West Burton Solar Project

Environmental Statement

Appendix 13.2: Archaeological Geophysical Survey Report (Part 5 of 6)

Prepared by: ASWYAS

March 2023

PINS reference: EN010132

Document reference: APP/WB6.3.13.2

APFP Regulation 5(2)(a)

West Burton
SOLAR PROJECT

Appendix 4

West Burton Cable Route Corridor Geophysics Report (ASWYAS 2023)

WYAS Archaeological Services

West Burton Cable Route

West Burton Solar Project

Lincolnshire

Geophysical Survey

Report no. 3890
January 2023

Client: West Burton SOLAR PROJECT

REGISTERED ORGANISATION CIfA

West Yorkshire Joint Services

West Burton Cable Route, West Burton Solar Project, Lincolnshire

Geophysical Survey

Summary

A geophysical (magnetometer) survey was undertaken across approximately 108 hectares of land associated with the West Burton Cable Route linking the previously surveyed proposed solar sites of West Burton 1, 2 and 3 to West Burton Power Station in Lincolnshire. The majority of the anomalies recorded are agricultural including field drains, ridge and furrow cultivation, modern ploughing and former field boundaries. Archaeological and possible archaeological responses have been recorded which relate to settlement activity, a ring ditch and field systems. Based on the geophysical survey, the archaeological potential of this site is deemed to be high in these areas and low elsewhere.

WYAS Archaeological Services

Report Information

Client:	West Burton Solar Project Limited
Report Type:	Geophysical Survey
Location:	West Burton Cable Route
County:	Lincolnshire
Grid Reference:	northwest at SK 7898 8517 / southeast at SK 9107 7881
Period(s) of activity:	Romano-British/medieval/post-medieval/modern
Report Number:	3890
Project Number:	XB85
Site Code:	CWB21
OASIS ID:	archaeol11-512402
Date of fieldwork:	August – October 2022
Date of report:	January 2023
Project Management:	Emma Brunning BSc MCIfA
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Document Issue Record

Ver	Author(s)	Reviewer	Approver	Date
1.0	JF	DW	JR	Jan 2023

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1 Introduction

Archaeological Services ASWYAS was commissioned by Lanpro Services on behalf of their client, West Burton Solar Project Limited to undertake a geophysical survey in advance of the proposed development of the West Burton Solar Scheme, Lincolnshire. This survey relates to land associated with the West Burton Cable Route within, hereafter referred to as the 'study site'. This was undertaken in line with current best practice (CIfA 2014; Schmidt *et al.* 2015). The survey was carried out between August and October 2022 to provide additional information on the archaeological resource of the study site.

Site location, topography and land-use

The proposed cable route has been divided into two sections as below

• Section 1 – areas to the east of West Burton Power Station (see Fig. 3)

• Section 2 – areas between West Burton 1, 2 and 3 sites (see Fig. 6)

The cable route was changed a number of times during survey, the final route comprised *c.* 108ha over 50 areas (S1-S50). The study site is located in the northwest at SK 7898 8517 and in the southeast at SK 9107 7881 (See Fig. 1). The geophysical survey areas were centred along the proposed cable route with a 50m buffer on each side. The route is primarily across arable land with a mix of crop coverage, plough, silage grass and pasture. Areas which were not suitable for survey included rough plough and overgrown vegetation.

Soils and geology

The recorded bedrock geology in the majority of the proposed route comprises mudstone of the Mercia Mudstone Group. Charmouth Mudstone Formation is present adjacent to the River Till between the West Burton 1 and 2 sites in Section 3, and Mudstone and limestone of Scunthorpe Mudstone Formation is present in between the West Burton 3 and 2 sites. Superficial deposits of clay, silt, sand and gravel alluvium are recorded along water courses that run through Sections 1 and 2. Superficial deposits of Holme Pierrepont Sand and Gravel Member occur in Section 1 to the east of West Burton Power Station (BGS 2023).

2 Archaeological Background

The archaeological background below is taken from a Written Scheme of Investigation provided by Lanpro Services Ltd (James 2022) and is split into sections reflecting each portion of cable route.

Section 1 – areas to the east of West Burton Power Station

Evidence of prehistoric activity in the vicinity of Section 1 is limited to probable trackways and ditches and enclosures of either prehistoric or Roman date to the west of New Ings Lane (MNT6174).

Littleborough Road and Wheatley Road follow the line of a Roman road that aligned westwards from the river crossing of the River Trent at Littleborough, which lies on the site of the Roman Town of *Segelocum*. Several fields to the north and south Littleborough contain earthworks belonging to the Roman town, a Scheduled Monument (NHLE: 1003669).

Section 1 is likely to have retained a primarily rural character since at least the early medieval period. The documentary and archaeological evidence for the area around the proposed cable route suggests that the present pattern of villages, hamlets and post-medieval farmsteads broadly represents the pattern of Late Anglo-Saxon, medieval and post-medieval settlement. Burton, Sturton le Steeple and Leverton are recorded as forming large settlements in the Domesday Book in 1086. An area to the south of West Burton Power Station forms a Scheduled Monument where earthworks represent the above ground remains of a deserted medieval village (NHLE: 1017741). Several earthworks have been recorded in the fields surrounding Sturton le Steeple that are likely to be of a medieval origin and possibly relate to settlement activity, suggesting that shrunken medieval settlement has occurred (MNT6108, MNT6109 and MNT6111).

An abundance of ridge and furrow has been recorded in the HER (MNT6006, MNT6110, MNT6849, MNT6896 and MNT6897). Consequently, there is a high potential that buried archaeological features dating to the medieval and post-medieval periods within the cable route primarily relate to agricultural activity, such as ridge and furrow, field boundaries and drainage.

Section 2 – areas between West Burton 1, 2 and 3 sites

There is one Scheduled Monument within the vicinity of the West Burton 1 site, relating to the Broxholme medieval settlement and cultivation remains (NHLE1016797), which lies adjacent to West Burton 1's south-western corner.

The West Burton 1 site contains three records held on the HER. A Neolithic stone axe found within the north-western side of the Site in 1934 (MLI51515), as well as parts of the eastern edges of areas defined on the HER as defining the extent of medieval and post-medieval settlement and cultivation remains at Broxholme (MLI50523; 51796).

The West Burton 2 Site contains a single designated heritage asset, the Scheduled remains of the medieval deserted village of North Ingleby (NHLE 1003570). It also contains fifteen non-designated heritage assets held on the Lincolnshire HER. These consist of fourteen 'monument' records and one 'event' record.

The earliest recorded evidence for activity within the West Burton 2 dates to the Neolithic with a polished stone axe found on the site's northern side (MLI52786) to the northwest of Wood Farm, and a piece of worked flint also recorded as having been discovered to Wood Farm's south (MLI52788). A Neolithic axe has also been found adjacent to the river Till, on the site's south-eastern edge (MLI52796).

The majority of the HER 'monument' records within West Burton 2 relate to medieval activity, associated with the deserted medieval settlements at North Ingleby (MLI54225; 50391) and South Ingleby (MLI50306; 50535; 50488). Four medieval coins are also recorded as having been recovered from a field to the south of Wood Farm (MLI52787).

The remaining HER 'monument' records relate to a former post-medieval windmill to the south of Ingleby Grange (MLI52773), the site of two former 19th-century farmsteads (MLI119086; 119092), and the location of a 19th-century park associated with Ingleby House (MLI92375).

The West Burton 3 site contains a single designated heritage asset, the Scheduled remains of the medieval bishop's palace and deer park at Stow Park (NHLE 1019229). The Scheduled Monument is divided across three separate areas; the site of the Bishop's Palace which is now largely occupied by the modern farm buildings of Moat Farm, of which parts of the northern, western and southern edges of the monument fall within the study site, the 'West Lawn' which comprises the remains of part of the former park pale, the eastern edge of which falls within West Burton 3; and the East Lawn, which is situated at least 250m from the site's south-eastern corner of West Burton 3.

The West Burton 3 site contains eighteen records held on the Lincolnshire HER. These consist of thirteen 'monument' records and five 'event' records. The earliest recorded evidence for activity within the Site is represented by the discovery of a Neolithic polished stone axe on the Site's northern edge close to Till Bridge Lane (MLI52435).

To the north-east of Stow Park farm, chance finds dating to the Roman period have been discovered, including a ring (MLI52442), strap-ends, a disc brooch and seventeen coins (MLU52441). On the north-western edge of the site, to the south of Poplar Farm, cropmarks interpreted as representing a probable Roman trackway and field boundaries have been recorded (MLI52489).

Much of the eastern side of West Burton 3 is covered by the area defined in the HER as forming the extent of Stow Park Medieval Deer Park (MLI50418), with the associated Bishop's Palace (MLI54199) and its post-medieval successor Moat Farm (MLI116500), as well as an adjacent former medieval settlement (MLI52444) situated on the former park's northern edge. Medieval finds have been found in the area of the Bishop's Palace, including a jetton, a heraldic badge, a short cross half-penny and a seal-matrix (MLI50403). Medieval ridge and furrow is recorded on the western edge West Burton 3, to the northeast of Brampton (MLI52501).

3 Aims, Methodology and Presentation

The aims and objectives of the programme of geophysical survey were to gather sufficient information to establish the presence/absence, character and extent, of any archaeological remains within the specific area and to inform an assessment of the archaeological potential of the site. To achieve this aim, a magnetometer survey covering all amenable parts of the study site was undertaken (see Fig. 2).

The general objectives of the geophysical survey were:

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

Magnetometer survey

The study site was surveyed using either a cart-based survey or hand-held survey. The cart-based survey was undertaken using an eight channel SenSYS MX V3 system containing eight FGM650 sensors. Readings are taken every 20MHz (between 0.05 and 0.1m). Data were recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside bespoke in-house software was used to process and present the data. Further details are given in Appendix 1.

Where a cart-based survey was not suitable the survey was undertaken using Bartington Grad601 magnetic gradiometers. These were employed taking readings at 0.25m intervals on zig-zag traverses 1.0m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation. Bespoke in-house software was used to process and present the data. Further details are given in Appendix 1.

Reporting

A general site location plan, incorporating the 1:50000 Ordnance Survey (OS) mapping, is shown in Figure 1. Figure 2 displays the location of the study site at a scale of 1:20000. Figure 3 shows the location of survey areas S1-S33 at a scale of 1:10000. Figure 4 shows the processed magnetometer data at a scale of 1:10000, whilst Figure 5 shows an overview of the interpretation at the same scale. Figure 6 shows the location of survey areas S35-S50 at a scale of 1:10000. Figure 7 shows the processed magnetometer data at a scale of 1:10000, whilst Figure 8 shows an overview of the interpretation at the same scale. Processed and

minimally processed data, together with interpretation of the survey results are presented in Figures 9 to 50 inclusive at a scale of 1:1500.

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

The survey methodology, report and any recommendations comply with guidelines outlined by the European Archaeological Council (Schmidt *et al*. 2015) and by the Chartered Institute for Archaeologists (CIfA 2014). All figures reproduced from Ordnance Survey mapping are with the permission of the controller of His Majesty's Stationery Office (© Crown copyright).

The figures in this report have been produced following analysis of the data in processed formats and over a range of different display levels. All figures are presented to most suitably display and interpret the data from this site based on the experience and knowledge of Archaeological Services staff.

4 Results and Discussion (see Figures 9 to 50)

Ferrous anomalies and magnetic disturbance

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

Linear dipolar trends have been recorded in Areas S1, S6, S9, S12 and S13 which relate to service pipes.

Areas of magnetic disturbance (**F7**) in Area S1 (Sector 1) and **F8** in Area S40 (Sector 12) correspond with features marked on historic mapping published 1900 and 1906 respectively (NLS 2023) and are probably related to in-filled ponds.

