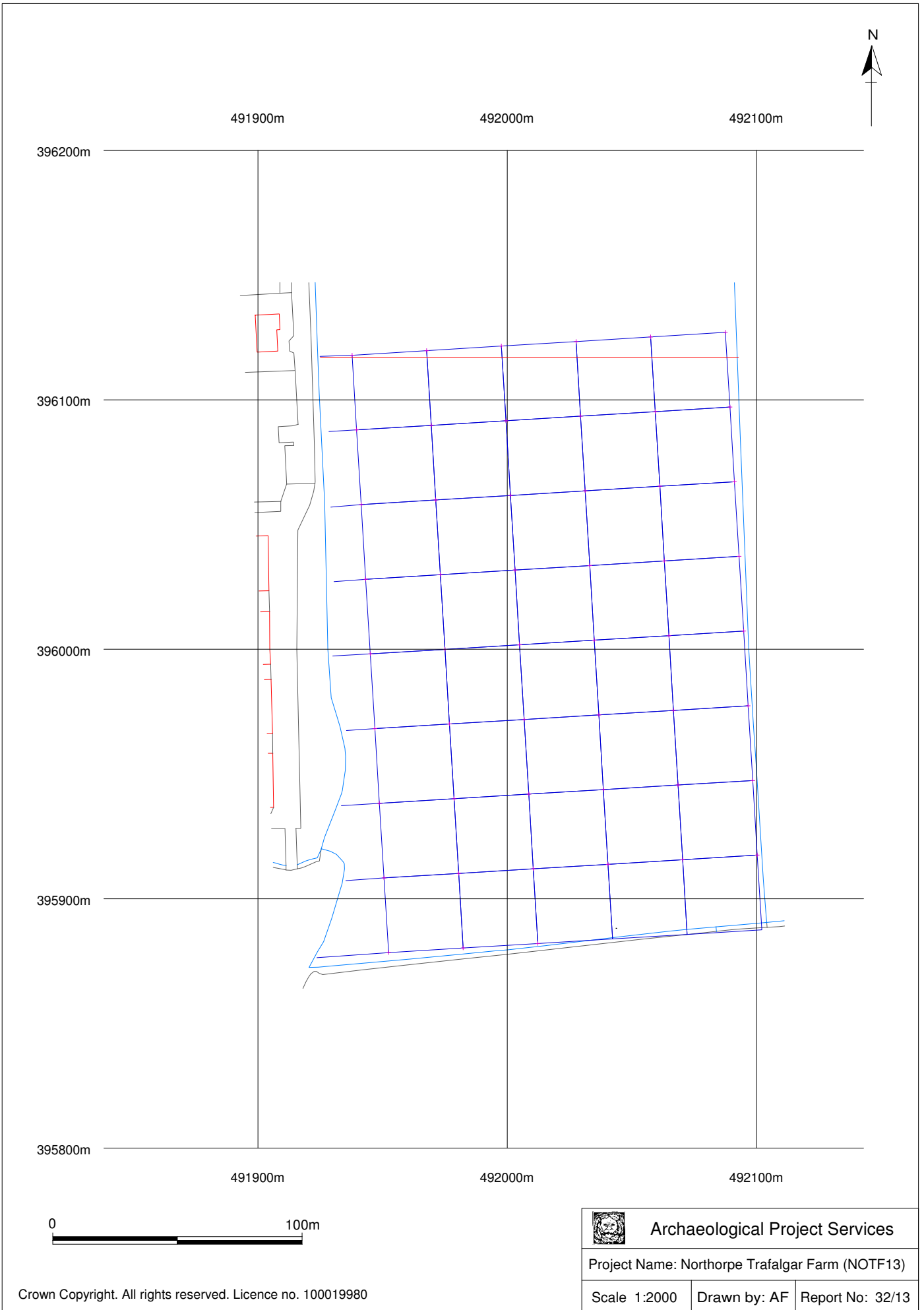


Figure 3 - Location and layout of survey area

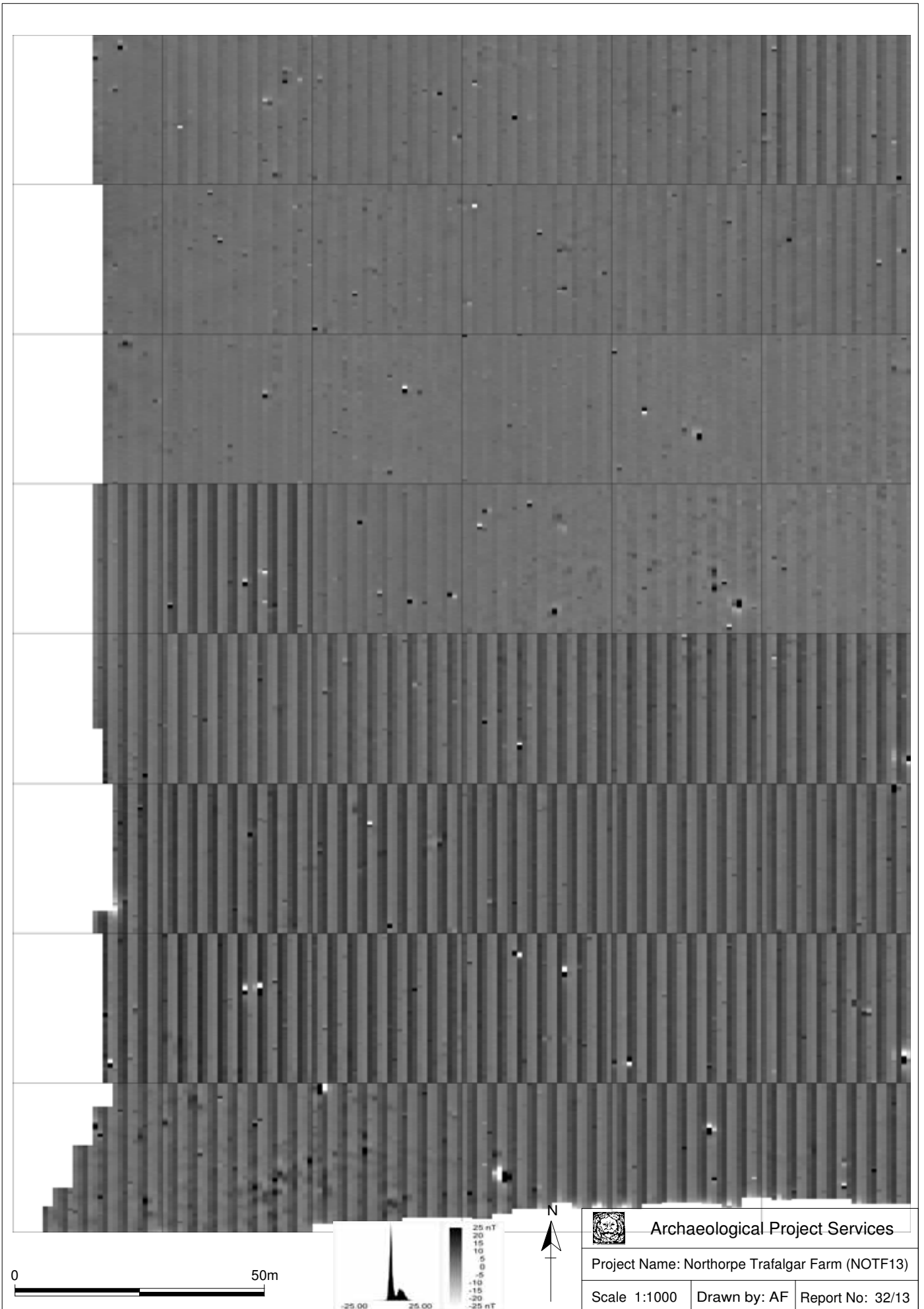
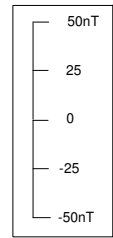
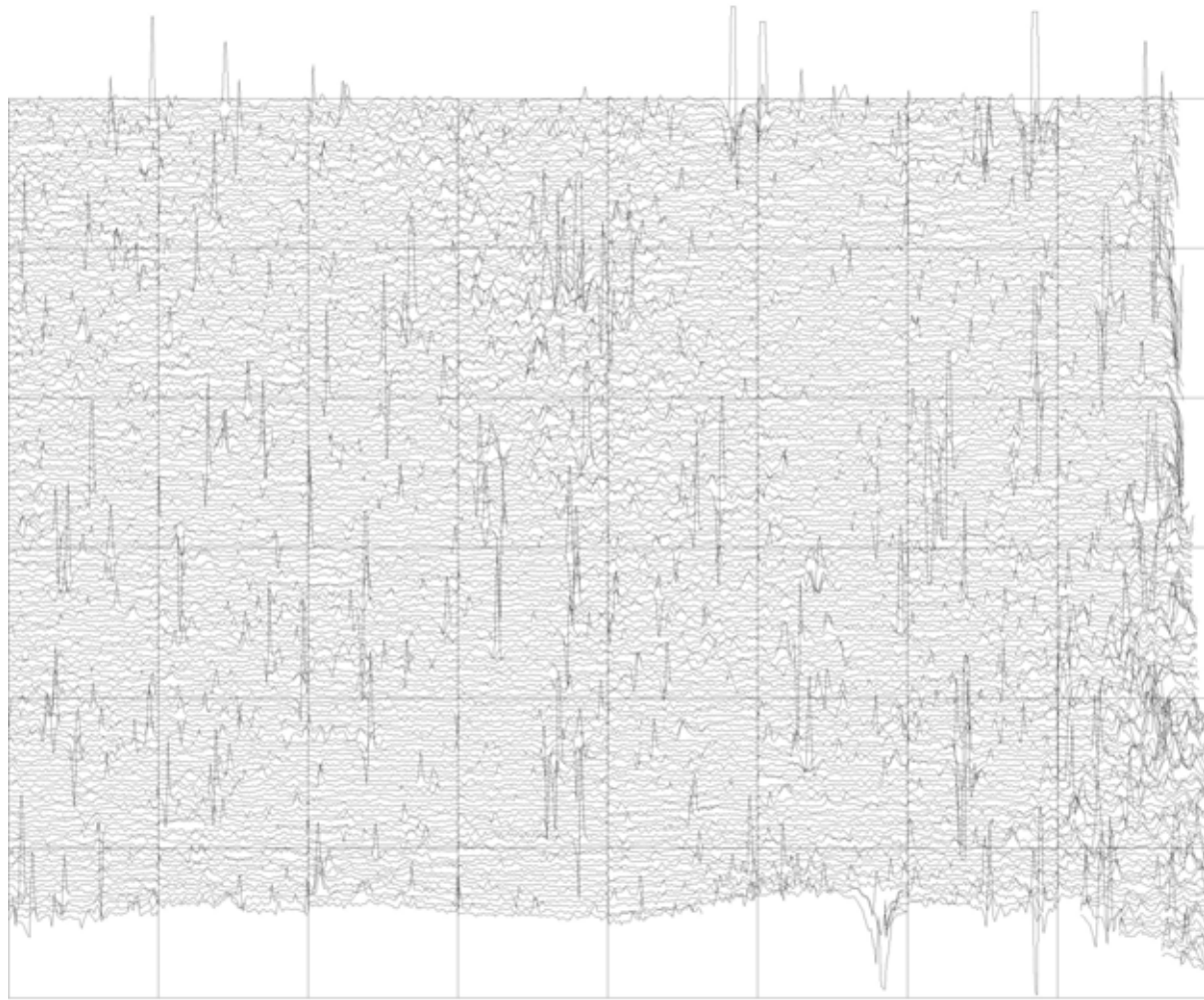


