

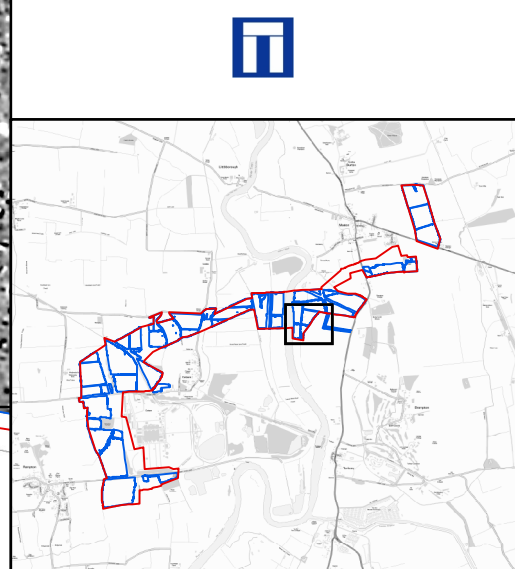
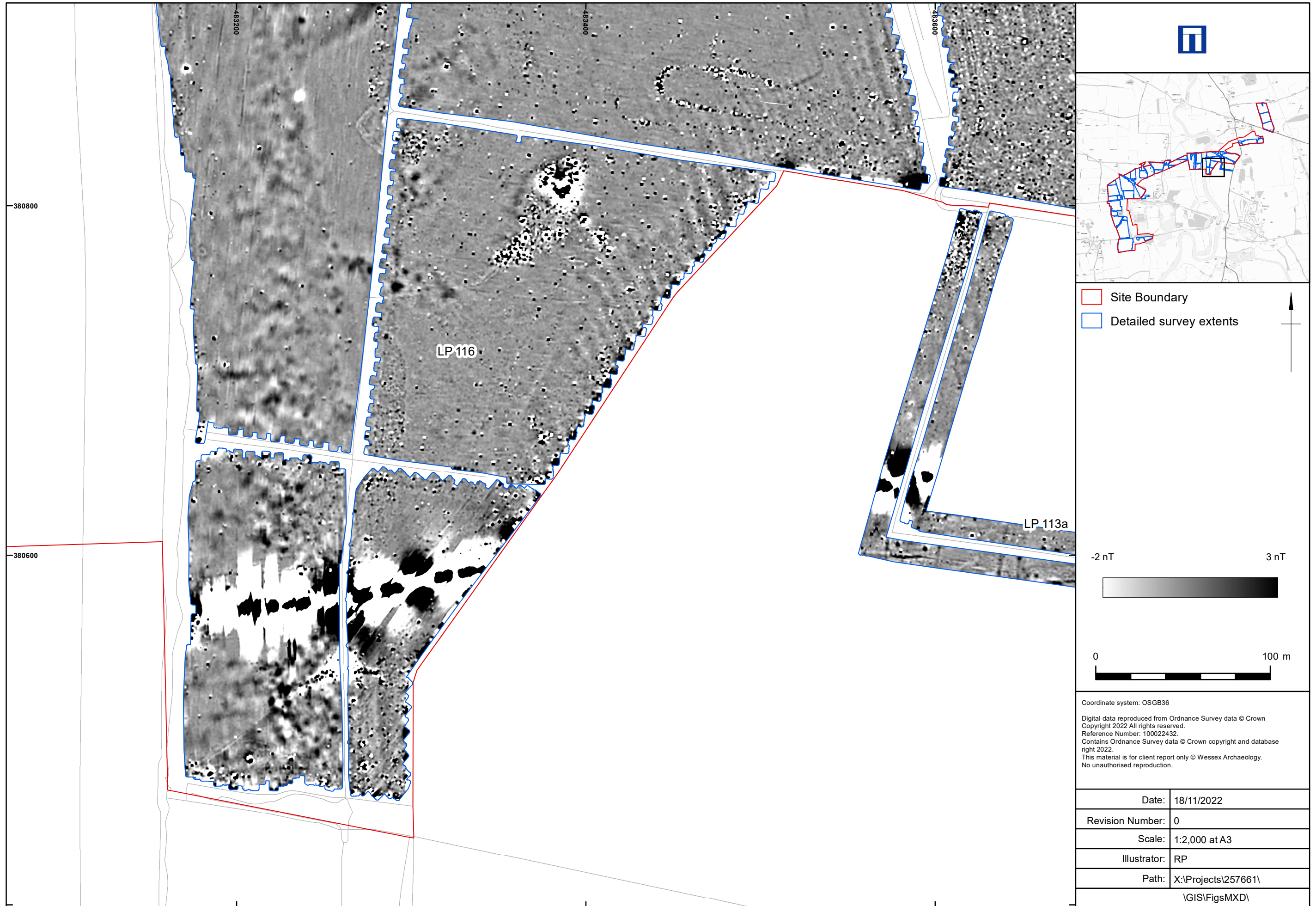
Cottam Solar Project

Environmental Statement Appendix 13.2: Archaeological Geophysical Survey Reports (Part 13 of 13)

Prepared by: Wessex Archaeology
January 2023

PINS reference: EN010133
Document reference: APP/C6.3.13.2
APFP Regulation 5(2)(a)