Overhead power cables nearest the West Burton Power Station have caused interference within the data which can be seen in Areas S5 and S9 (Sectors 2 and 3). Large circular ferrous responses (**F1**-**F5**) in Areas S9, S11, S12, S14, S15, S16 and S17 (Sectors 3 - 5) relate to electricity pylons. Circular ferrous response **F6** in Area S1 (Sector 1) is likely to be

associated with a former pylon, as characterised by the 'button-like' appearance which represents the four legs/foundations of the pylon remaining *in situ*.

Magnetic disturbance along the limits of the survey areas is due to metal fencing within the field boundaries, adjacent farm buildings, roads and in the case of Areas S36 and S37, the railway line.

Geological anomalies

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

These are particular evident in Areas S27–S33 (Sector 9) which are adjacent to the river Trent and are therefore likely to be associated with flooding or palaeochannels, formerly feeding the river.

A broad sinuous anomaly (**G1**) has also been recorded in Areas S19–S22 (Sector 6) which is likely to be a former water course and a continuation of the curving boundary ditch to the east of the survey areas.

Agricultural anomalies

At least eleven former field boundaries (**FB1**–**FB11**) have been recorded throughout the study site. All of these boundaries correspond to former field boundaries recorded on Ordnance Survey maps from 1885 (NLS 2022).

Field drains can be seen within most of the fields. They are of differing magnetic strength which is likely to be associated with the construction material of the drains. Those that are particularly strong, such as in Areas S1–S8 (Sectors 1-2), Areas S12 and S14 (Sector 4), Area S20 (Sectors 5 and 6), are likely to be of a fired clay construction.

Medieval or post-medieval ridge and furrow cultivation has been recorded within a number of the areas.

Other parallel linear trends can be seen within all areas and are associated with modern ploughing. Only a selection of these have been highlighted on the interpretation diagrams to show the direction of the plough lines.

Uncertain anomalies

A number of anomalies within the dataset have been interpreted as having an uncertain origin, the majority of these are magnetically weak isolated trends which are on a different alignment to the current ploughing regime.

A possible rectilinear anomaly (**U1**) in Area S30 (Sector 9) lies within a zone of natural responses. This anomaly is of possible archaeological interest but there is no clear pattern and is more likely to be of a natural origin.

A short length of ditch-like anomaly (**U2**) in Area S48 (Sector 9) corresponds with a parch mark on Google imagery. It may be associated with a drain, service trench, or a former boundary, not shown on historic mapping. There is also the possibility it may be more historic in origin.

Possible and definite archaeological anomalies

Anomalies (**A1**) recorded in Area S9 (Sector 3) include a series of linear and curvilinear trends, of differing magnetic strengths. Due to other similar recorded features, as part of wider solar scheme, these anomalies are indicative of settlement activity over a probable Iron Age/Romano-British to medieval time period. It is likely that the activity continues further to the south, outside the survey area. The response from the overhead power cables may have masked further responses in the east.

A rectilinear anomaly (**A2**) in the south-western corner of Area S24 (Sector 7) has been recorded which is anthropogenic in origin, although a date is uncertain and could reflect a more recent feature. The anomaly continues slightly into Area S25 to the south. A number of possible archaeological anomalies (**P1**) have been recorded to the north of **A1** and may be associated, but as they are weaker in magnetic strength, an agricultural origin for **P1** is also possible.

A short linear anomaly (**P2**) can be seen in Area S25 (Sector 7) amongst an area of increased magnetic noise. It is likely that it indicates a former boundary which is not shown on historic mapping. This corresponds with aerial photograph cropmarks interpreted as Iron Age/Roman ditches/enclosures

A series of weak linear trends (**P3**) in Area S36 (Sector 7) suggest large enclosures or parts of field systems. Further similar responses (**P4**) in Areas S39 and S40 (Sector 12) may also indicate field systems.

A circular anomaly (**A3**) located in Area 39 (Sector 12) measures approximately 10m in diameter and may represent an isolated ring ditch.

Located in the south of Areas S42 and S43 (Sector 13) a clear rectilinear enclosure (**A4**) has been recorded which measures approximately 64m by 67m. There is the possibility of an entrance to its north-eastern corner. No obvious internal features have been recorded although the responses from the field drains and agriculture may have masked anything, if present.

Linear anomalies (**P5**) in Areas S42 and S43 (Sector 13) suggest field systems and are similar to those recorded at **P3** and **P4**.

5 Conclusions

The geophysical survey has detected a number of magnetic anomalies associated mainly with an agricultural landscape including former field boundaries, medieval/post-medieval ridge and furrow cultivation, modern ploughing and land drains. Definite archaeological responses have been recorded in several of the areas, comprising settlement features, rectilinear enclosures and a ring ditch. Possible archaeological responses have also been recorded which are likely to be associated with former field systems.

Magnetic disturbance within the dataset can be attributed to adjacent tracks and metal fencing within field boundaries. Service pipes have also been recorded along with interference from the overhead power cables near the power station.

Based on the geophysical survey, the archaeological potential of the study site is deemed to be high in the areas where magnetic anomalies have been identified that are likely to be indicative of archaeological deposits and low elsewhere.

Fig. 1. Site location

West Burton Power Station

see Fig. 3

see Fig. 6

West Burton 3

West Burton 1

West Burton 2

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33 S34 S35 S36 S37 S38 S39 S40 S41 S42 S43 S44 S45 S46 S47 S48 S49 S50

N

3860000 3850000 3840000 3830000 3820000 3810000 3800000 3790000 3780000 3770000 3760000

4770000 4780000 4790000 4800000 4810000 4820000 4830000 4840000 4850000 4860000 4870000 4880000 4890000 4900000 4910000 4920000

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Location of study site

Fig. 2

Title

- SURVEY AREA
- S1 FIELD NUMBERS
- SECTOR BOUNDARY
- PARCEL AREA

0 800m

1:20,000 @ A1

N

SECTOR 1
SEE FIGS 9-11

SECTOR 2
SEE FIGS 12-14

SECTOR 3
SEE FIGS 15-17

SECTOR 4
SEE FIGS 18-20

SECTOR 5
SEE FIGS 21-23

SECTOR 6
SEE FIGS 24-26

SECTOR 7
SEE FIGS 27-29

SECTOR 8
SEE FIGS 30-32

SECTOR 9
SEE FIGS 33-35

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33

385000
384000
383000
382000
381000

479000
480000
481000
482000

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Location of survey areas S1-S33

Fig. 3

Title

- SURVEY AREA
- S1 FIELD NUMBERS
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

0 400m

1:10,000 @ A2

N

SECTOR 1
SEE FIGS 9-11

SECTOR 2
SEE FIGS 12-14

SECTOR 3
SEE FIGS 15-17

SECTOR 4
SEE FIGS 18-20

SECTOR 5
SEE FIGS 21-23

SECTOR 6
SEE FIGS 24-26

SECTOR 7
SEE FIGS 27-29

SECTOR 8
SEE FIGS 30-32

SECTOR 9
SEE FIGS 33-35

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33

3850000
3840000
3830000
3820000
3810000
4790000
4800000
4810000
4820000

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Processed magnetometer data; S1-S33

Fig. 4

Title

- SURVEY AREA
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 400m

1:10,000 @ A2

N

SECTOR 1
SEE FIGS 9-11

SECTOR 2
SEE FIGS 12-14

SECTOR 3
SEE FIGS 15-17

SECTOR 4
SEE FIGS 18-20

SECTOR 5
SEE FIGS 21-23

SECTOR 6
SEE FIGS 24-26

SECTOR 7
SEE FIGS 27-29

SECTOR 8
SEE FIGS 30-32

SECTOR 9
SEE FIGS 33-35

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33

3850000
3840000
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3810000
4790000
4800000
4810000
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Interpretation of magnetometer data; S1-S33

Fig. 5

Title
- SURVEY AREA
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation
- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ?ARCHAEOLOGY
- ARCHAEOLOGY
- INTERFERENCE

0 400m
1:10,000 @ A2

N

S35

S36

S37

S38

S39

S40

S41

S42

S43

S44

S45

S46

S47

S48

S49

S50

SECTOR 10
SEE FIGS 36-38

SECTOR 11
SEE FIGS 39-41

SECTOR 12
SEE FIGS 42-44

SECTOR 13
SEE FIGS 45-47

SECTOR 14
SEE FIGS 48-50

3800000

3790000

3780000

4860000

4870000

4880000

4890000

4900000

4910000

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Location of survey areas S35-S50

Fig. 6

Title

- SURVEY AREA
- T1 FIELD NUMBERS
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

0 400m

1:10,000 @ A2

N

S35

S36

S37

S38

S39

S40

S41

S42

S43

S44

S45

S46

S47

S48

S49

S50

SECTOR 10
SEE FIGS 36-38

SECTOR 11
SEE FIGS 39-41

SECTOR 12
SEE FIGS 42-44

SECTOR 13
SEE FIGS 45-47

SECTOR 14
SEE FIGS 48-50

3800000

3790000

3780000

4860000

4870000

4880000

4890000

4900000

4910000

Project ID: XB85_CWB22 West Burton Cable Route

Processed magnetometer data; S35-S50

Fig. 7

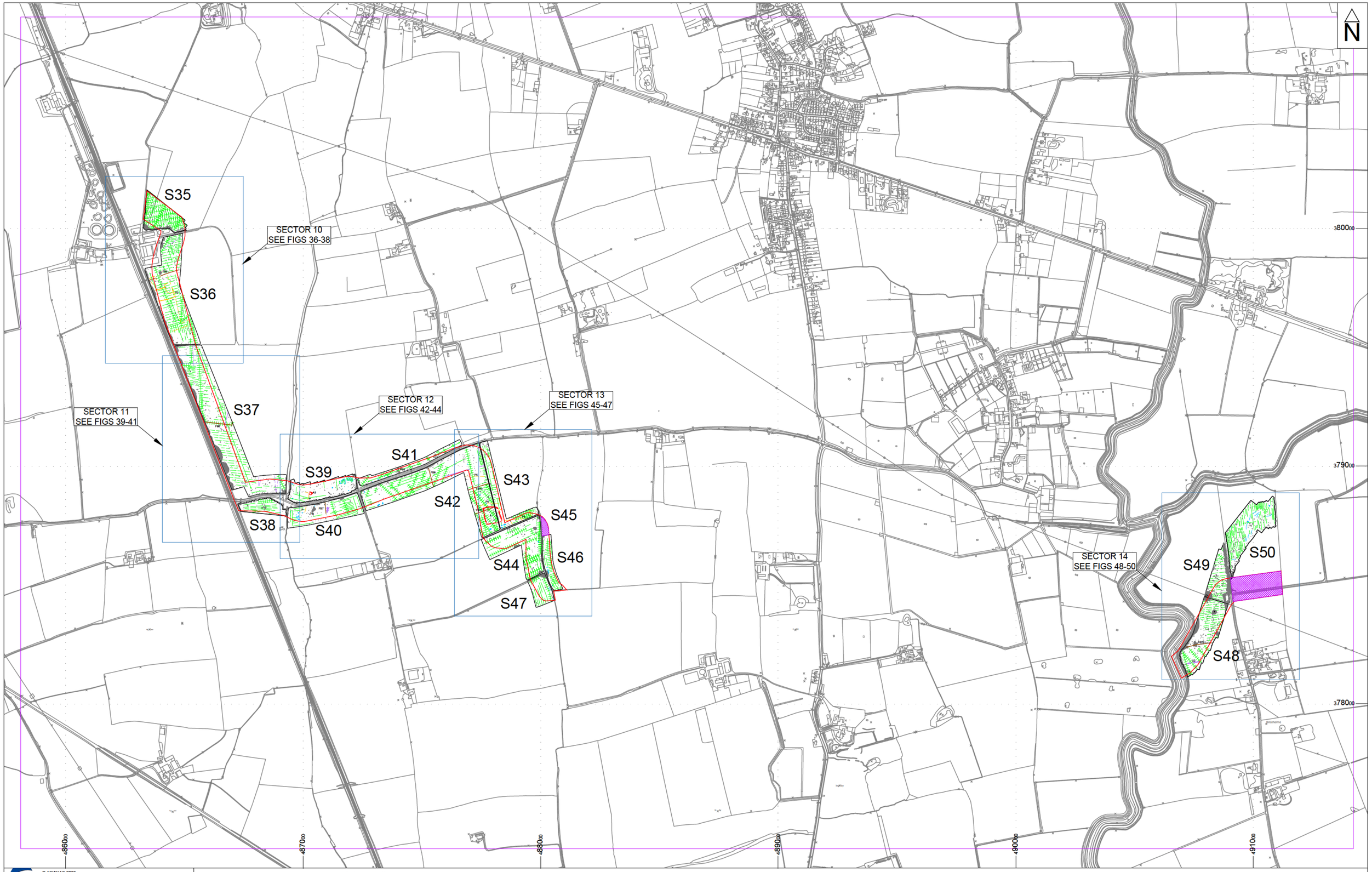
Title

- SURVEY AREA
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 400m

1:10,000 @ A2



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Interpretation of magnetometer data; S35-S50