Figure 4 - Minimally processed data greyscale plot




	Archaeological Project Services	
Project Name: Northorpe Trafagar Square (NOTF13)		
Scale 1:1500	Drawn by: AF	Report No: 32/13

Figure 5 - Minimally processed data trace plot

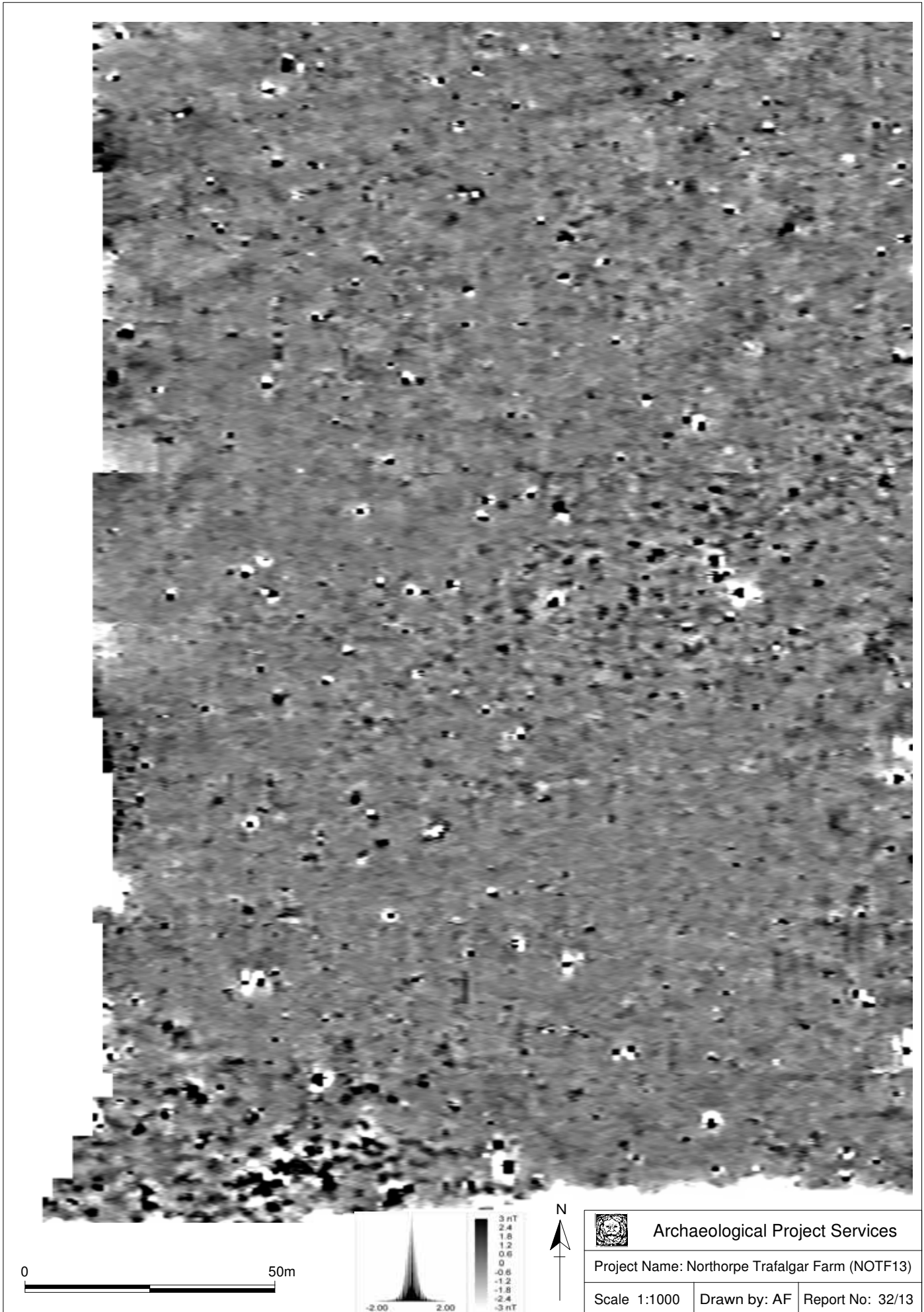