▭ Site Boundary
▭ Detailed survey extents

-2 nT 3 nT

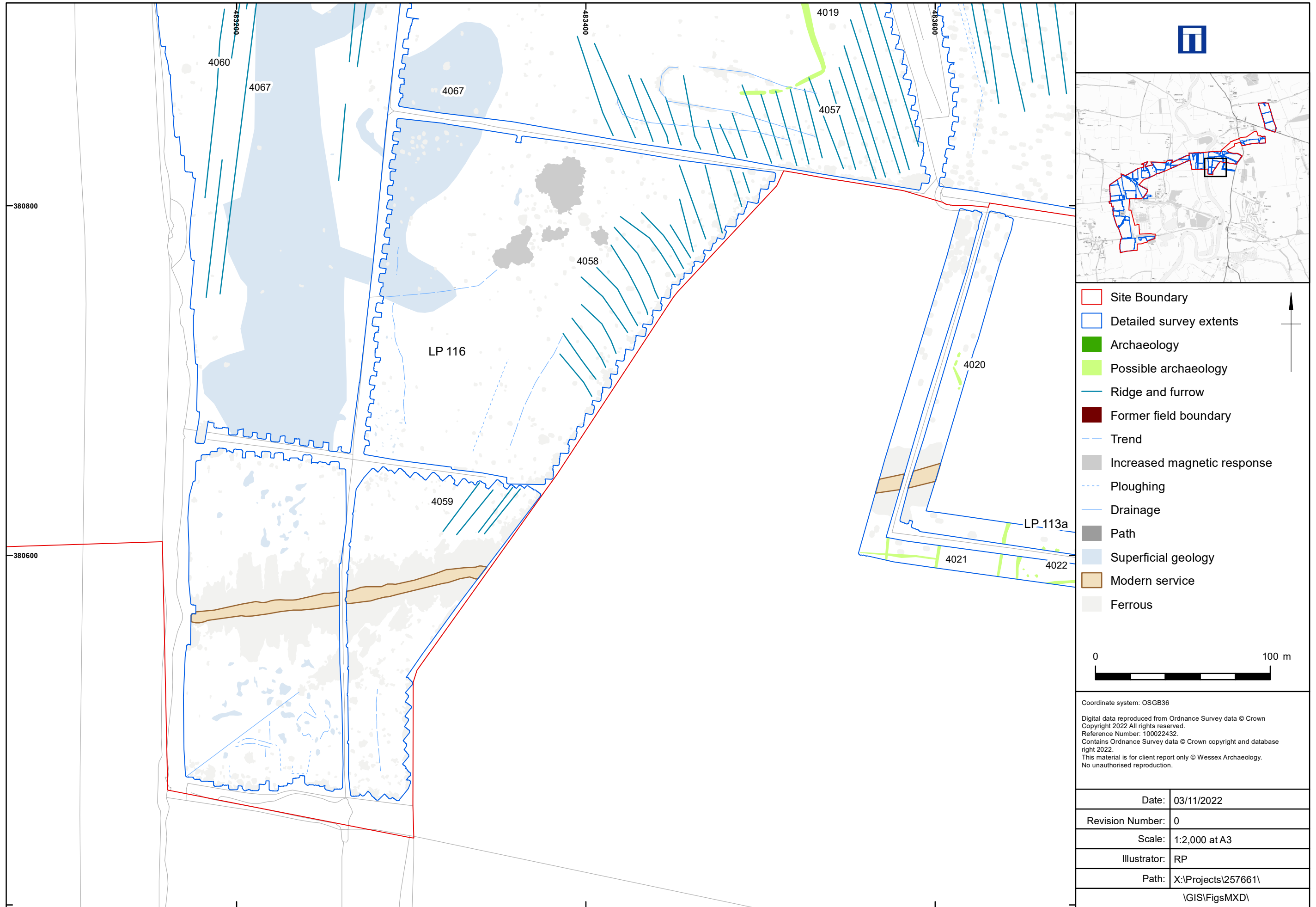
0 100 m

Coordinate system: OSGB36
 Digital data reproduced from Ordnance Survey data © Crown Copyright 2022 All rights reserved.
 Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2022.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.

Date:	18/11/2022
Revision Number:	0
Scale:	1:2,000 at A3
Illustrator:	RP
Path:	X:\Projects\257661\GIS\FigsMXD\

Detailed gradiometer survey results: grayscale plot (Field 116)

Figure 22

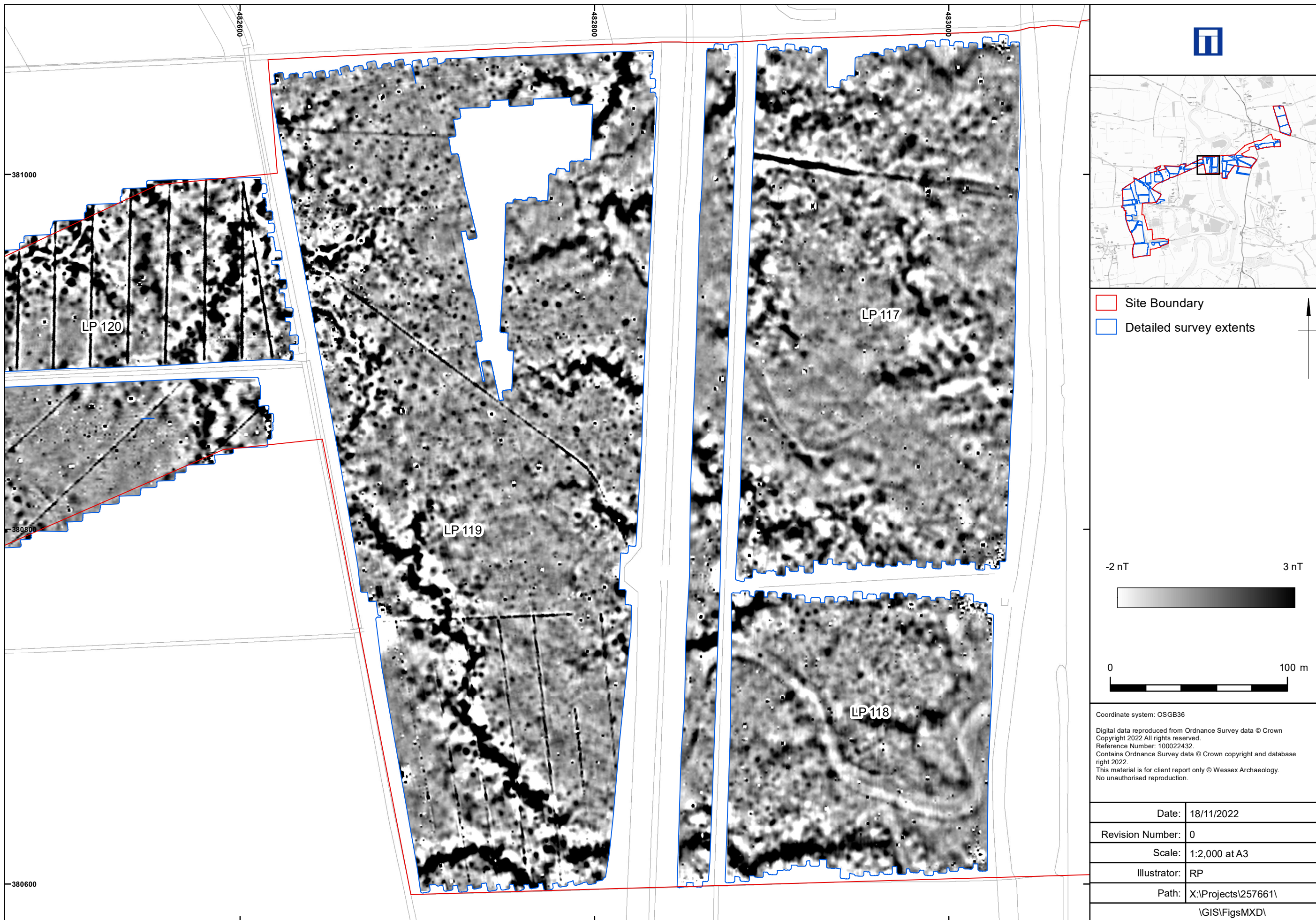


Detailed gradiometer survey results: interpretation (Field 116)