Fig. 8

Title

- SURVEY AREA
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ?ARCHAEOLOGY
- ARCHAEOLOGY
- INTERFERENCE

0 400m

1:10,000 @ A2

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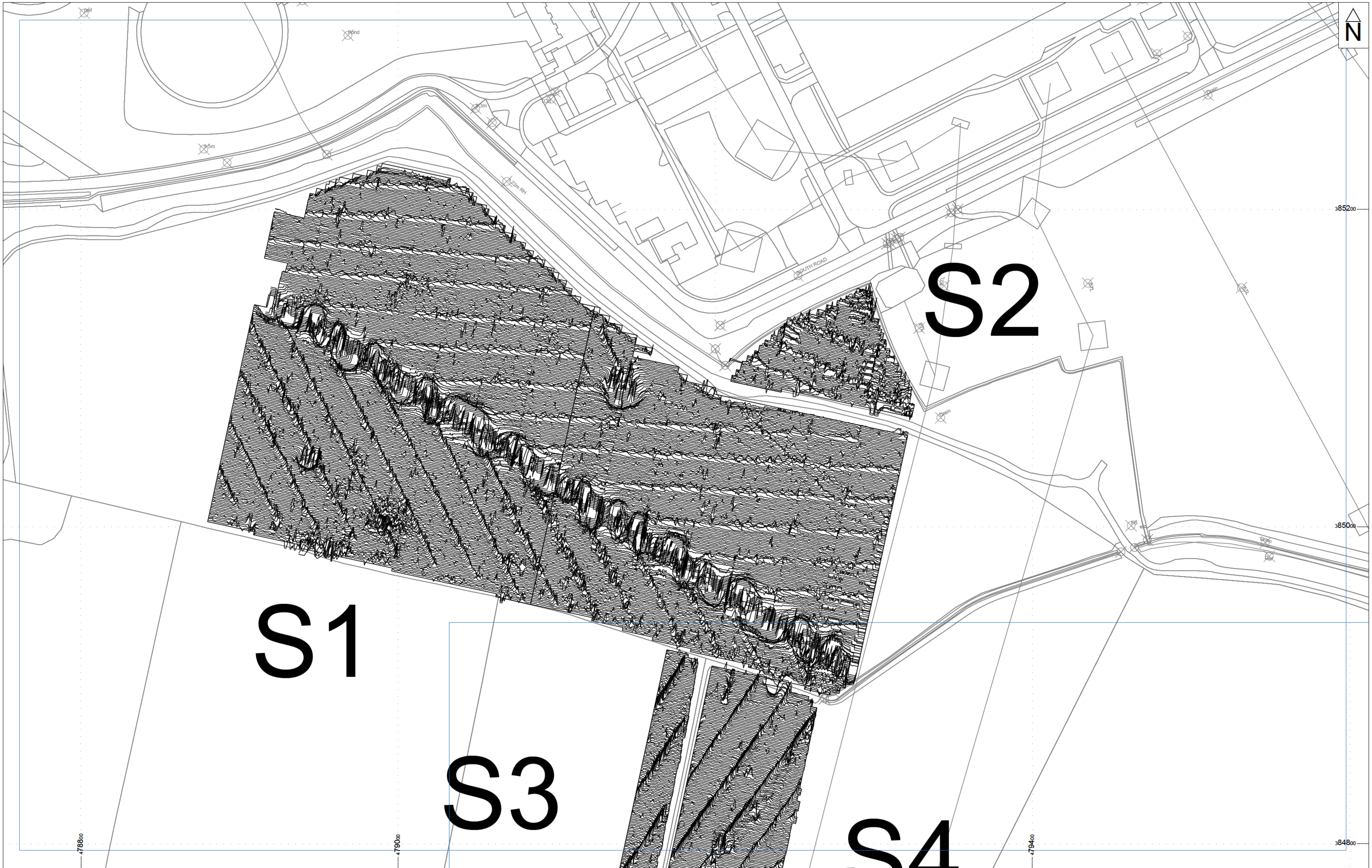
Processed greyscale magnetometer data; Sector 1

Fig. 9

Title

	SECTOR BOUNDARY
	UNSUITABLE FOR SURVEY



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XY trace plot of minimally processed magnetometer data; Sector 1

Fig. 10

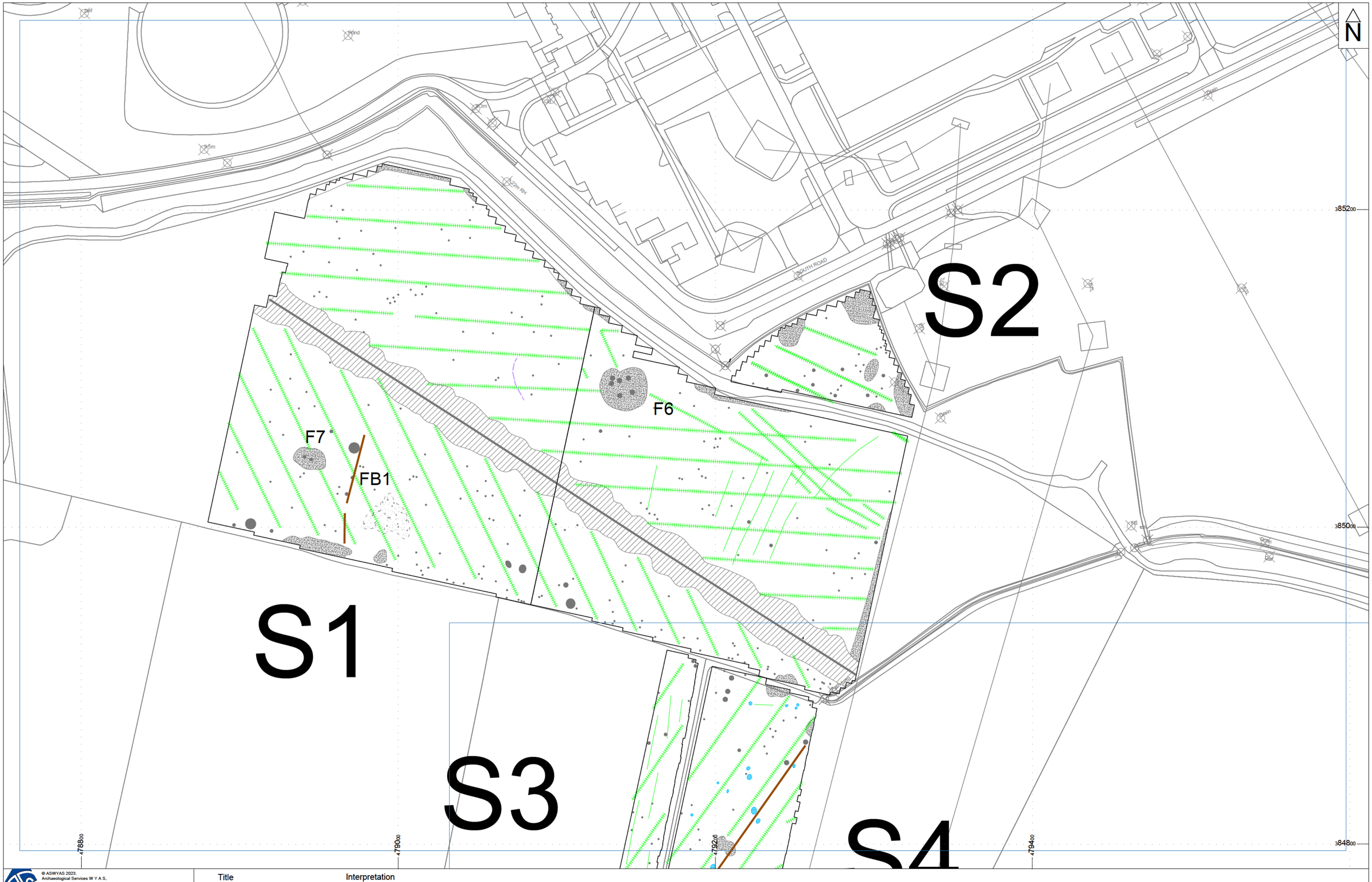
Title

	SECTOR BOUNDARY
	UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2



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Interpretation of magnetometer data; Sector 1

Fig. 11

Title

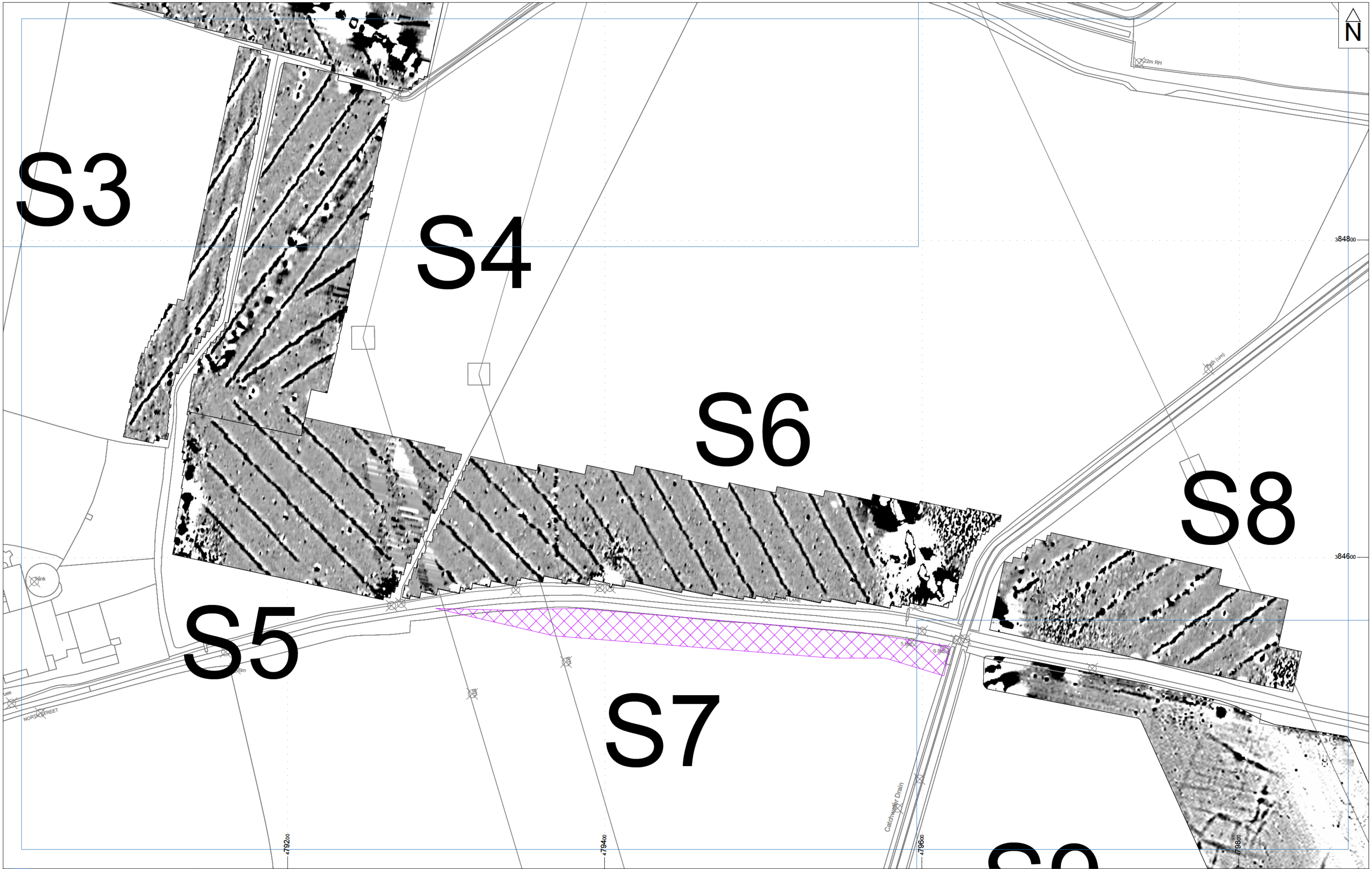
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN

0 60m

1:1,500 @ A2



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Processed greyscale magnetometer data; Sector 2

Fig. 12

Title

	SECTOR BOUNDARY
	UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2

S3

S4

S6

S8

S5

S7

S9

N

22m RH

Track (um)

Ditch

NORTH STREET

Catchwater Drain

384800

384600

479200

479400

479600

479800

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XY trace plot of minimally processed magnetometer data; Sector 2

Fig. 13

Title

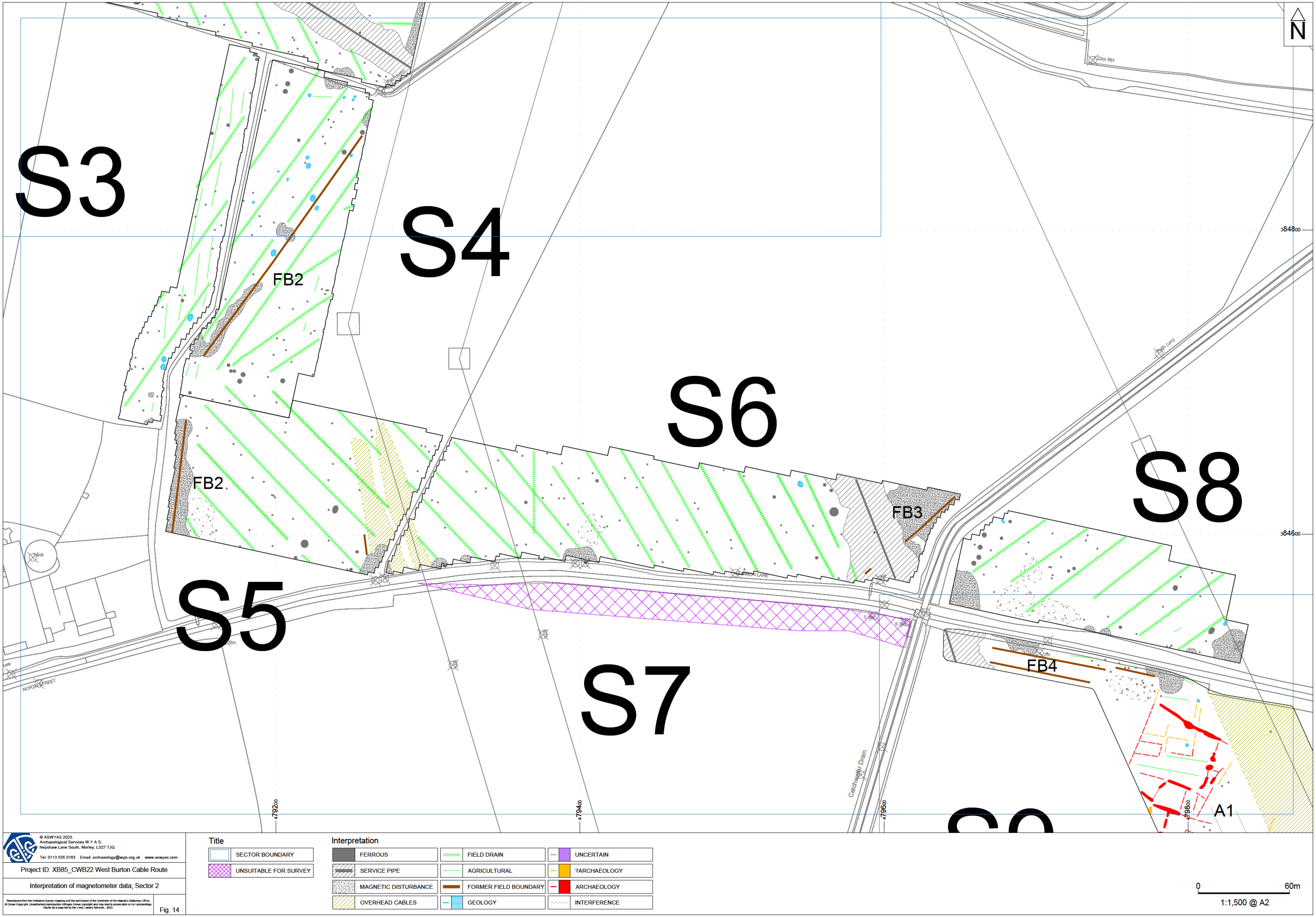
SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2



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Interpretation of magnetometer data; Sector 2

Fig. 14

S9

S10

S11

N

384400

384200

384000

479600

479800

480000

LITTLEBOROUGH ROAD

CROSS COMMON LANE

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Processed greyscale magnetometer data; Sector 3

Fig. 15

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2

S9

S10

S11

N

384400

384200

384000

479600

479800

480000

LITTLEBOROUGH ROAD

Project ID: XB85_CWB22 West Burton Cable Route

XY trace plot of minimally processed magnetometer data; Sector 3

Fig. 16

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2

N

S9

S10

S11

FB4

A1

F1

F2

384400

384200

384000

383800

479600

479800

480000

LITTLEBOROUGH ROAD

CROSS COMMON LANE

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Interpretation of magnetometer data; Sector 3

Fig. 17

Title

- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

FERROUS	FIELD DRAIN	UNCERTAIN
SERVICE PIPE	AGRICULTURAL	?ARCHAEOLOGY
MAGNETIC DISTURBANCE	FORMER FIELD BOUNDARY	ARCHAEOLOGY
OVERHEAD CABLES	GEOLOGY	INTERFERENCE

0 60m

1:1,500 @ A2

N

S12

S13

S14

CROSS COMMON LANE

STYLEBOROUGH ROAD

Main

Drain

50m

4800 00

4802 00

4804 00

3838 00

3836 00

3834 00

3832 00

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Processed greyscale magnetometer data; Sector 4

Fig. 18

Title

SECTOR BOUNDARY

nT -1.0 2.0

0 60m

1:1,500 @ A2

N

S12

S13

S14

CROSS COMMON LANE

LITTLEBOROUGH ROAD

3838000

3836000

3834000

4800000

4802000

4804000

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XY trace plot of minimally processed magnetometer data; Sector 4

Fig. 19

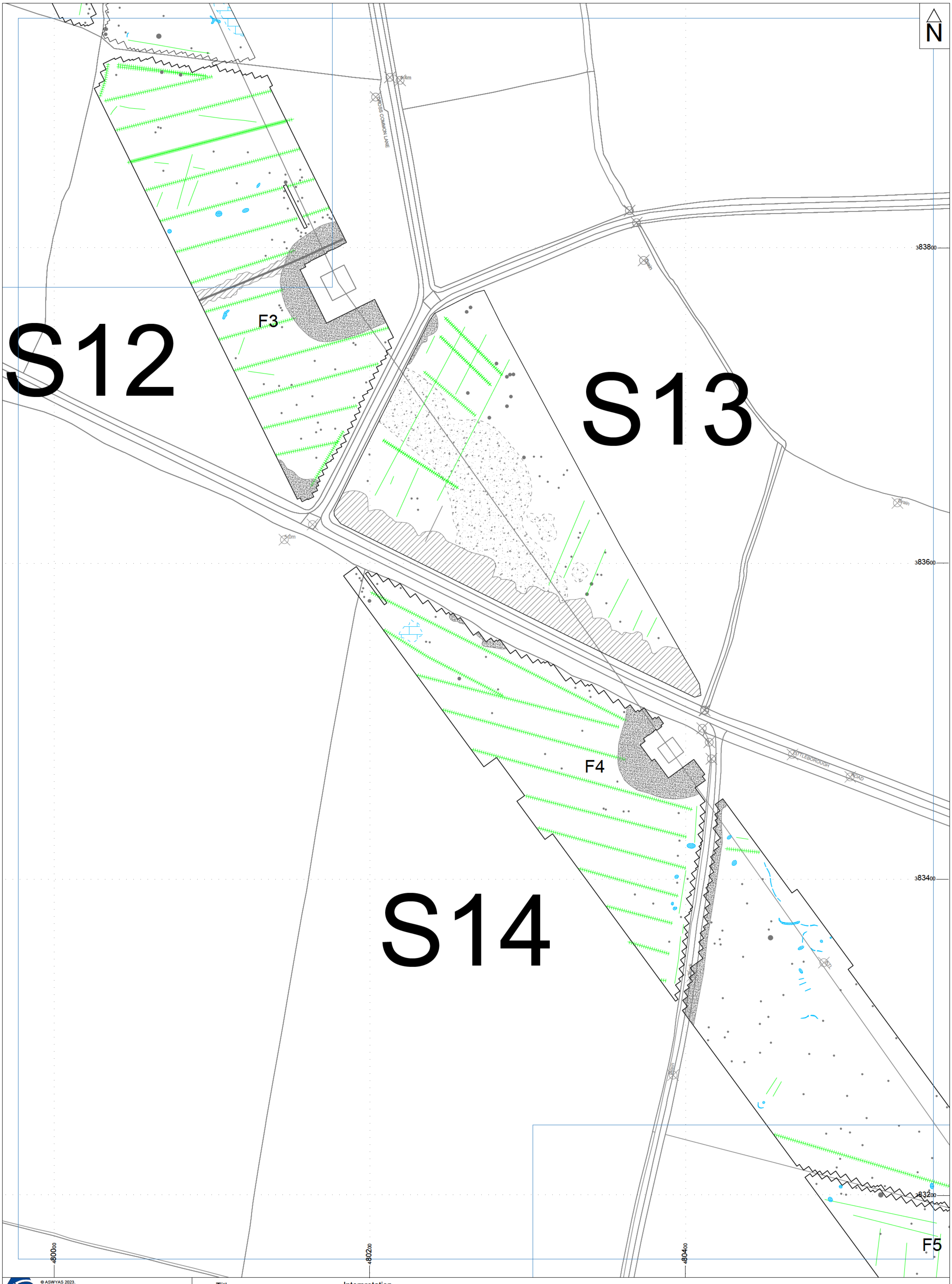
Title

SECTOR BOUNDARY

15.0 nT/cm

0 60m

1:1,500 @ A2



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Interpretation of magnetometer data; Sector 4