Figure 6 - Processed data greyscale plot

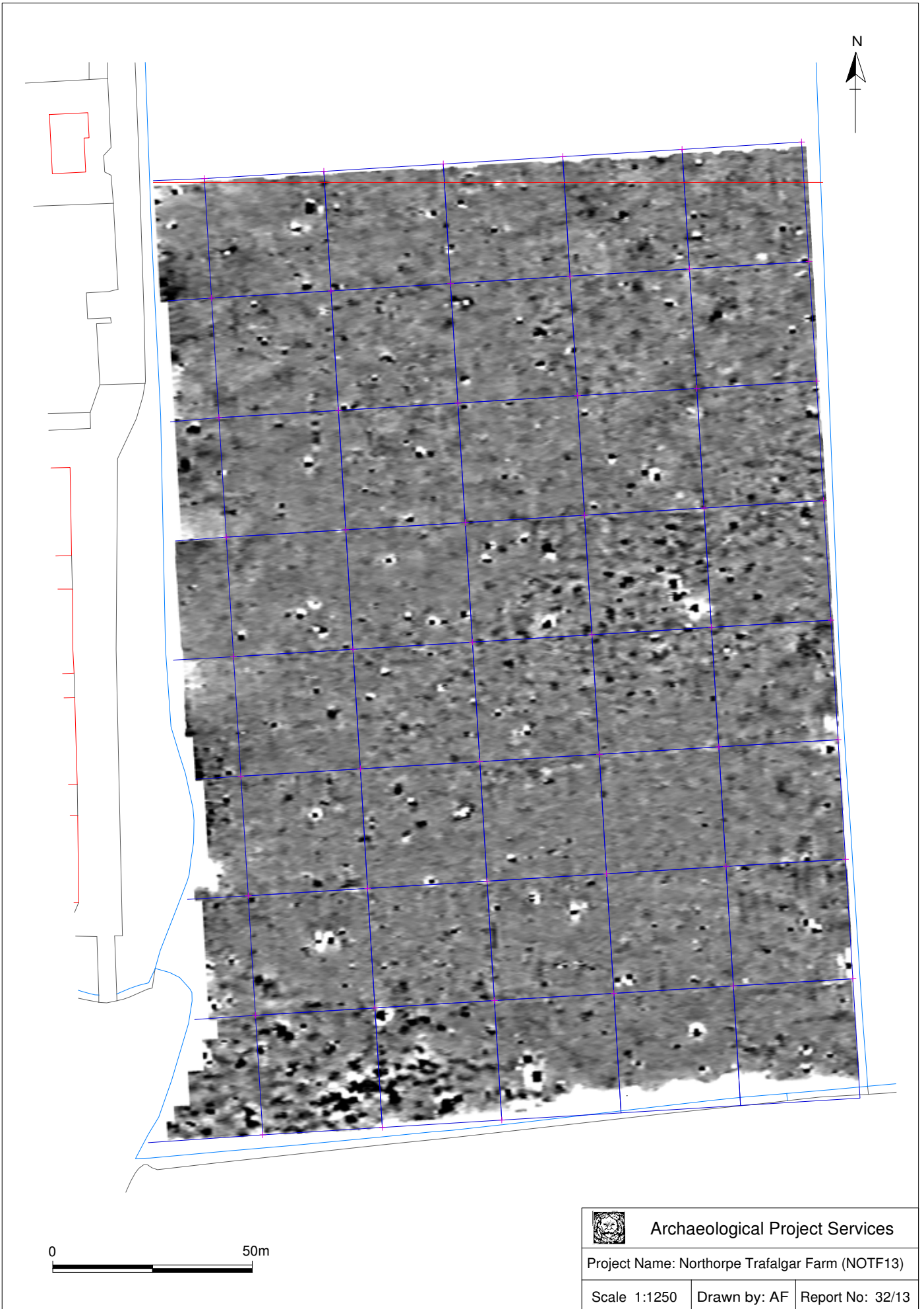


Figure 7 - Processed data greyscale overlain on base map

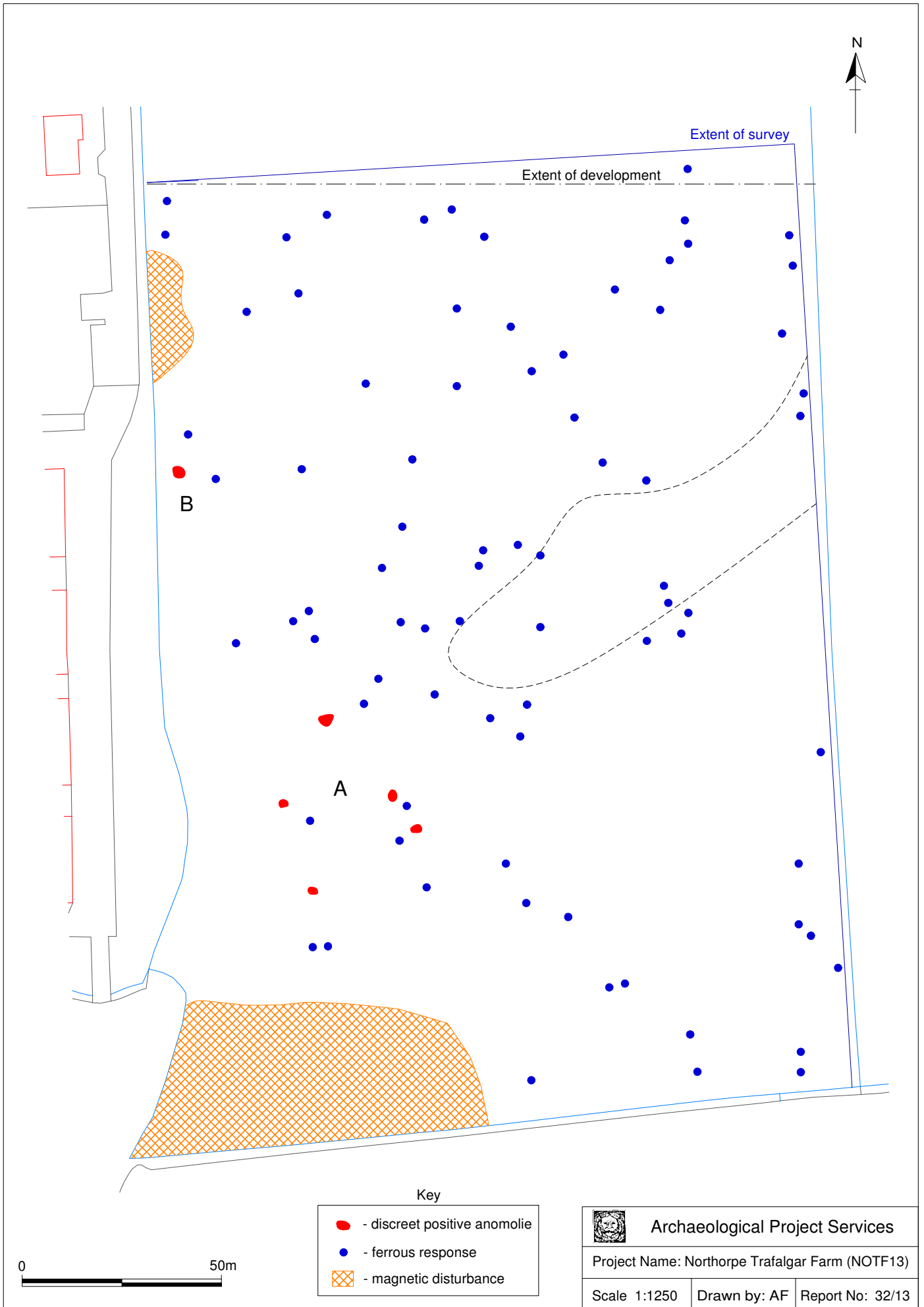


Figure 7 - Processed data greyscale overlain on base map

## Appendix 1 THE ARCHIVE

The archive consists of:

- 2 Daily record sheets
- 1 Report text and illustrations
- Digital data

File names	notf13-01.xgd notf13-02.xgd notf13-03.xgd notf13-04.xgd notf13-05.xgd notf13-06.xgd notf13-07.xgd notf13-08.xgd notf13-09.xgd notf13-10.xgd notf13-11.xgd notf13-12.xgd notf13-13.xgd notf13-14.xgd notf13-15.xgd notf13-16.xgd notf13-17.xgd notf13-18.xgd	notf13-19.xgd notf13-20.xgd notf13-21.xgd notf13-22.xgd notf13-23.xgd notf13-24.xgd notf13-25.xgd notf13-26.xgd notf13-27.xgd notf13-28.xgd notf13-29.xgd notf13-30.xgd notf13-31.xgd notf13-32.xgd notf13-33.xgd notf13-34.xgd notf13-35.xgd notf13-36.xgd	notf13-37.xgd notf13-38.xgd notf13-39.xgd notf13-40.xgd notf13-41.xgd notf13-42.xgd notf13-43.xgd notf13-44.xgd notf13-45.xgd notf13-46.xgd notf13-47.xgd notf13-48.xgd  notf13-c1.xcp notf13-t1.xcp
Explanation of codes used in file names	xgd files are magnetometer grids, named with site code and number in the order surveyed. xcp files are composites containing record of all the data and processes used to produce the end product		
Description of file formats	All files are in plain text xml format with header data defining survey and processing parameters		
List of codes used in files	D indicates a "dummy" value within the composite data		
Hardware, software and operating systems	ArcheoSurveyor 2.5.15 running under Windows 7		
Date of last modification	01/03/13		
Indications of known areas of weakness in data			

All primary records are currently kept at:

Archaeological Project Services, The Old School, Cameron Street, Heckington, Sleaford, Lincolnshire NG34 9RW

The ultimate destination of the project archive is:

The Collection

Site Code:

NOTF13

Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.

---

**LAND AT  
NORTHORPE TRAFALGAR FARM,  
GAINSBOROUGH ROAD, LINCOLNSHIRE  
(NOTF13)**

**GEOPHYSICAL SURVEY**

---

**Work undertaken for  
Acorus Rural Property Services**

**March 2013**

**Report produced by  
Andrew S. Failes BA (Hons) MA**

**OASIS Ref: archaeol1-146030  
National Grid Reference: SK 9600 9208**

APS Report No: **32/13**

**ARCHAEOLOGICAL  
PROJECT  
SERVICES**





## CONTENTS

<b>1.</b>	<b>SUMMARY</b> .....	<b>1</b>
<b>2.</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>2.1</b>	<b>DEFINITION OF AN EVALUATION</b> .....	<b>1</b>
<b>2.2</b>	<b>BACKGROUND</b> .....	<b>1</b>
<b>2.3</b>	<b>TOPOGRAPHY AND GEOLOGY</b> .....	<b>1</b>
<b>3.</b>	<b>GEOPHYSICAL SURVEY</b> .....	<b>1</b>
<b>3.1</b>	<b>METHODS</b> .....	<b>1</b>
<b>3.2</b>	<b>RESULTS</b> .....	<b>3</b>
<b>4.</b>	<b>DISCUSSION</b> .....	<b>3</b>
<b>5.</b>	<b>ACKNOWLEDGEMENTS</b> .....	<b>3</b>
<b>6.</b>	<b>PERSONNEL</b> .....	<b>3</b>
<b>7.</b>	<b>BIBLIOGRAPHY</b> .....	<b>3</b>
<b>8.</b>	<b>ABBREVIATIONS</b> .....	<b>4</b>

Appendix 1     The Archive

### List of Figures

Figure 1    General location map

Figure 2    Site location map

Figure 3    Location and layout of survey area

Figure 4    Minimally processed data greyscale plot

Figure 5    Minimally processed data trace plot

Figure 6    Processed data greyscale plot

Figure 7    Processed data greyscale plot overlain on base map

Figure 8    Interpretative plot

## 1. SUMMARY

*Detailed magnetic gradiometer survey was undertaken for Acorous Rural Property Services on land at Northorpe Trafalgar Farm, off Gainsborough Road in the Parish of Grayingham. The survey encompassed an area of c. 4ha.*

*Magnetometer survey identified few anomalies of potential archaeological origin. A small cluster of discrete positive anomalies to the southwest of the centre of the survey area and a single discreet positive anomaly to the northwest may represent cut features but no clear pattern is evident and little more can be said on the basis of form alone.*

*Magnetic disturbance is present in the southwestern corner of the field, but with the exception of occasional metal items in topsoil there is little indication of modern disturbance across the field as a whole.*

## 2. INTRODUCTION

### 2.1 Definition of an Evaluation

Geophysical survey is a non-intrusive method of archaeological evaluation. Evaluation is defined as ‘*a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate*’ (IFA 2008).

### 2.2 Background

Archaeological Project Services was

commissioned by *Acorous Rural Property Services* to undertake detailed magnetometer survey on land at Northorpe Trafalgar Farm, off Gainsborough Road, Grayingham, Lincolnshire. The survey was carried out on the 27<sup>th</sup> to 28<sup>th</sup> of February 2013.

### 2.3 Topography and Geology

The survey area at Northorpe Trafalgar Farm lies in the parish of Grayingham, Lincolnshire, 3km southwest of Kirton in Lindsey and 12km northeast of Gainsborough. The investigation area lies in a field to the east of a poultry farm (Fig 2), sloping gently down to the south and centred on National Grid Reference SK 9600 9208 (Fig. 2). It is situated at a height of c. 15m OD. Soils at the site are alluvial soils of the Flandrian Age, consisting of soft to firm consolidated silty clay (BGS 50000 scale digital geology).

## 3. GEOPHYSICAL SURVEY

### 3.1 Methods

Location and layout of the survey area is shown in Figure 3. The investigation area comprised a rectangular block of land c. 165m wide by 240m long, extending north from the southern field boundary and amounting to approximately 4ha in total. The field had been ploughed and harrowed and was in good condition for survey.

Survey was undertaken in accordance with English Heritage (2008) and IfA (2011) guidelines and codes of conduct. The survey grid was laid out using differential GPS equipment using Ordnance Survey correction data to allowing accurate positioning and relocation where necessary.

The magnetic survey was carried out using

a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. This records subtle changes in the magnetic field resulting from differing features in the soil. Changes as small as 0.2 nanoTesla (nT) in an overall field strength of c. 49,000nT can be accurately detected using this instrumentation, although in practice instrument interference and soil noise can limit sensitivity.

The mapping of anomalies in a systematic manner allows interpretation of the type of material present beneath the surface. Strong magnetic anomalies are generated by buried iron-based objects or by kilns or hearths, usually resulting in a bipolar (positive/negative) response. More subtle positive anomalies representing pits and ditches can be seen where these contain more topsoil which is normally richer in magnetic iron oxides and provides a contrast with the natural subsoil (but this can vary depending on the nature of the underlying deposits). A negative anomaly may result from upcast bank material. Wall foundations can also show as negative anomalies where the stone is less magnetic than the surrounding soil, or as stronger positive and negative anomalies if of brick, but are not always responsive to the technique. It should be noted that not all features will be responsive and absence of anomalies does not necessarily indicate absence of archaeological features.

Magnetometers measure changes in the Earth's magnetic field. With two sensors configured as a gradiometer the recorded values indicate the difference between two magnetic measurements separated by a fixed distance. The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame with a 1m separation between the sensing elements giving a strong response to deep anomalies.

#### *Sampling interval and data capture*

Readings were taken at 0.25m centres along traverses 1m apart. This equates to 3600 sampling points in a full 30m x 30m grid. The Grad 601 has a typical depth of penetration of 0.5m to 1.0m although a greater range is possible where strongly magnetic objects have been buried in the site.

Readings are logged consecutively into the data logger which is downloaded daily either into a portable computer whilst on site or directly to the office computer. At the end of each job, data is transferred to the office for processing and presentation.

#### *Processing and presentation of results*

Processing is performed using specialist ArcheoSurveyor software. 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 (Destripe or zero mean traverse). Despiking is also performed to reduce the effect of the anomalies resulting from small iron objects often found on agricultural land. Further processing can then be carried out which may include low pass filtering to reduce 'noise' in the data and hence emphasise the archaeological or man-made anomalies.

The following are the processing techniques carried out on the processed gradiometer data used in this report:

1. DeStripe (sets the background mean of each traverse within a grid to zero and is useful for removing striping effects)
2. Despike (useful for display and allows further processing functions to be carried out more effectively by removing extreme

data values)

Parameters: X radius = 1; Y radius = 1;  
Threshold = 3SD; Spike replacement = mean

3. Clip (excludes extreme values allowing better representation of detail in the mid range): -3 to 3nT.

### 3.2 Results

The presentation of the data for the site involves a print-out of the raw or minimally processed data as greyscale and trace plots (Figs 4, 5; clipped for display but otherwise unprocessed), together with greyscale plots of the processed data (Figs 6, 7). Magnetic anomalies have been identified and plotted onto an interpretative drawing (Fig. 8) and are described below.