Figure 23

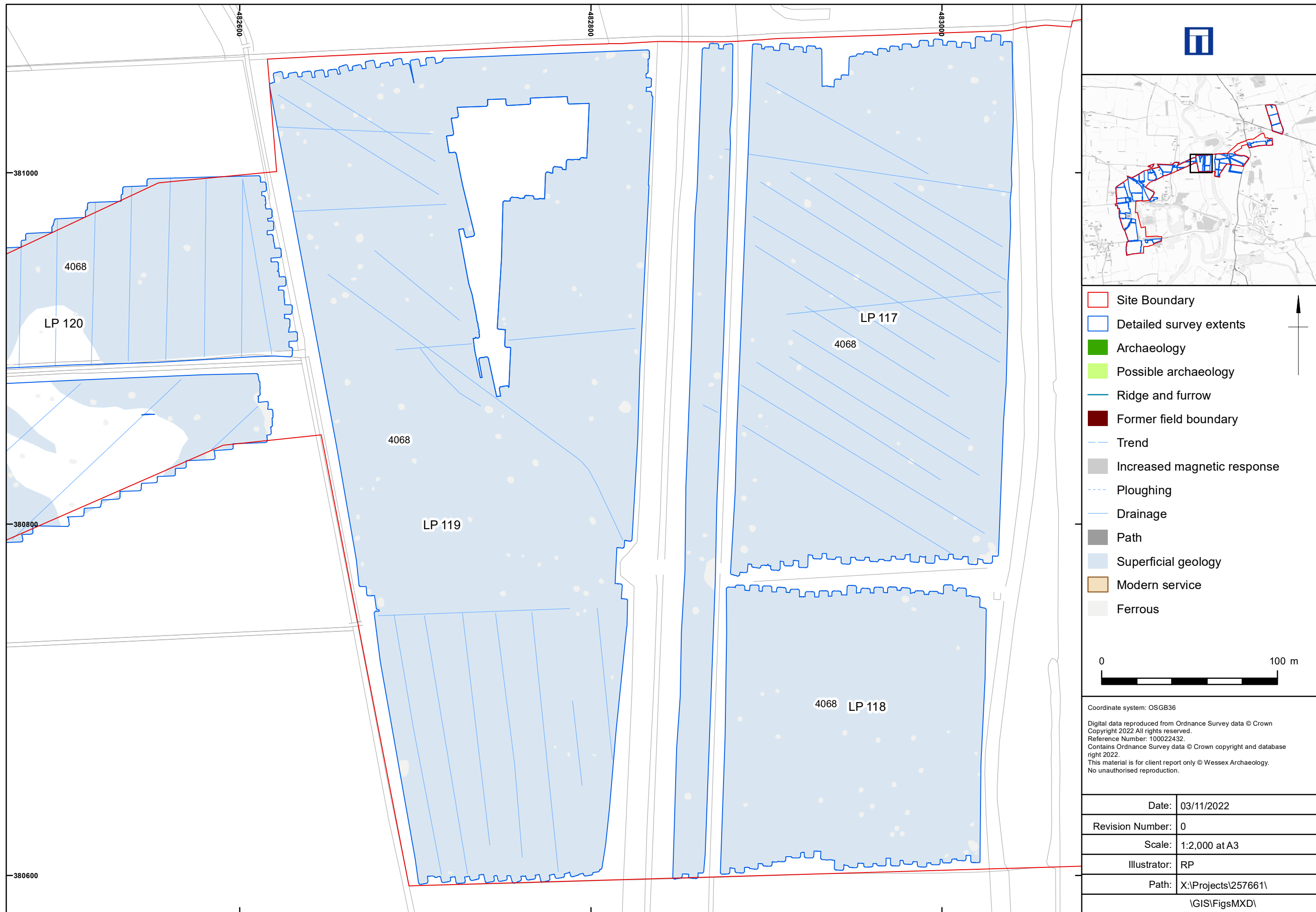
Date:	03/11/2022
Revision Number:	0
Scale:	1:2,000 at A3
Illustrator:	RP
Path:	X:\Projects\257661\
	\GIS\Figs\MXD\

Coordinate system: OSGB36
 Digital data reproduced from Ordnance Survey data © Crown Copyright 2022 All rights reserved.
 Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2022.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.



Detailed gradiometer survey results: grayscale plot (Field 117 - 121)