Fig. 20

Title

	SECTOR BOUNDARY

Interpretation

	FERROUS		FIELD DRAIN
	SERVICE PIPE		AGRICULTURAL
	MAGNETIC DISTURBANCE		GEOLOGY

0 60m

1:1,500 @ A2

N

S16

S17

S18

Drain

TENTON LANE

Drain

22m RH

Well

3832000

3830000

3828000

3826000

4804000

4806000

4808000

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Processed greyscale magnetometer data; Sector 5

Fig. 21

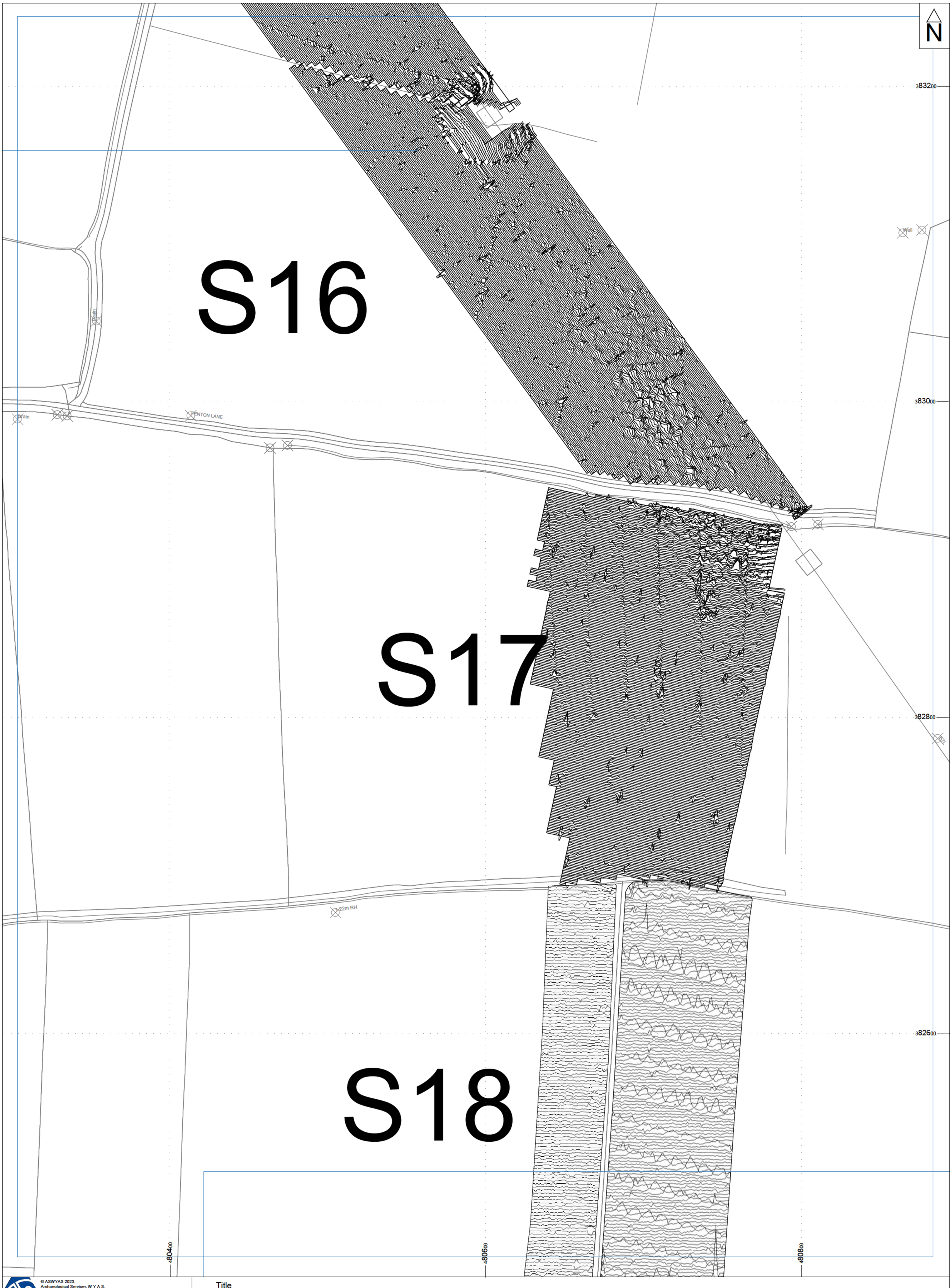
Title

SECTOR BOUNDARY

nT -1.0 2.0

0 60m

1:1,500 @ A2



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XY trace plot of minimally processed magnetometer data; Sector 5

Fig. 22

Title

SECTOR BOUNDARY

15.0 nT/cm

0 60m

1:1,500 @ A2

N

F5

S16

S17

S18

Drain

PENTON LANE

Drain

Well

22m RH

3832$_{00}$

3830$_{00}$

3828$_{00}$

3826$_{00}$

4804$_{00}$

4806$_{00}$

4808$_{00}$

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Interpretation of magnetometer data; Sector 5

Fig. 23

Title

- SECTOR BOUNDARY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- GEOLOGY

0 60m

1:1,500 @ A2

N

S20

S19

S21

S22

NORTHFIELD ROAD

Drain

52m

Track

Drain

CRAIKBANK LANE

Drain

382400

382200

382000

381800

480600

480800

481000

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Project ID: XB85_CWB22 West Burton Cable Route

Processed greyscale magnetometer data; Sector 6

Fig. 24

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2

N

S20

S19

S21

S22

NORTHFIELD ROAD

Drain

52m

Ditch

RAIKBANK LANE

Drain

Drain

382400

382200

382000

381800

380600

380800

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XY trace plot of minimally processed magnetometer data; Sector 6

Fig. 25

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2

N

S20

S19

S21

S22

G1

G1

G1

NORTHFIELD ROAD

Drain

52m

Ditch

Drain

RAIKBANK LANE

Drain

P1

382400

382200

382000

381800

480600

480800

481000

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Interpretation of magnetometer data; Sector 6

Fig. 26

Title

- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- GEOLOGY
- UNCERTAIN
- ?ARCHAEOLOGY
- ARCHAEOLOGY

0 60m

1:1,500 @ A2

S23

S24

S25

N

NORTH LEES ROAD

3818 00

3816 00

3814 00

4808 00

4810 00

4812 00

4814 00

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Processed greyscale magnetometer data; Sector 7

Fig. 27

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2

S23

S24

S25

N

3818 00

3816 00

3814 00

4808 00

4810 00

4812 00

North Lees Road

Track

Drain

Archaeological Services W Y A S,
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XY trace plot of minimally processed magnetometer data; Sector 7

Fig. 28

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2

S24

S23

S25

P1

A2

P2

N

3818 00

3816 00

3814 00

4808 00

4810 00

4812 00

4814 00

Project ID: XB85_CWB22 West Burton Cable Route

Interpretation of magnetometer data; Sector 7

Fig. 29

Title

- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- GEOLOGY
- UNCERTAIN
- ?ARCHAEOLOGY
- ARCHAEOLOGY

0 60m

1:1,500 @ A2

N

S26

S2

S29

Coates

COATES ROAD

Slurry Bed

Pond

Coates Farm

Marlyn House

Pond

Const & Ward Bdy

Pond

Pond

3814 00

3812 00

3810 00

4814 00

4816 00

4818 00

4820 00

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Processed greyscale magnetometer data; Sector 8

Fig. 30

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2

N

Quarry Bed

Coates

COATES ROAD

Coates Farm

Marlyn House

3m RH

6m

Const & Ward Bdy

S26

S29

3814.00

3812.00

3810.00

4814.00

4816.00

4818.00

4820.00

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XY trace plot of minimally processed magnetometer data; Sector 8

Fig. 31

Title

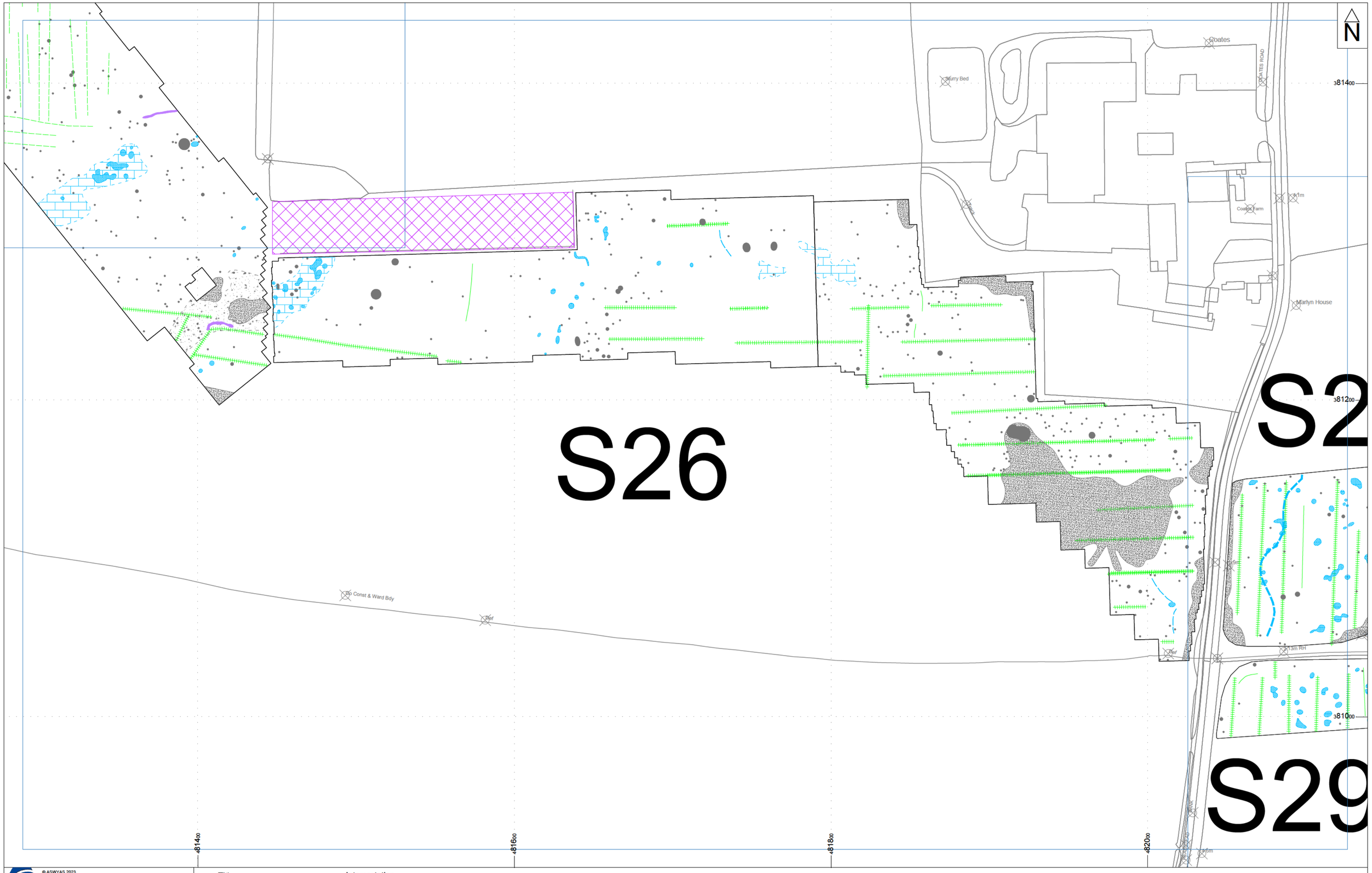
SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2



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Interpretation of magnetometer data; Sector 8