#### *Discrete positive anomalies*

A cluster of discrete positive anomalies **A**, towards the southwest of the centre of the survey area and a single discrete positive anomaly **B** to the northwest have been highlighted. These possibly indicate cut features, although no clear pattern is evident and little more can be said on the basis of form alone.

#### *Modern/magnetic disturbance*

Strong bipolar responses occur in the southwestern corner of the field and probably represent modern disturbance.

#### *Iron spikes (discrete bipolar anomalies)*

Iron items within the topsoil give a distinctive localised bipolar (strong positive with associated strong negative) response. Such items usually derive from relatively recent management or agricultural use of the land – broken or discarded pieces of agricultural machinery or other modern debris. These are widely scattered across the site

### 4. DISCUSSION

Magnetometer survey identified few anomalies of potential archaeological origin. A number of discrete positive anomalies towards the central western area of the survey area and a single discrete positive anomaly to the northwest may represent cut features but no clear pattern is evident and little more can be said on the basis of form alone.

Magnetic disturbance is present in the southwest corner of the survey area, but with the exception of occasional metal items in the topsoil there is little indication of modern disturbance across the field as a whole. A possible faint area of magnetic disturbance was also recorded on a northeast-southwest alignment extending from the centre of the site which may represent a change in natural geology.

### 5. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Henry Doble who commissioned the project on behalf of Acorus Rural Property Services. Steve Malone (APS) edited the report along with Tom Lane (APS).

### 6. PERSONNEL

Project coordinator: Steve Malone  
Geophysical Survey: Andrew Failes, Jonathon Smith  
Survey processing and reporting: Steve Malone, Andrew Failes

### 7. BIBLIOGRAPHY

Clark, A., 1996 *Seeing Beneath the Soil*, London, 2<sup>nd</sup> edn.

English Heritage, 2008 *Geophysical*

*Survey in Archaeological Field Evaluation.*

Hodge, C.A.H., Burton, R.G.O., Corbett, W.M., Evans, R. and Seale, R.S., 1984 *Soils and their use in Eastern England*, Soil Survey of England and Wales **13**

IfA, 2008 *Standard and Guidance for Field Evaluation.*

IfA, 2011 *Standard and Guidance for Geophysical Survey.*

## **8. ABBREVIATIONS**

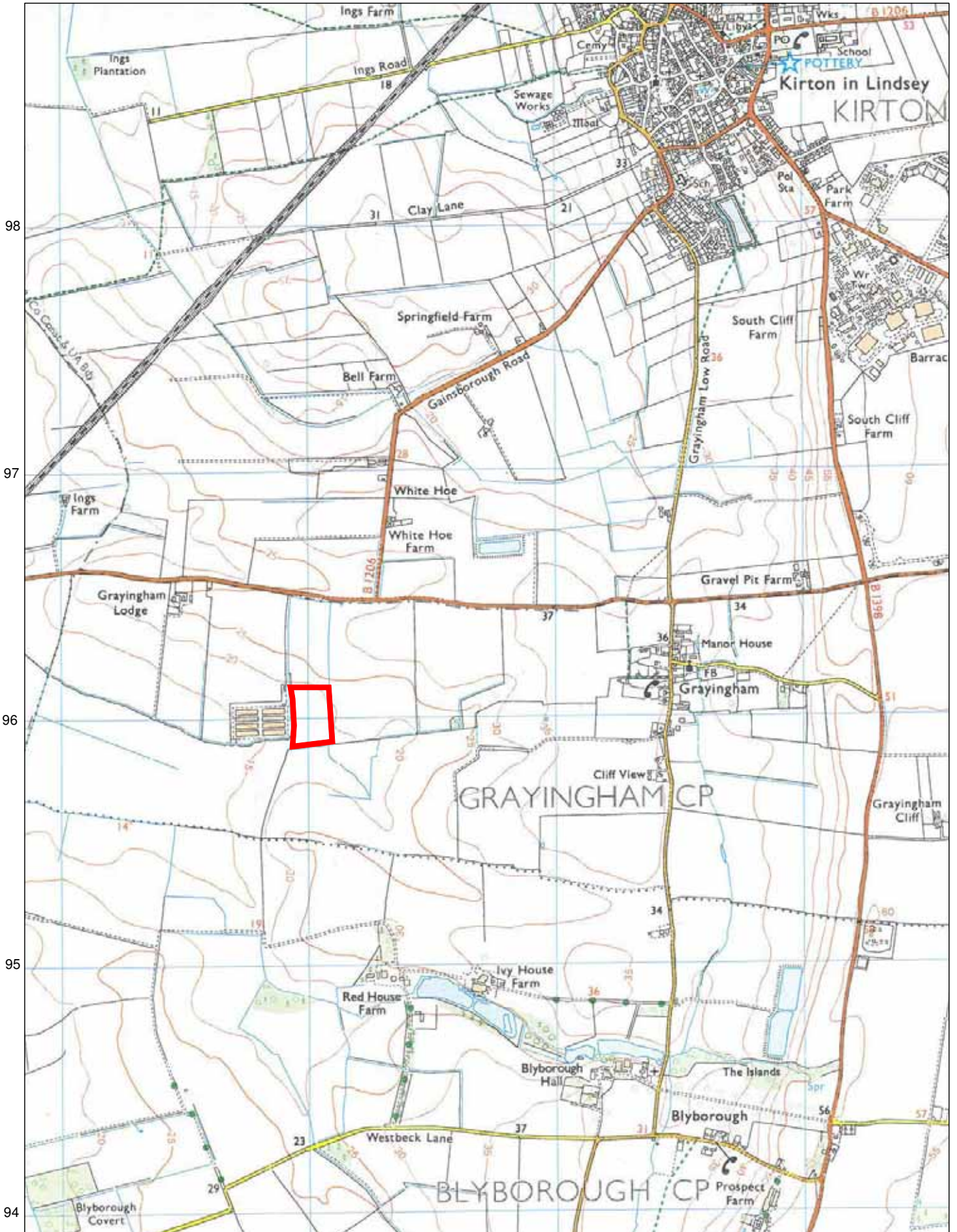
APS Archaeological Project Services

BGS British Geological Survey

IfA Institute for Archaeologists



Figure 1: General Location Plan



SK



- Site location



Archaeological Project Services

Project Name: Northorpe Trafalgar Farm (NOTF13)

Scale 1:20000 Drawn by: AF Report No: 32/13

Reproduced from the Ordnance Survey 1:25000 map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright. HTL Licence No 100020146