Figure 24



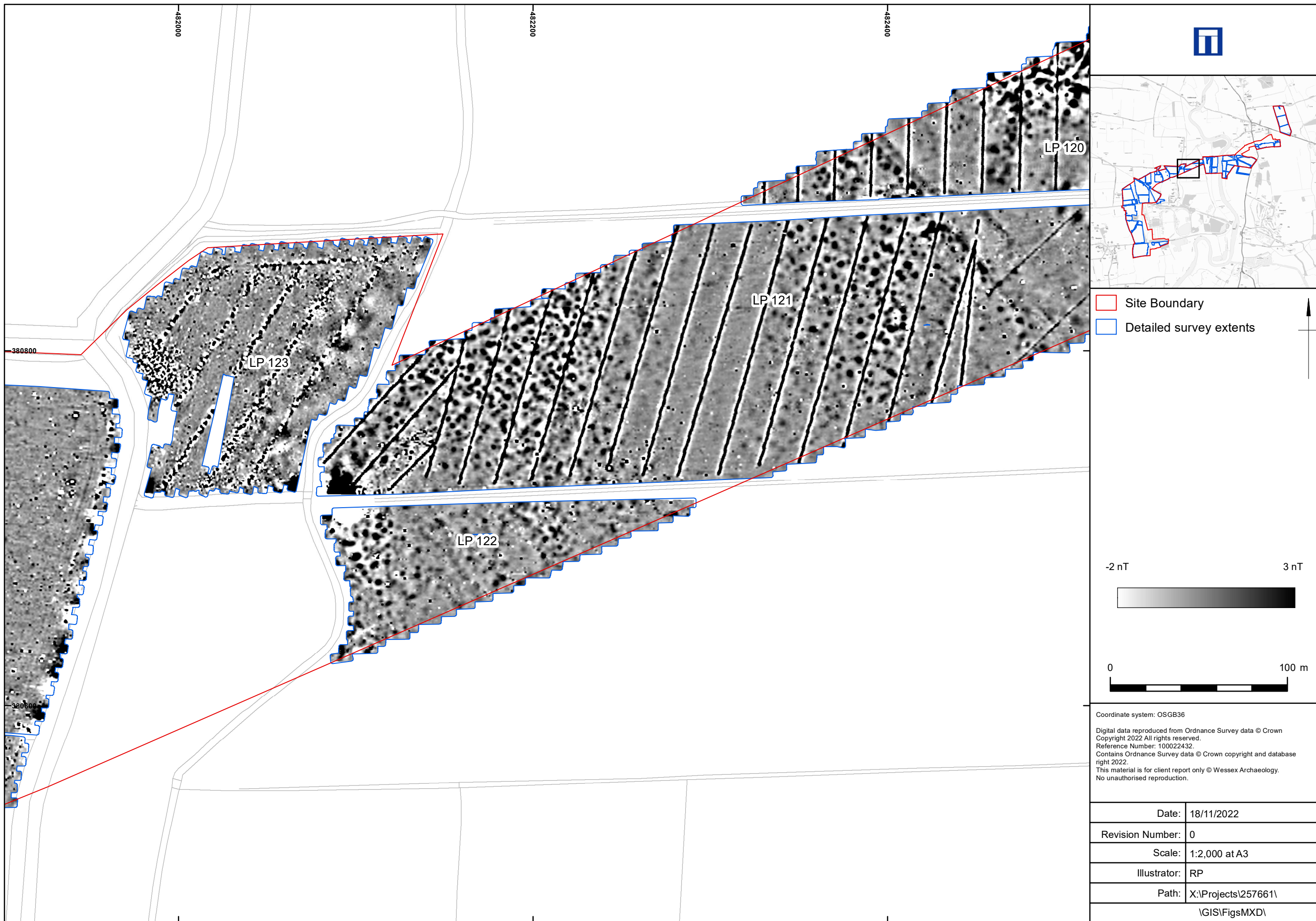
- Site Boundary
- Detailed survey extents
- Archaeology
- Possible archaeology
- Ridge and furrow
- Former field boundary
- Trend
- Increased magnetic response
- Ploughing
- Drainage
- Path
- Superficial geology
- Modern service
- Ferrous



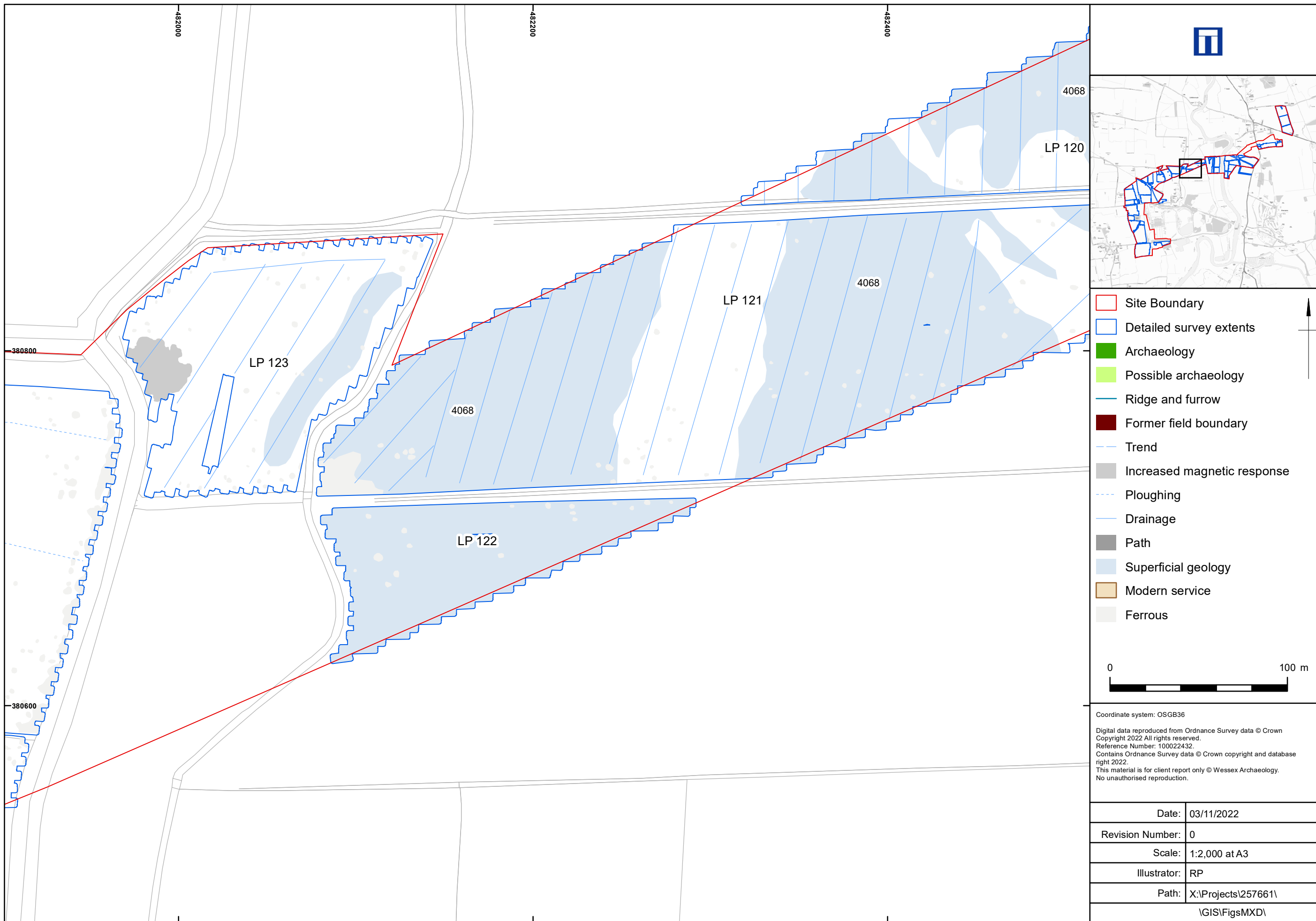
Coordinate system: OSGB36
 Digital data reproduced from Ordnance Survey data © Crown Copyright 2022 All rights reserved.
 Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2022.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.