Fig. 32

Title

- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- GEOLOGY
- UNCERTAIN

0 60m

1:1,500 @ A2

S27

S28

S31

S32

S3

S29

S30

S33

N

Coates Farm

Marlyn House

Track

Drain

05m Tk H

05m RH

13m RH

Const & Ward Bdy

3812

3810

4822

4824

4826

4828

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Processed greyscale magnetometer data; Sector 9

Fig. 33

Title

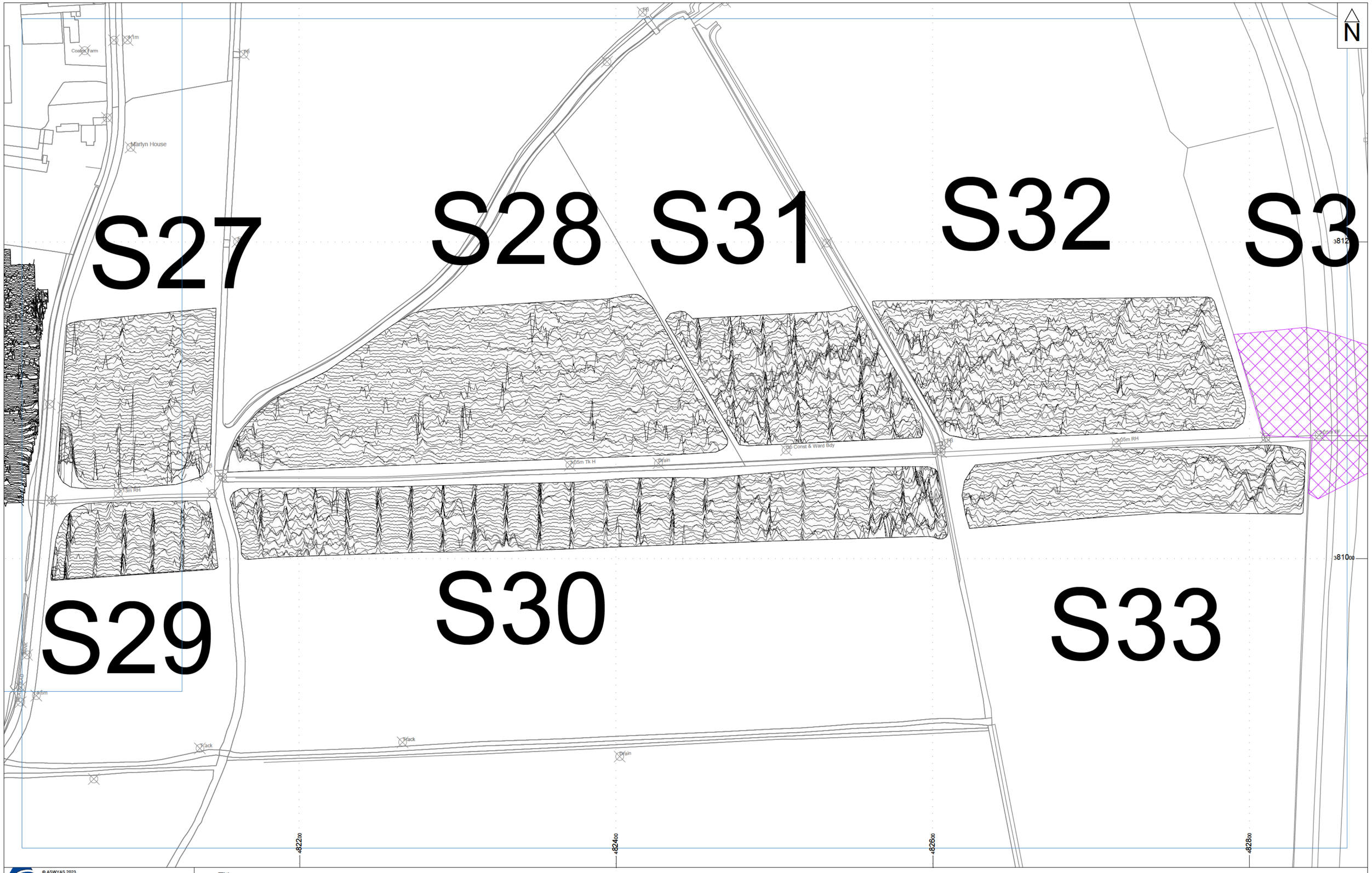
SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2



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XY trace plot of minimally processed magnetometer data; Sector 9

Fig. 34

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2

S27

S28

S31

S32

S3

S29

S30

S33

N

Marlyn House

Track

Drain

U1

3822000

3824000

3826000

3828000

3812000

3810000

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Interpretation of magnetometer data; Sector 9

Fig. 35

Title

- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- GEOLOGY
- UNCERTAIN

0 60m

1:1,500 @ A2

S35

S36

N

3802 00

3800 00

3798 00

3796 00

4862 00

4864 00

4866 00

Pond

Pond

Pond

MP 92 28

MP 92 27

Track

Tank

Silos

Track

Track

Track

MP 92 01

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Processed greyscale magnetometer data; Sector 10

Fig. 36

Title

SECTOR BOUNDARY

nT -1.0 2.0

0 60m

1:1,500 @ A2

N

3802 00

S35

3800 00

3798 00

S36

3796 00

4862 00

4864 00

4866 00

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XY trace plot of minimally processed magnetometer data; Sector 10

Fig. 37

Title

SECTOR BOUNDARY

15.0 nT/cm

0 60m

1:1,500 @ A2

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Interpretation of magnetometer data; Sector 10

Fig. 38

Title

- SECTOR BOUNDARY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- UNCERTAIN
- ?ARCHAEOLOGY

0 60m

1:1,500 @ A2

N

S37

S38

MP 0.78

MP 0.8

East Lawn

1.22m RH

Ward Bdy

Def

FW

Pond

379400

379200

379000

378800

486400

486600

486800

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Processed greyscale magnetometer data; Sector 11

Fig. 39

Title

SECTOR BOUNDARY

nT -1.0 2.0

0 60m

1:1,500 @ A2

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XY trace plot of minimally processed magnetometer data; Sector 11

Fig. 40

Title

SECTOR BOUNDARY

15.0 nT/cm

0 60m

1:1,500 @ A2

N

S37

FB6

S38

MP 0.76

MP 0.8

East Lawn

1.22m RH

Ward Bdy

Def

FW

Pond

379400

379200

379000

378800

486400

486600

486800

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Interpretation of magnetometer data; Sector 11

Fig. 41

Title

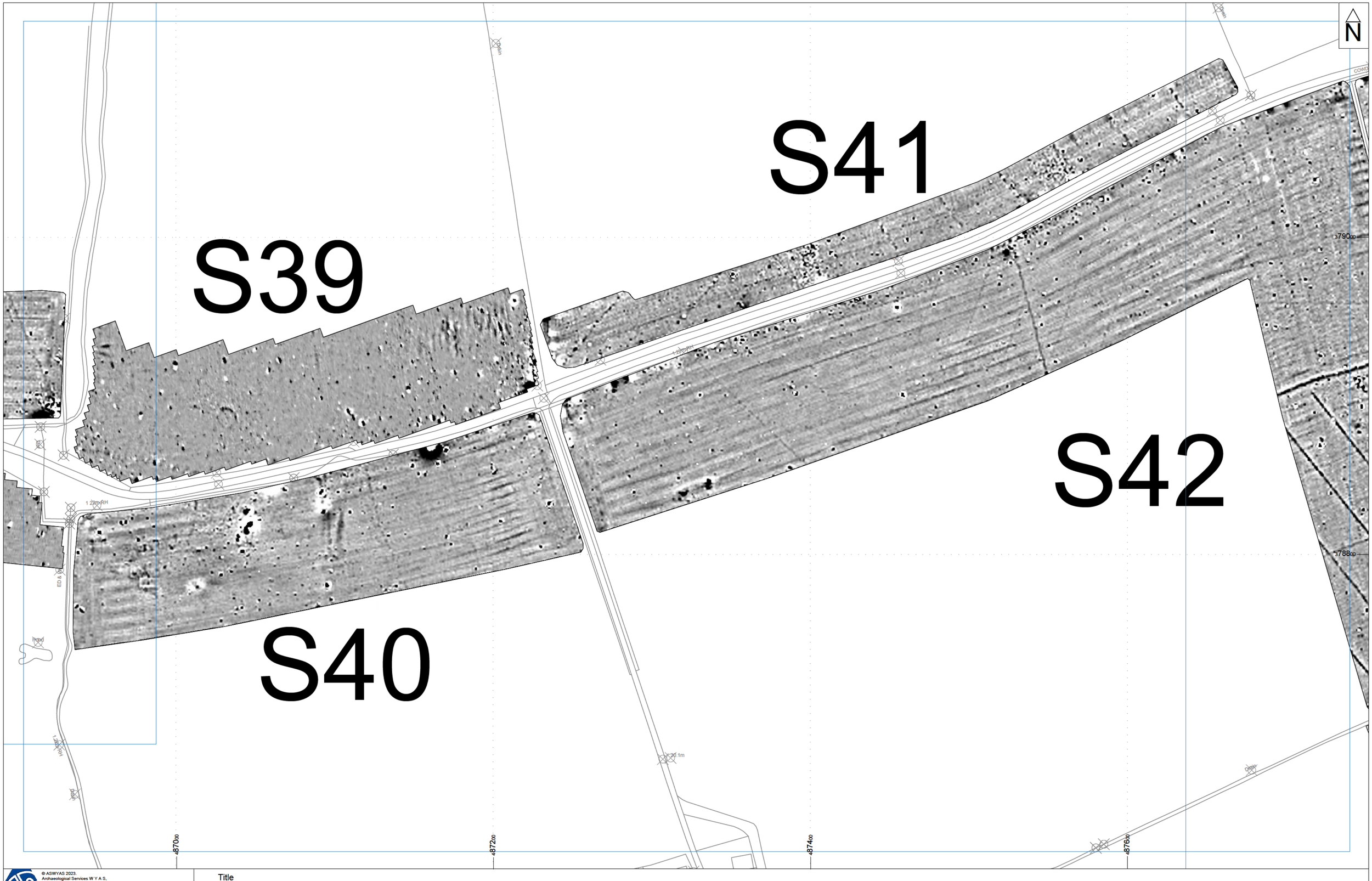
- SECTOR BOUNDARY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN

0 60m

1:1,500 @ A2



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Processed greyscale magnetometer data; Sector 12