Figure 2 - Site location

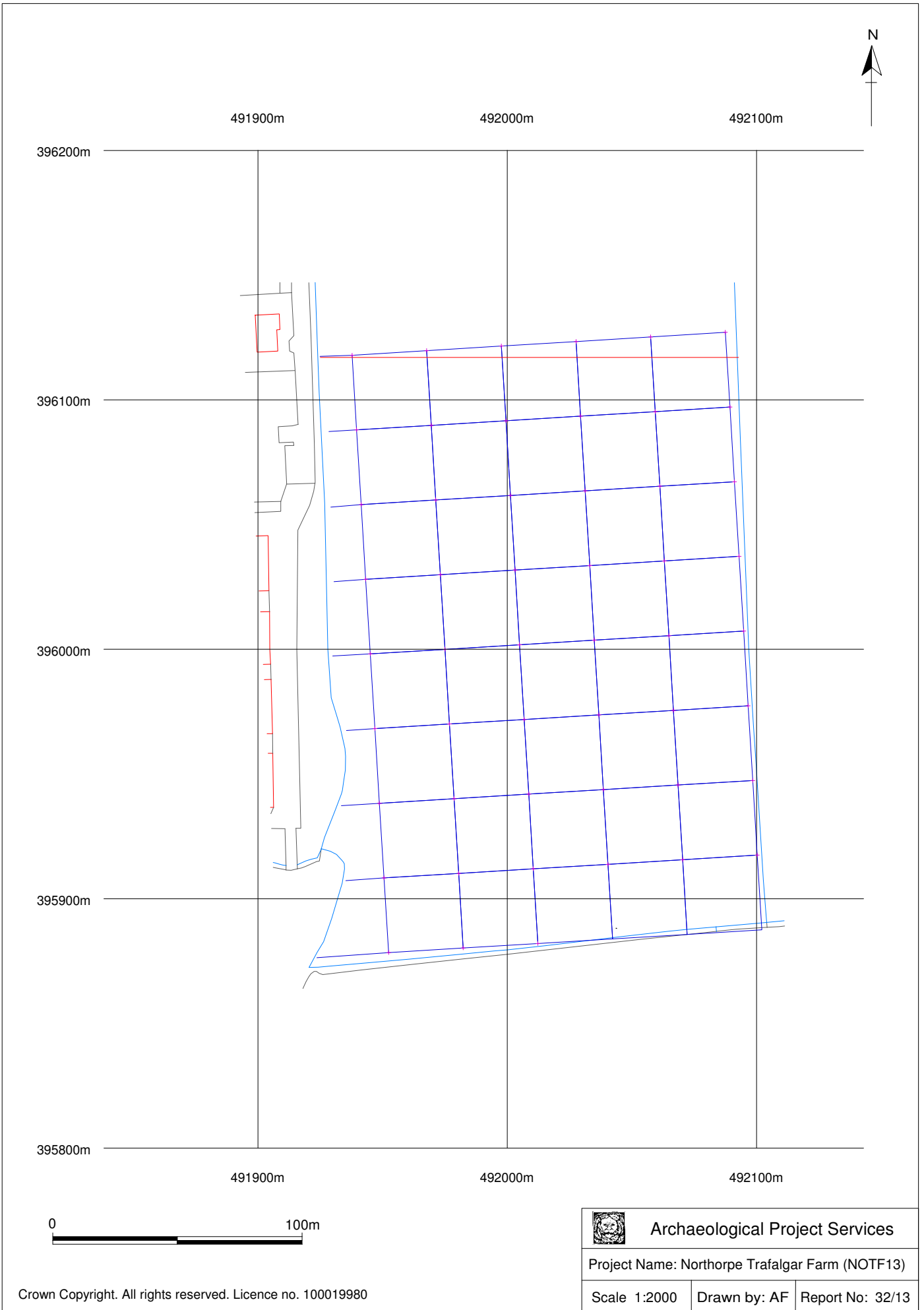


Figure 3 - Location and layout of survey area



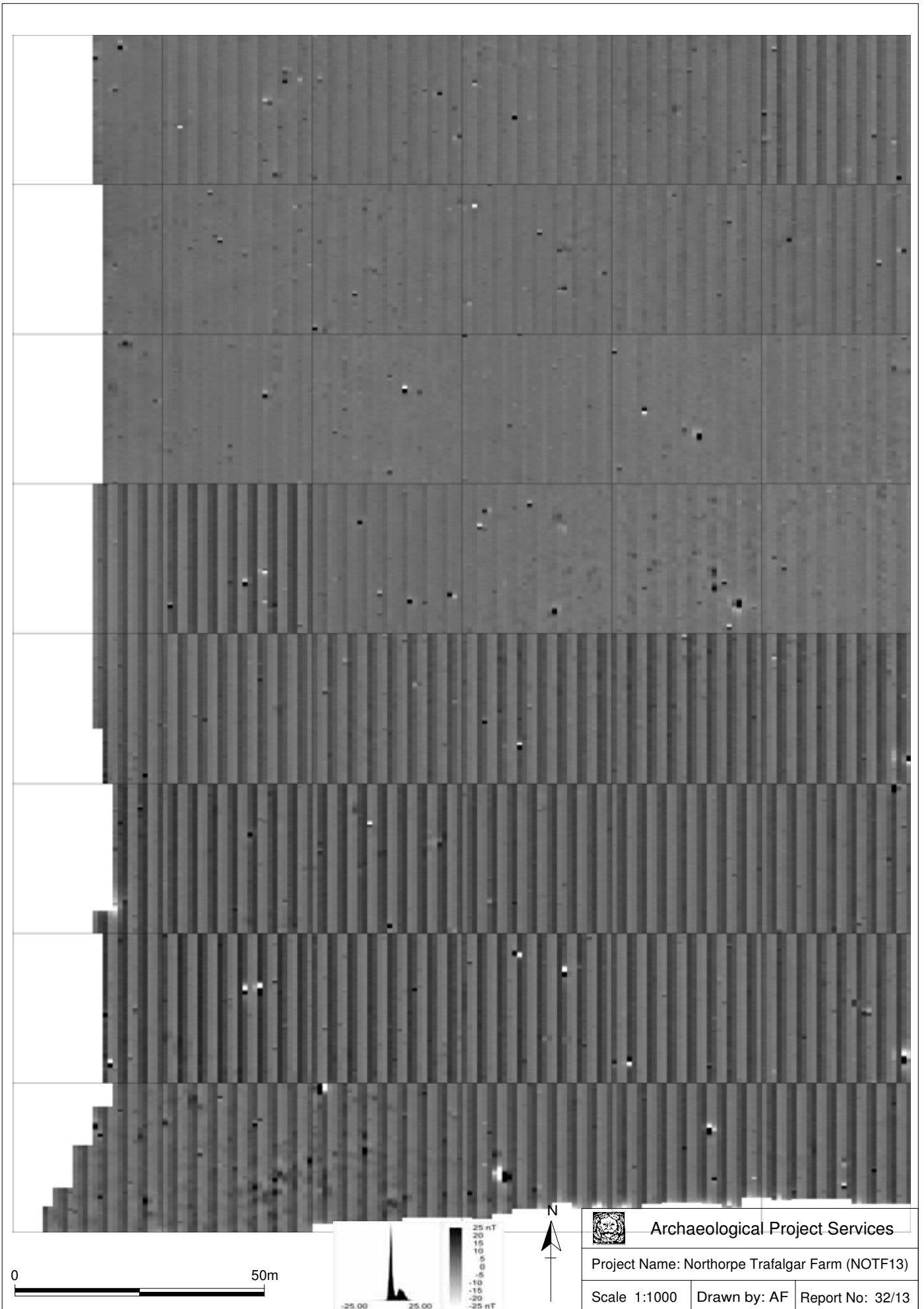
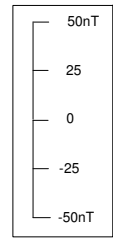
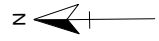
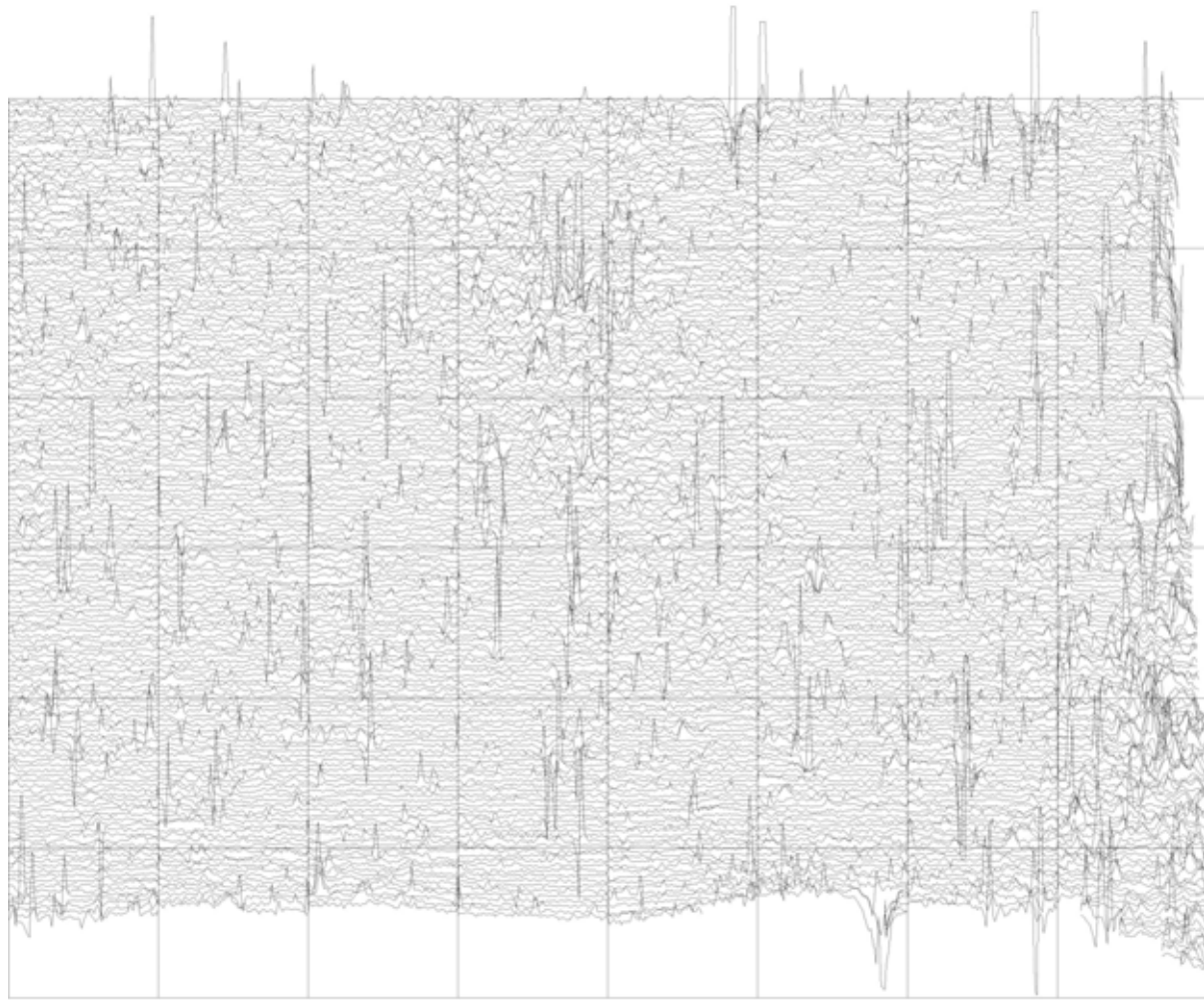