Date:	03/11/2022
Revision Number:	0
Scale:	1:2,000 at A3
Illustrator:	RP
Path:	X:\Projects\257661\ GIS\Figs\MXD\

Detailed gradiometer survey results: interpretation (Field 117 - 121)

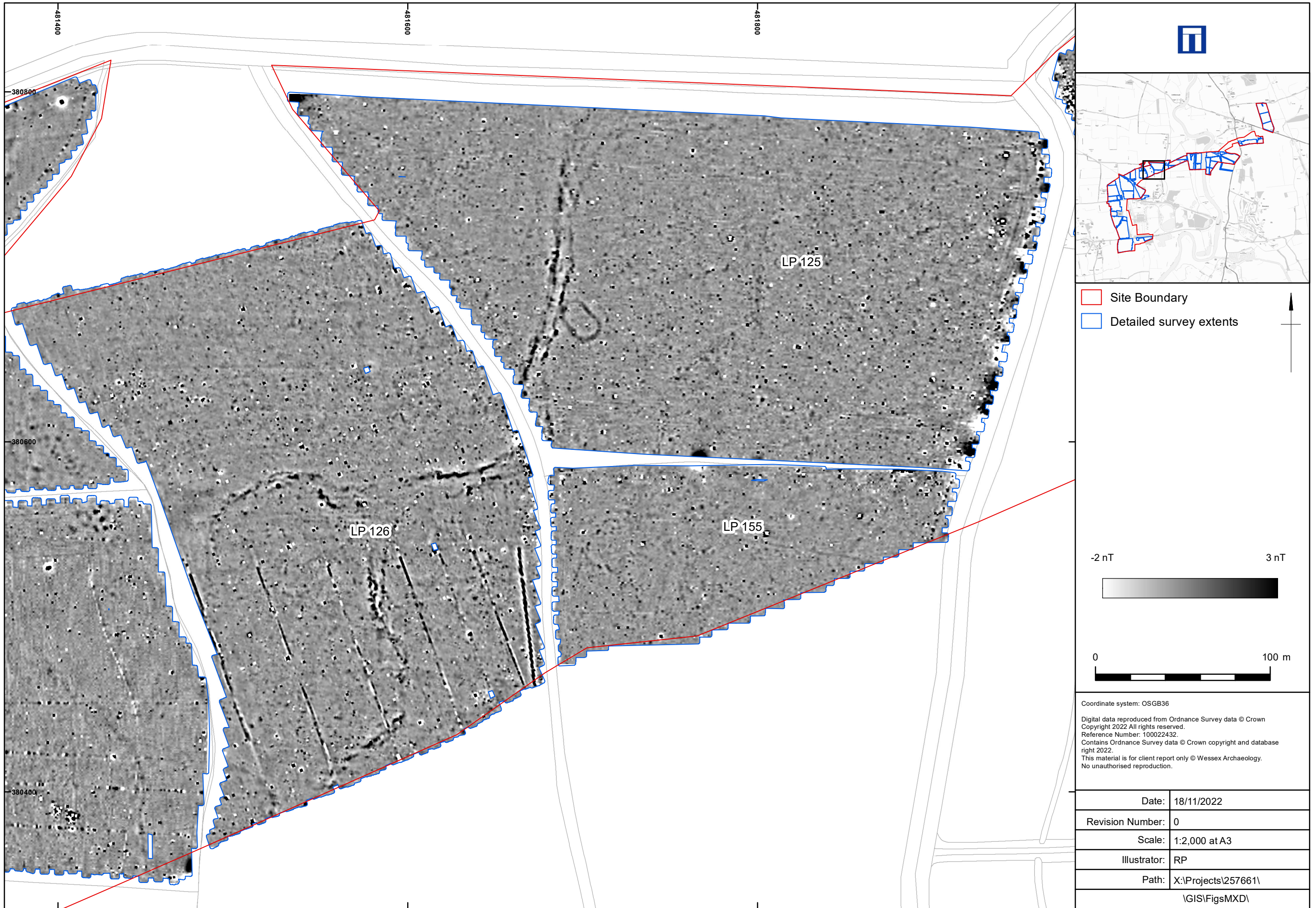


Detailed gradiometer survey results: grayscale plot (Fields 119 - 123)