Fig. 42

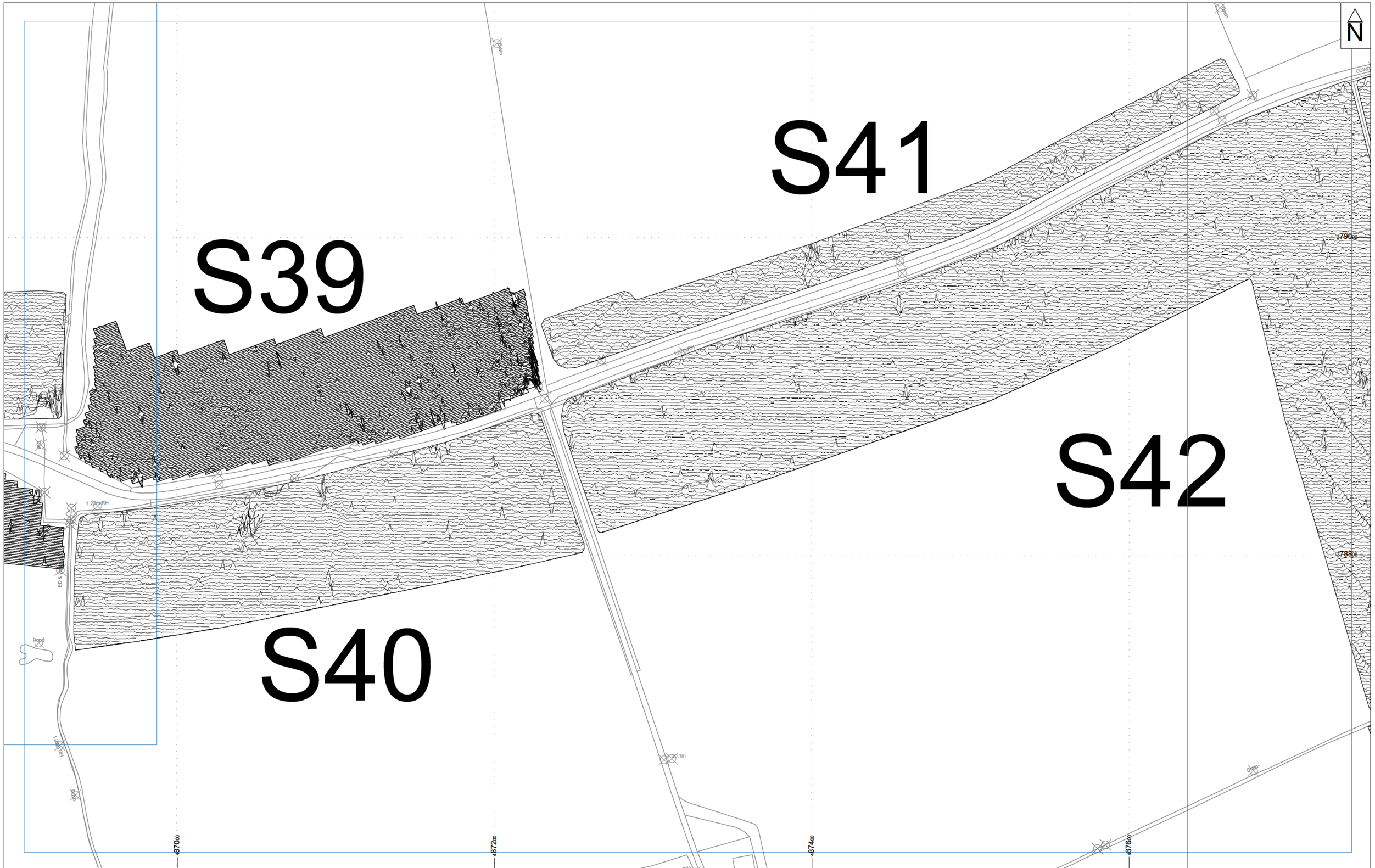
Title

SECTOR BOUNDARY

nT -1.0 2.0

0 60m

1:1,500 @ A2



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XY trace plot of minimally processed magnetometer data; Sector 12

Fig. 43

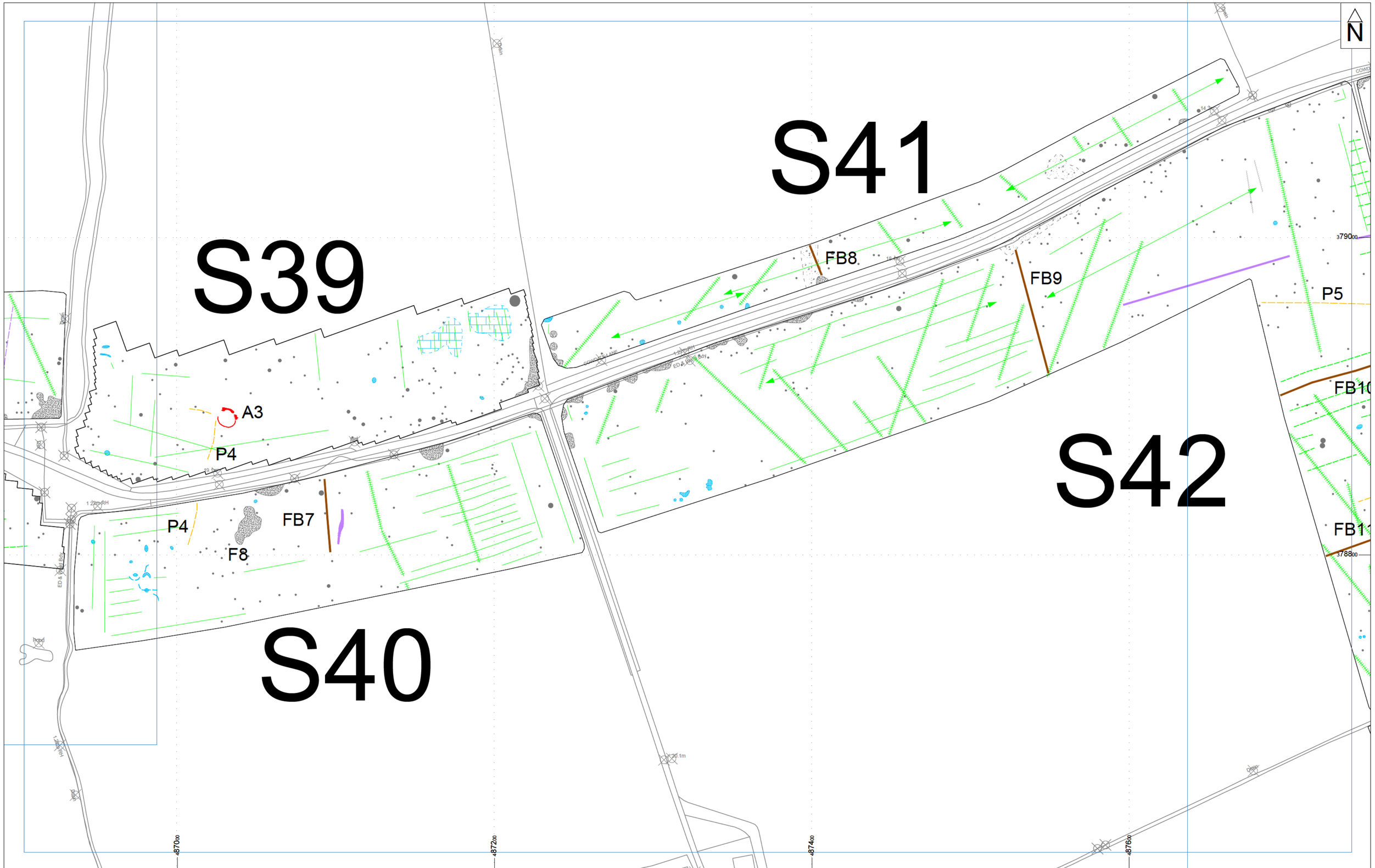
Title

SECTOR BOUNDARY

15.0 nT/cm

0 60m

1:1,500 @ A2



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Interpretation of magnetometer data; Sector 12

Fig. 44

Title

- SECTOR BOUNDARY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ?ARCHAEOLOGY
- ARCHAEOLOGY

0 60m

1:1,500 @ A2

N

Drain

Pond

18.3m

14.8m

1.22m RH

COWDALE LANE

ED & Ward Bdy

378900

S43

2

S45

Drain

S44

S46

Track

378800

378600

S47

378400

487800

488000

488200

Project ID: XB85_CWB22 West Burton Cable Route

Processed greyscale magnetometer data; Sector 13

Fig. 45

Title

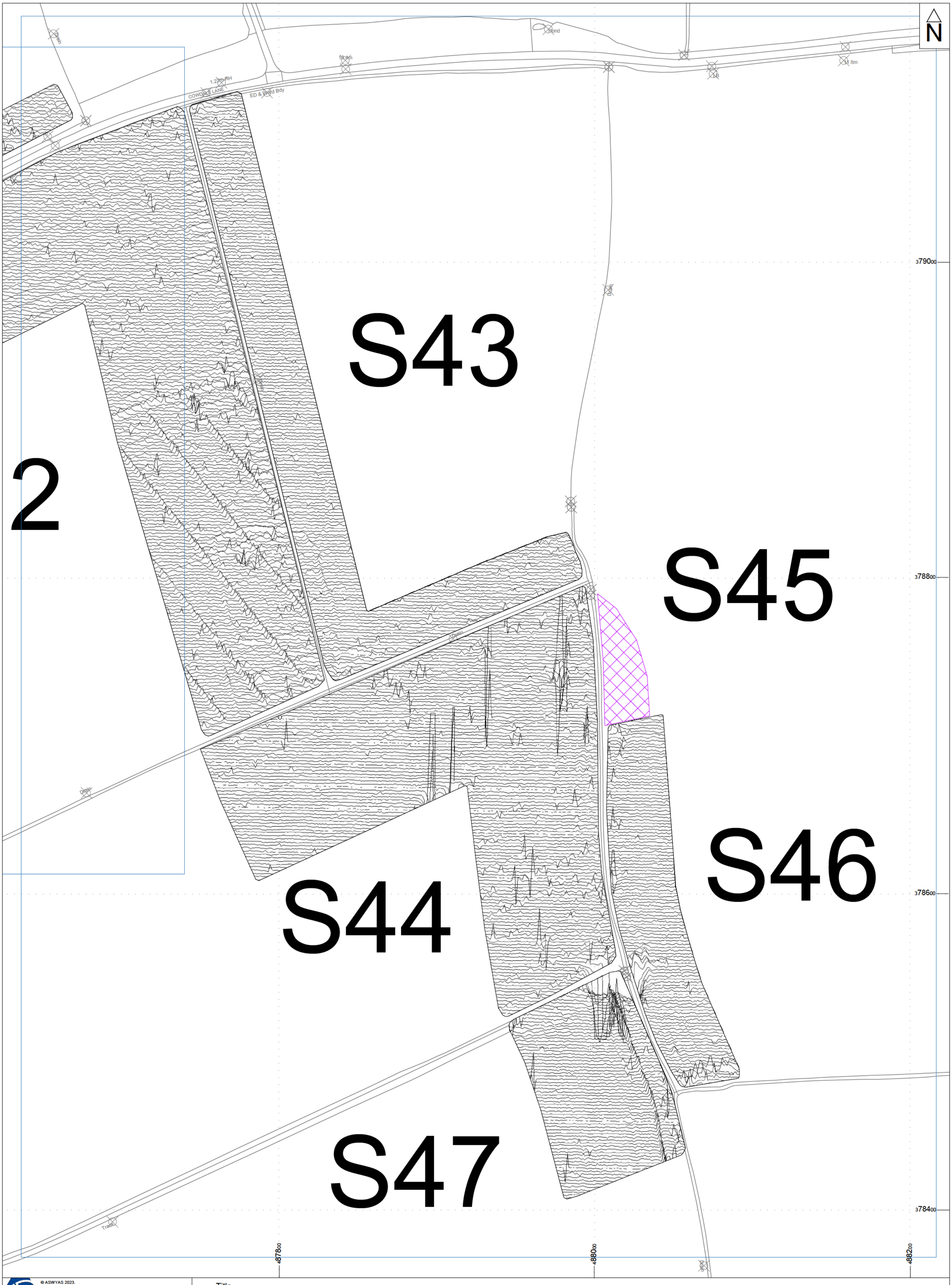
SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2



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XY trace plot of minimally processed magnetometer data; Sector 13