Figure 4 - Minimally processed data greyscale plot




 Archaeological Project Services		
Project Name: Northorpe Trafagar Square (NOTF13)		
Scale 1:1500	Drawn by: AF	Report No: 32/13

Figure 5 - Minimally processed data trace plot

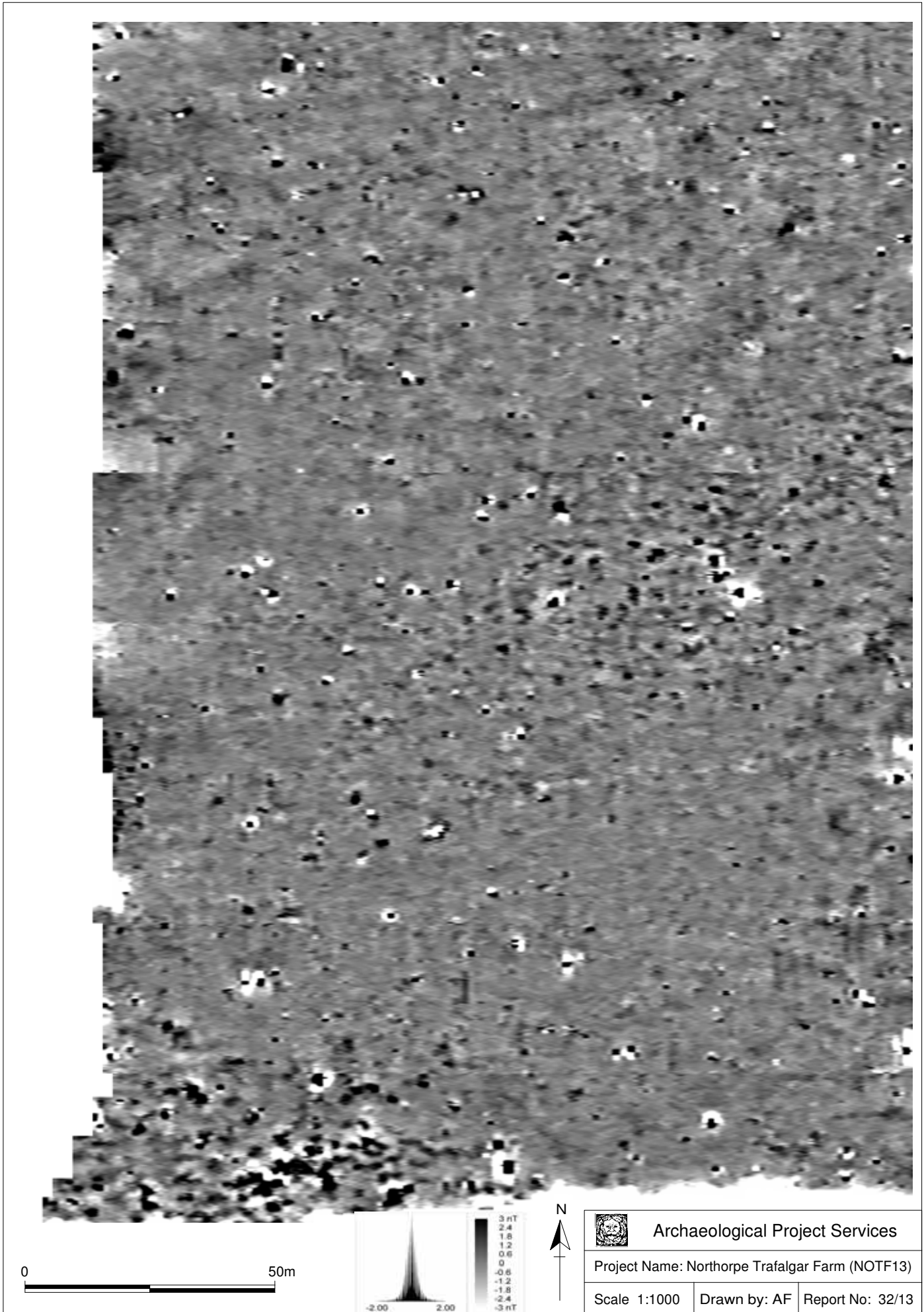


Figure 6 - Processed data greyscale plot

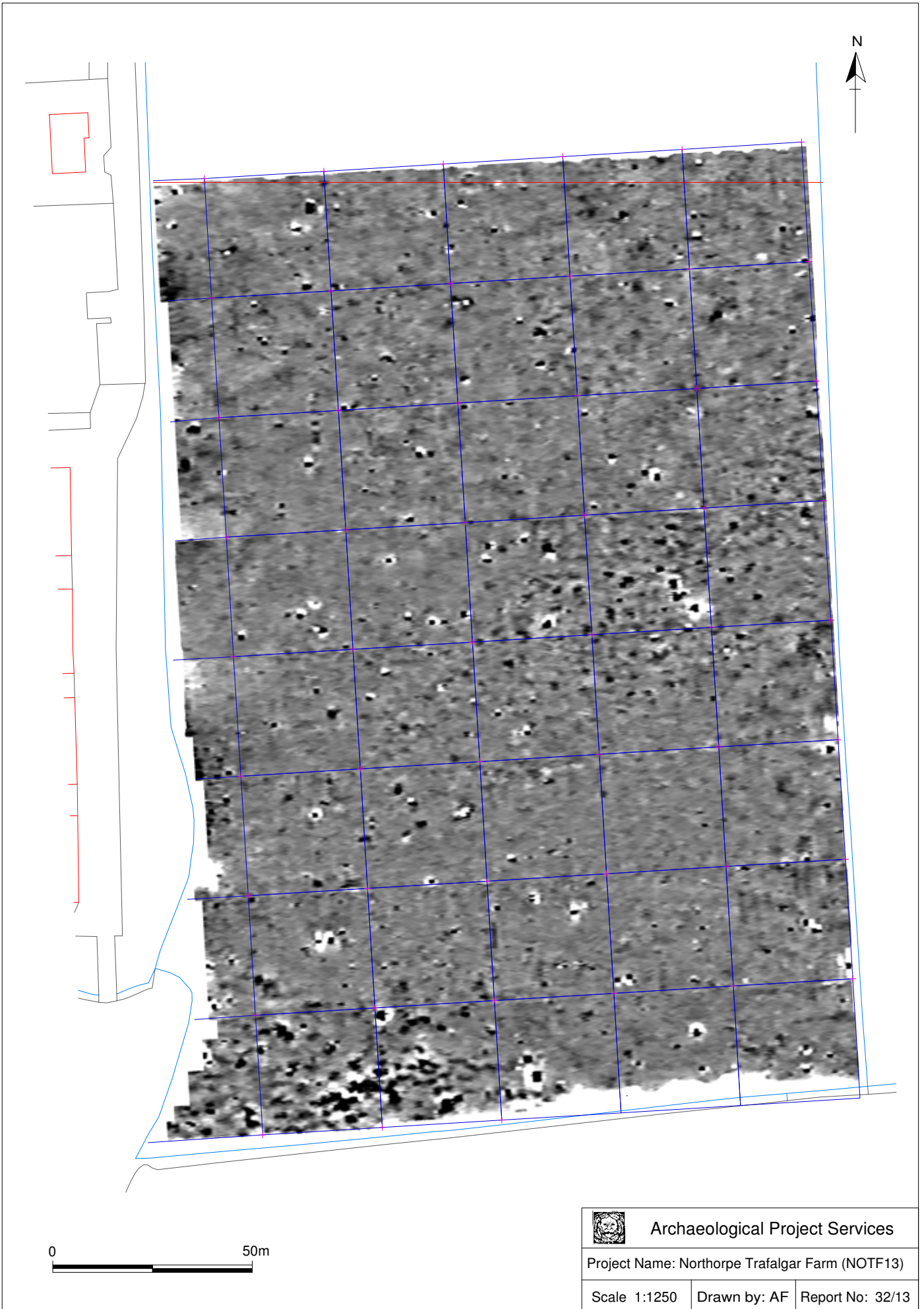


Figure 7 - Processed data greyscale overlain on base map

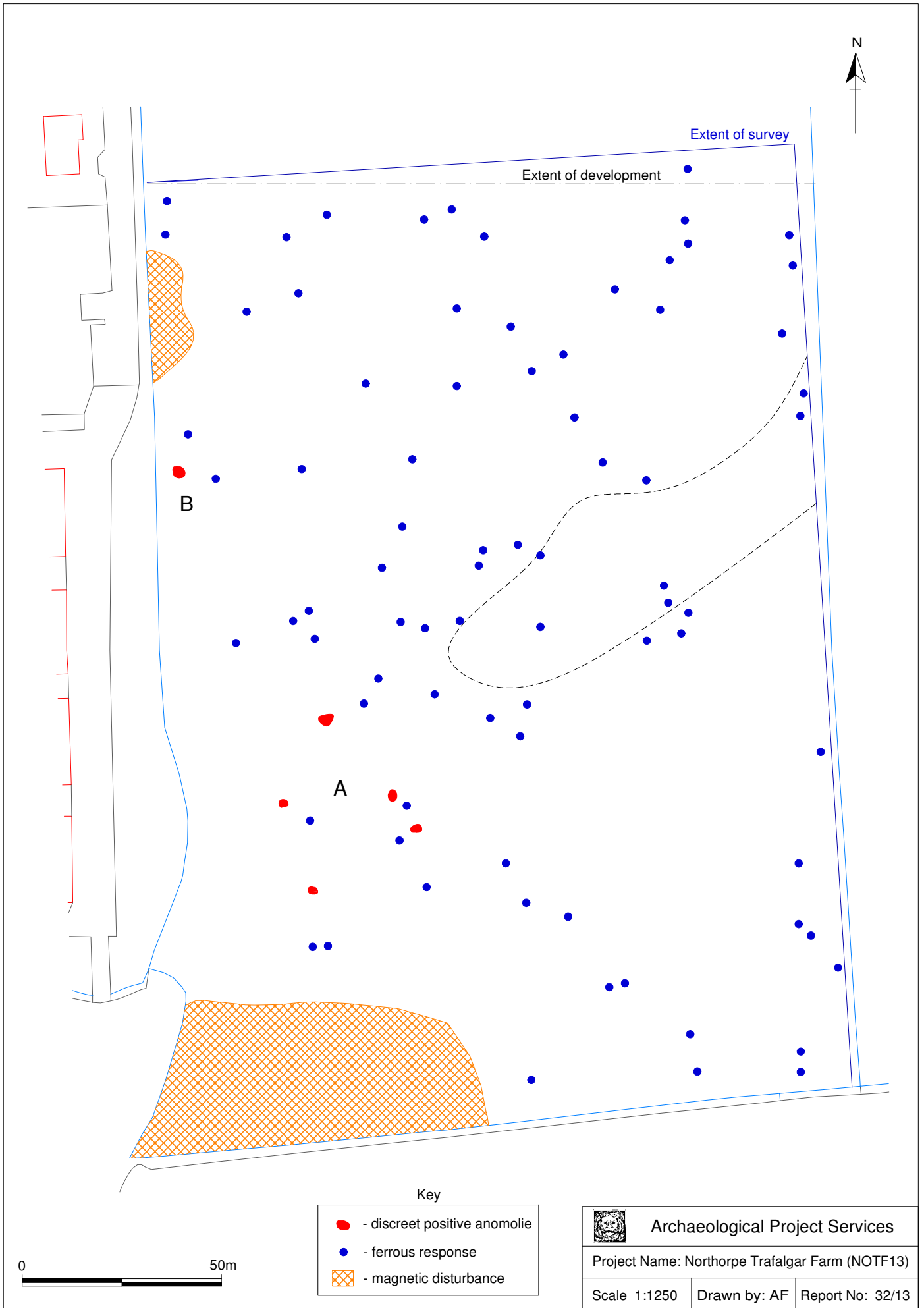


Figure 7 - Processed data greyscale overlain on base map

## Appendix 1 THE ARCHIVE

The archive consists of:

- 2 Daily record sheets
- 1 Report text and illustrations
- Digital data

File names	notf13-01.xgd notf13-02.xgd notf13-03.xgd notf13-04.xgd notf13-05.xgd notf13-06.xgd notf13-07.xgd notf13-08.xgd notf13-09.xgd notf13-10.xgd notf13-11.xgd notf13-12.xgd notf13-13.xgd notf13-14.xgd notf13-15.xgd notf13-16.xgd notf13-17.xgd notf13-18.xgd	notf13-19.xgd notf13-20.xgd notf13-21.xgd notf13-22.xgd notf13-23.xgd notf13-24.xgd notf13-25.xgd notf13-26.xgd notf13-27.xgd notf13-28.xgd notf13-29.xgd notf13-30.xgd notf13-31.xgd notf13-32.xgd notf13-33.xgd notf13-34.xgd notf13-35.xgd notf13-36.xgd	notf13-37.xgd notf13-38.xgd notf13-39.xgd notf13-40.xgd notf13-41.xgd notf13-42.xgd notf13-43.xgd notf13-44.xgd notf13-45.xgd notf13-46.xgd notf13-47.xgd notf13-48.xgd  notf13-c1.xcp notf13-t1.xcp
Explanation of codes used in file names	xgd files are magnetometer grids, named with site code and number in the order surveyed. xcp files are composites containing record of all the data and processes used to produce the end product		
Description of file formats	All files are in plain text xml format with header data defining survey and processing parameters		
List of codes used in files	D indicates a "dummy" value within the composite data		
Hardware, software and operating systems	ArcheoSurveyor 2.5.15 running under Windows 7		
Date of last modification	01/03/13		
Indications of known areas of weakness in data			

All primary records are currently kept at:

Archaeological Project Services, The Old School, Cameron Street, Heckington, Sleaford, Lincolnshire NG34 9RW

The ultimate destination of the project archive is:

The Collection

Site Code:

NOTF13

Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.