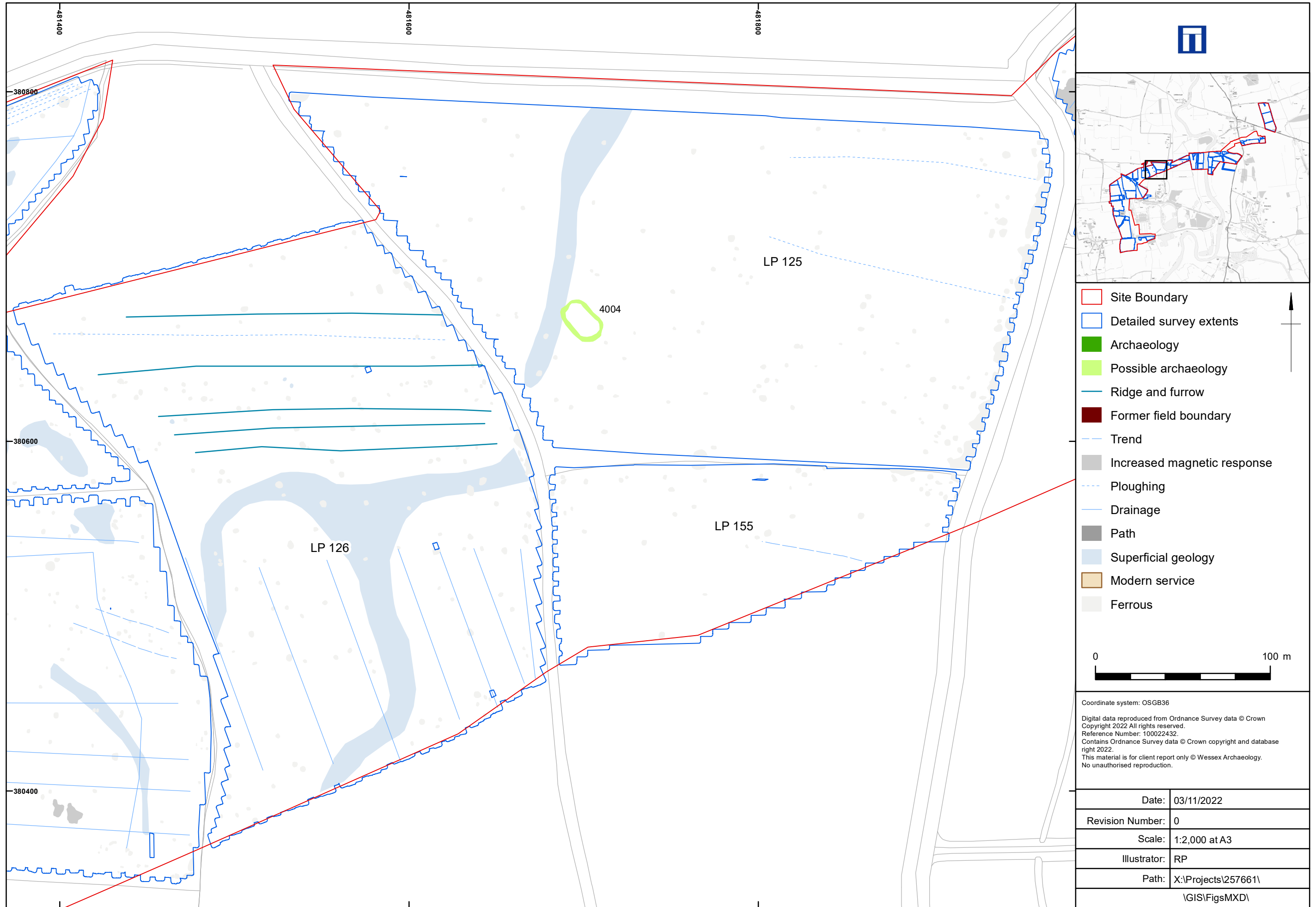
Detailed gradiometer survey results: interpretation (Fields 119 - 123)

Figure 27



Detailed gradiometer survey results: grayscale plot (Field 125 - 128, 155)

Figure 28



Detailed gradiometer survey results: interpretation (Field 125 - 128, 155)

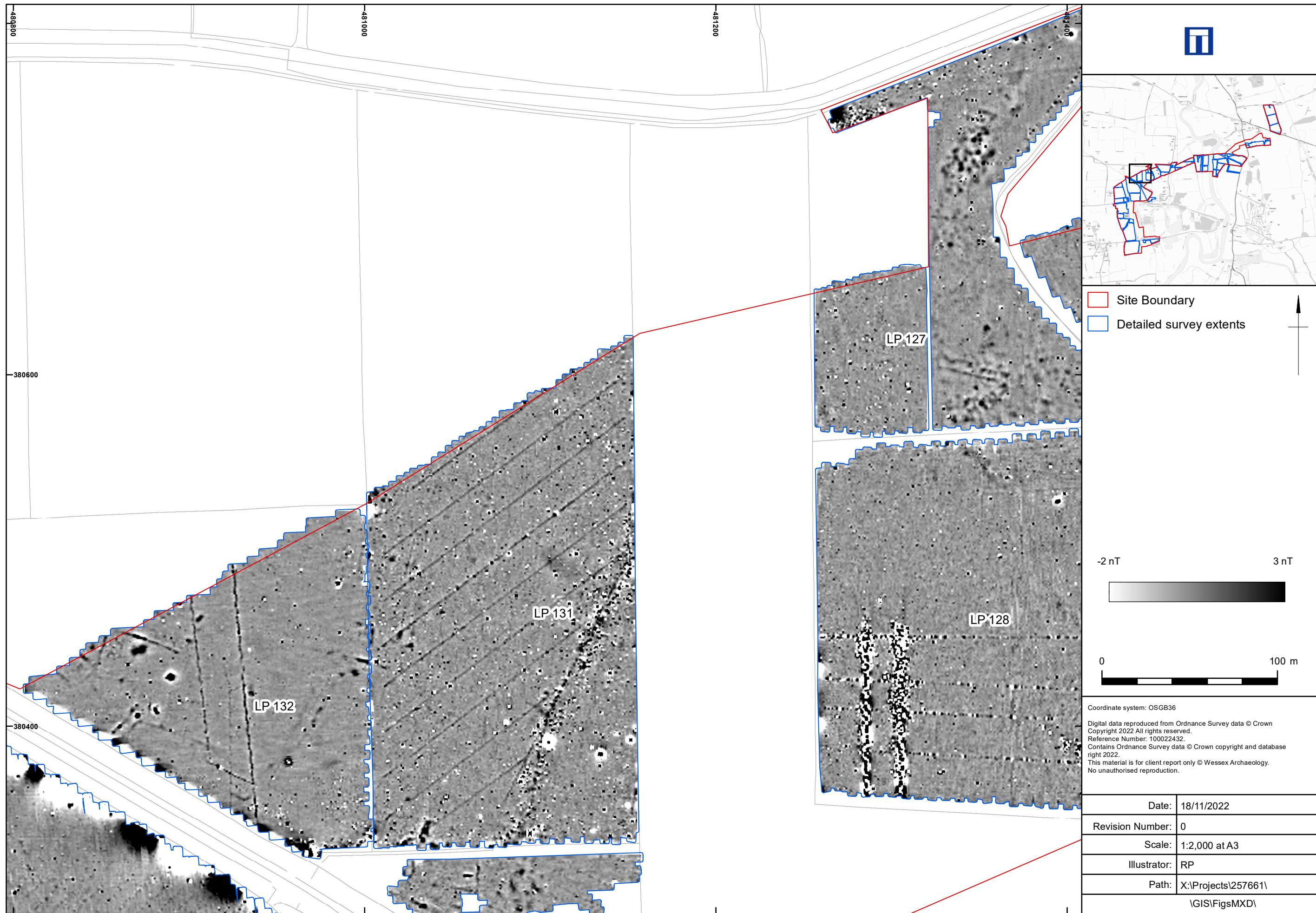
Figure 29

- Site Boundary
- Detailed survey extents
- Archaeology
- Possible archaeology
- Ridge and furrow
- Former field boundary
- Trend
- Increased magnetic response
- Ploughing
- Drainage
- Path
- Superficial geology
- Modern service
- Ferrous