Fig. 46

Title

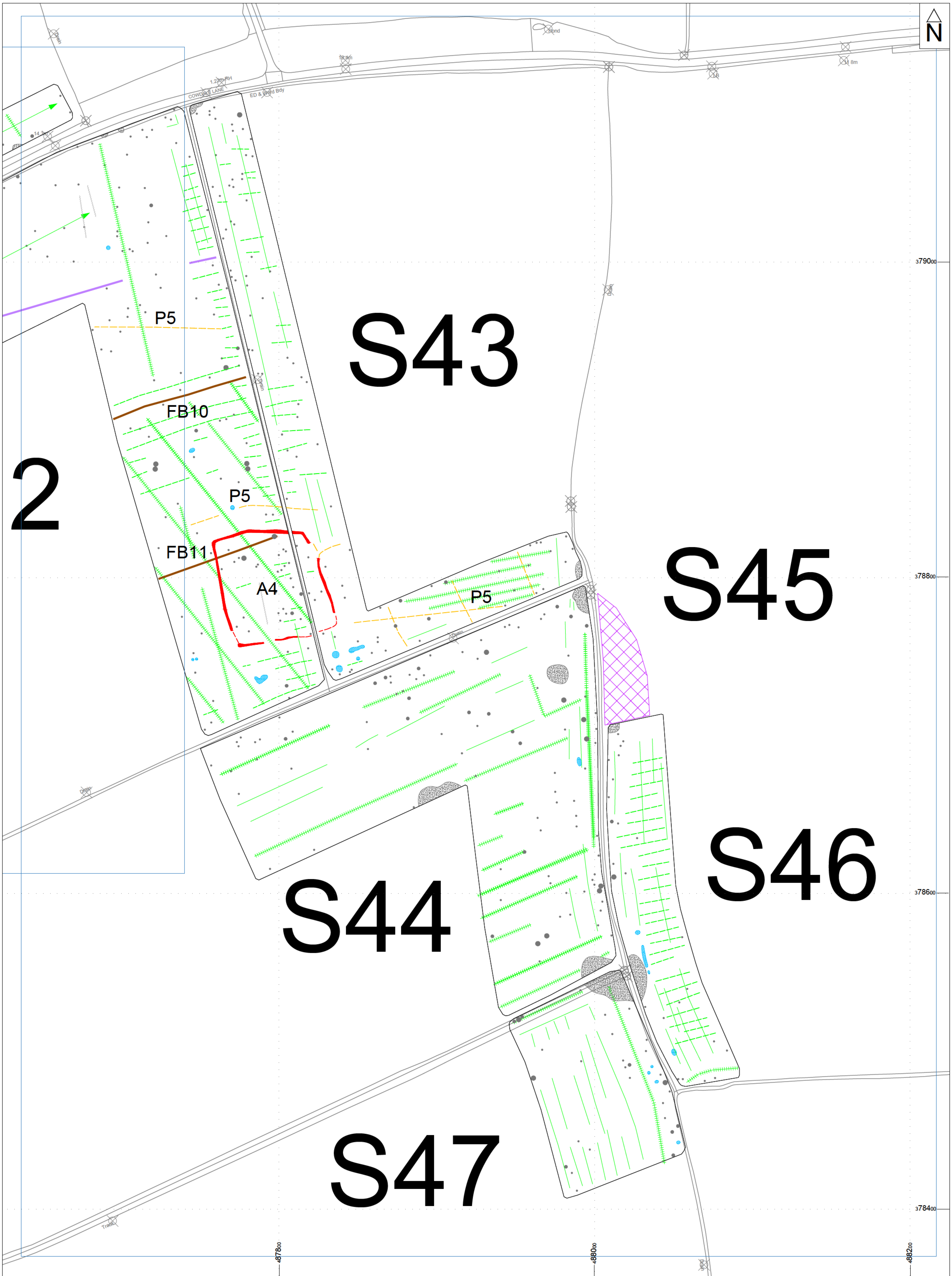
SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2



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Interpretation of magnetometer data; Sector 13

Fig. 47

Title

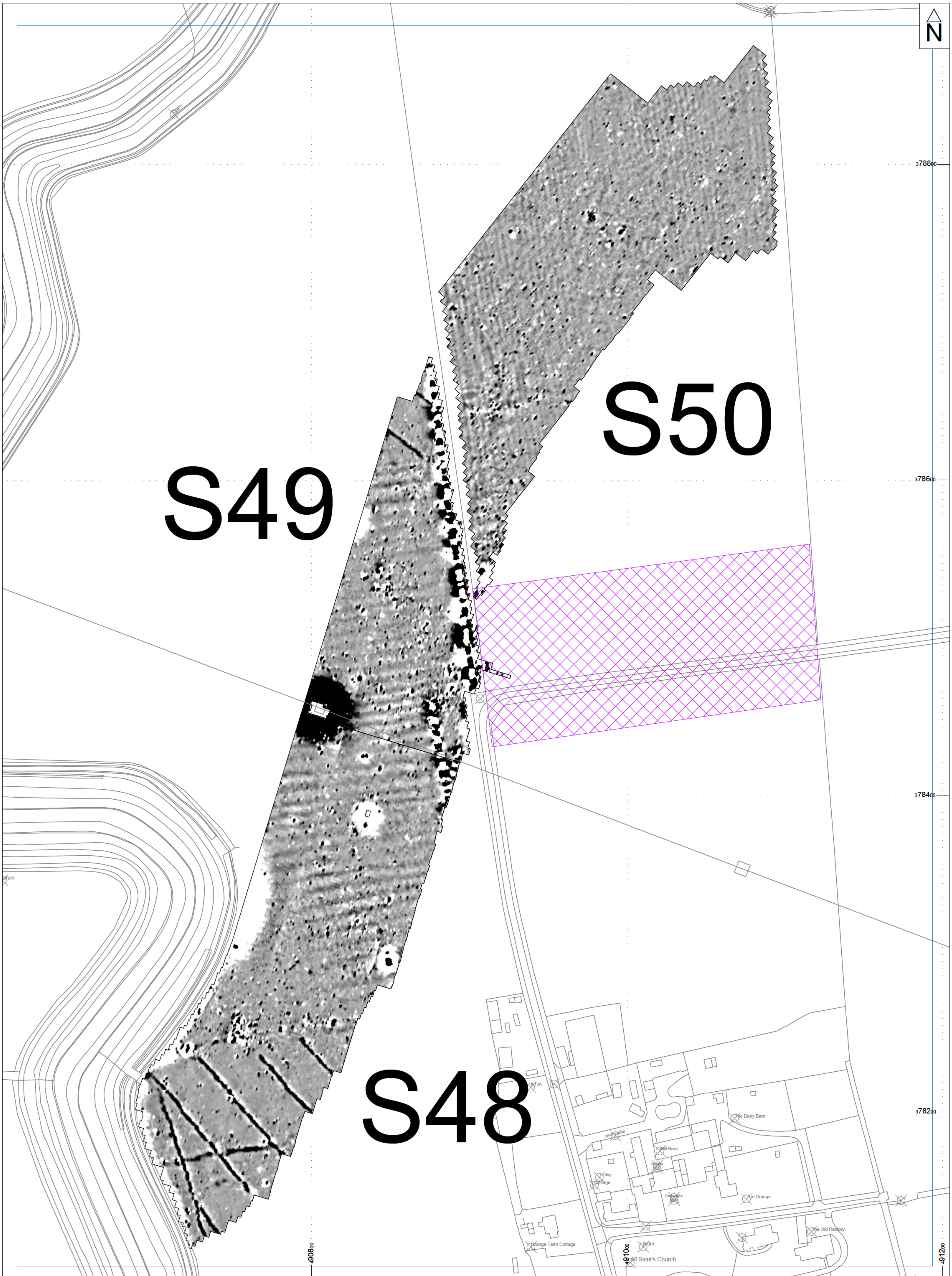
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ?ARCHAEOLOGY
- ARCHAEOLOGY

0 60m

1:1,500 @ A2



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Project ID: XB85_CWB22 West Burton Cable Route

Processed greyscale magnetometer data; Sector 14

Fig. 48

Title

	SECTOR BOUNDARY
	UNSUITABLE FOR SURVEY

nT -1.0 2.0

0 60m

1:1,500 @ A2

N

S49

S50

S48

Drain

Drain

The Dairy Barn

Mill Barn

Kniley Cottage

The Grange

The Old Rectory

Grange Farm Cottage

All Saint's Church

3788 00

3786 00

3784 00

3782 00

4908 00

4910 00

4912 00

Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ

Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XB85_CWB22 West Burton Cable Route

XY trace plot of minimally processed magnetometer data; Sector 14

Fig. 49

Title

SECTOR BOUNDARY

UNSUITABLE FOR SURVEY

15.0 nT/cm

0 60m

1:1,500 @ A2

N

S49

S50

S48

FB12

U2

Drain

Drain

The Dairy Barn

Mill Barn

Trilley Cottage

The Grange

The Old Rectory

Grange Farm Cottage

All Saint's Church

3788 00

3786 00

3784 00

3782 00

4908 00

4910 00

4912 00

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Project ID: XB85_CWB22 West Burton Cable Route

Interpretation of magnetometer data; Sector 14

Fig. 50

Title
- SECTOR BOUNDARY
- UNSUITABLE FOR SURVEY

Interpretation
- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN

0 60m

1:1,500 @ A2

Appendix 1: Magnetic survey - technical information

Magnetic Susceptibility and Soil Magnetism

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

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

Types of Magnetic Anomaly

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

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

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

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

Isolated dipolar anomalies (iron spikes)

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

Areas of magnetic disturbance

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

Linear trend

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

Areas of magnetic enhancement/positive isolated anomalies

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

Linear and curvilinear anomalies

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

Methodology: Gradiometer Survey

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

During this survey an eight channel Sensys MX V3 system containing eight FGM650 sensors was also used which was towed across the area using an ATV. Readings were taken every 20MHz (between 0.05 and 0.1m). Data was be recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation.

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

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

Appendix 2: Survey location information

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

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

Appendix 3: Geophysical archive

The geophysical archive comprises:-

- an archive disk containing compressed (WinZip 8) files of the raw data, report text (Microsoft Word 2013), and graphics files (Adobe Illustrator CS2 and AutoCAD 2022) files; and
- a full copy of the report.

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

Appendix 4: Oasis form

Summary for archaeol11-512402

OASIS ID (UID)	archaeol11-512402
Project Name	Geophysical Survey at West Burton Cable Route
Sitename	West Burton Cable Route
Activity type	Geophysical Survey, MAGNETOMETRY SURVEY
Project Identifier(s)	
Planning Id	
Reason For Investigation	Planning: Pre application
Organisation Responsible for work	Archaeological Services WYAS
Project Dates	01-Aug-2022 - 14-Oct-2022
Location	West Burton Cable Route NGR : SK 78980 85170 LL : 53.357520061843, -0.814780897886303 12 Fig : 478980,385170
Administrative Areas	Country : England County : Nottinghamshire District : Bassetlaw Parish : Sturton le Steeple
Project Methodology	The study site was surveyed using either a cart-based survey or hand-held survey. The cart-based survey was undertaken using an eight channel SenSYS MX V3 system containing eight FGM650 sensors. Readings are taken every 20MHz (between 0.05 and 0.1m). Data were recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside bespoke in-house software was used to process and present the data. Where a cart-based survey was not suitable the survey was undertaken using Bartington Grad601 magnetic gradiometers. These were employed taking readings at 0.25m intervals on zig-zag traverses 1.0m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation. Bespoke in-house software was used to process and present the data.
Project Results	A geophysical (magnetometer) survey was undertaken on land consisting of approximately 108 hectares of land associated with the West Burton Cable Route linking the previously surveyed proposed solar sites of West Burton 1, 2 and 3 to West Burton Power Station in Lincolnshire. The majority of the anomalies recorded are agricultural including field drains, ridge and furrow cultivation, modern ploughing and former field boundaries. Archaeological and possible archaeological responses have been recorded which relate to settlement activity, a ring ditch and field systems. Based on the geophysical survey, the archaeological potential of this site is deemed to be high in these areas and low elsewhere.
Keywords	Rectilinear Enclosure - UNCERTAIN - FISH Thesaurus of Monument Types Ring Ditch - UNCERTAIN - FISH Thesaurus of Monument Types
Funder	

HER	Nottinghamshire HER - unRev - STANDARD
Person Responsible for work	Emma, Brunning
HER Identifiers	
Archives	

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