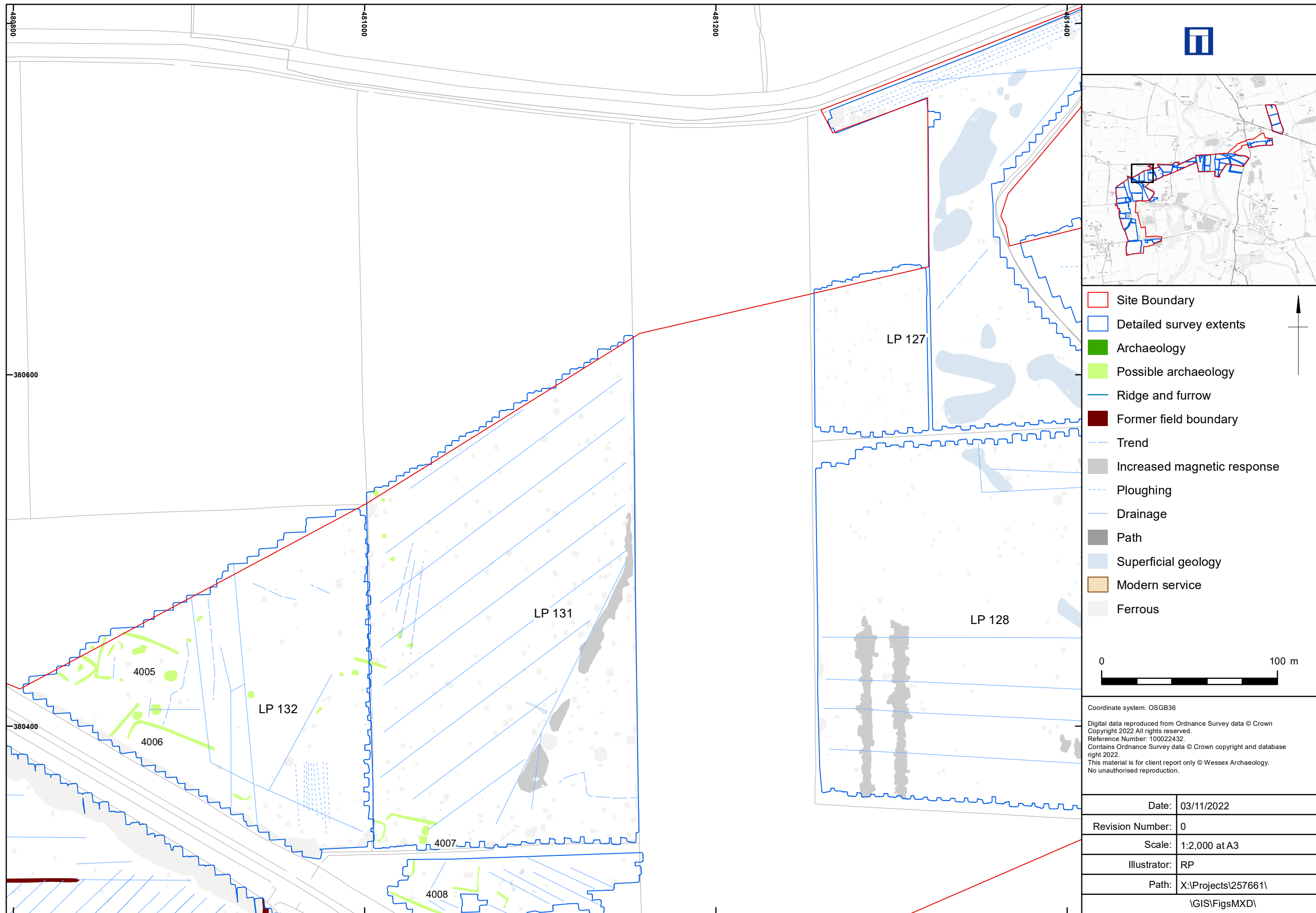


Coordinate system: OSGB36
 Digital data reproduced from Ordnance Survey data © Crown Copyright 2022 All rights reserved.
 Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2022.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.

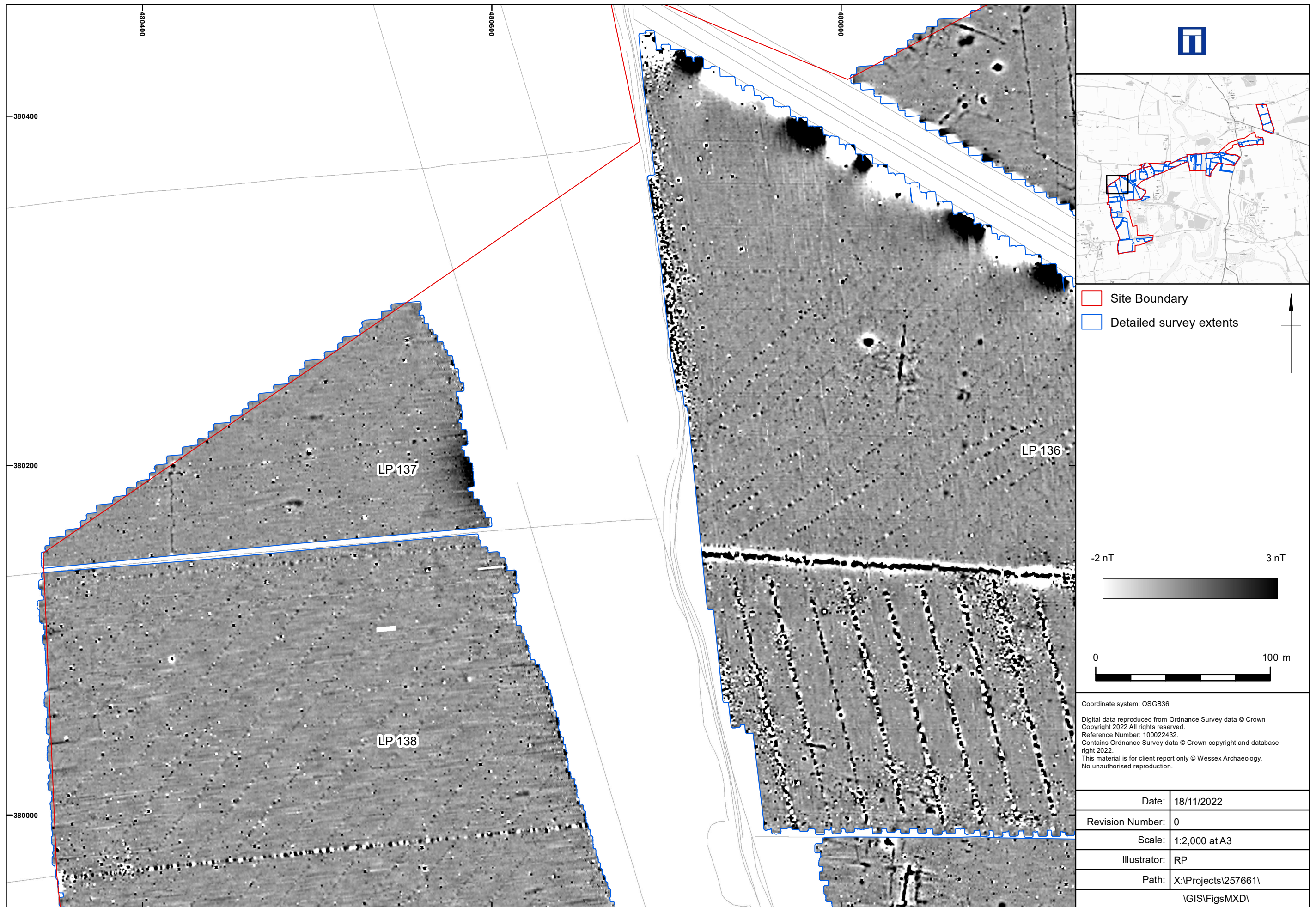
Date:	03/11/2022
Revision Number:	0
Scale:	1:2,000 at A3
Illustrator:	RP
Path:	X:\Projects\257661\GIS\FigsMXD\



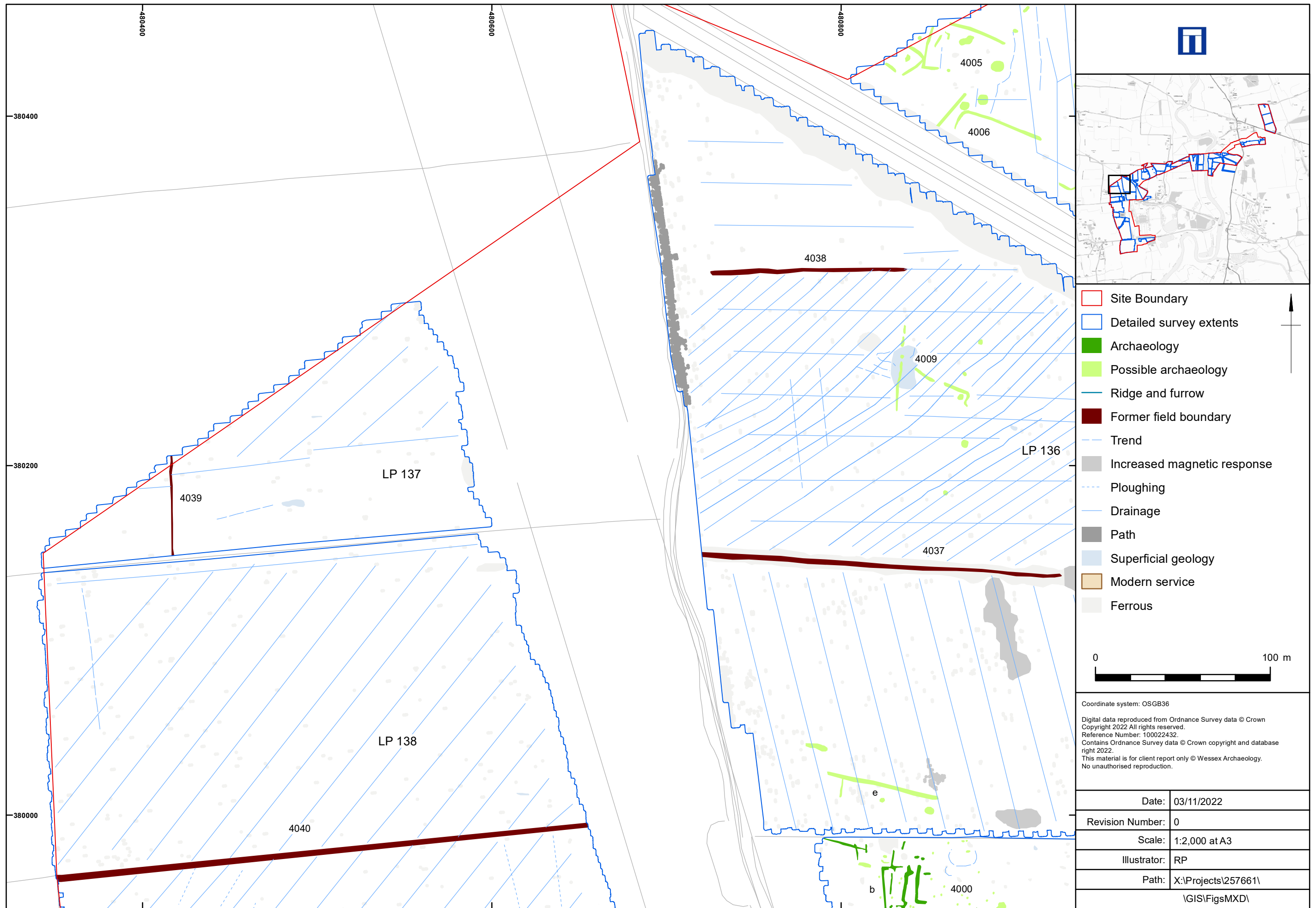
Detailed gradiometer survey results: grayscale plot (Fields 127 - 133)



Detailed gradiometer survey results: interpretation (Fields 127 - 133)

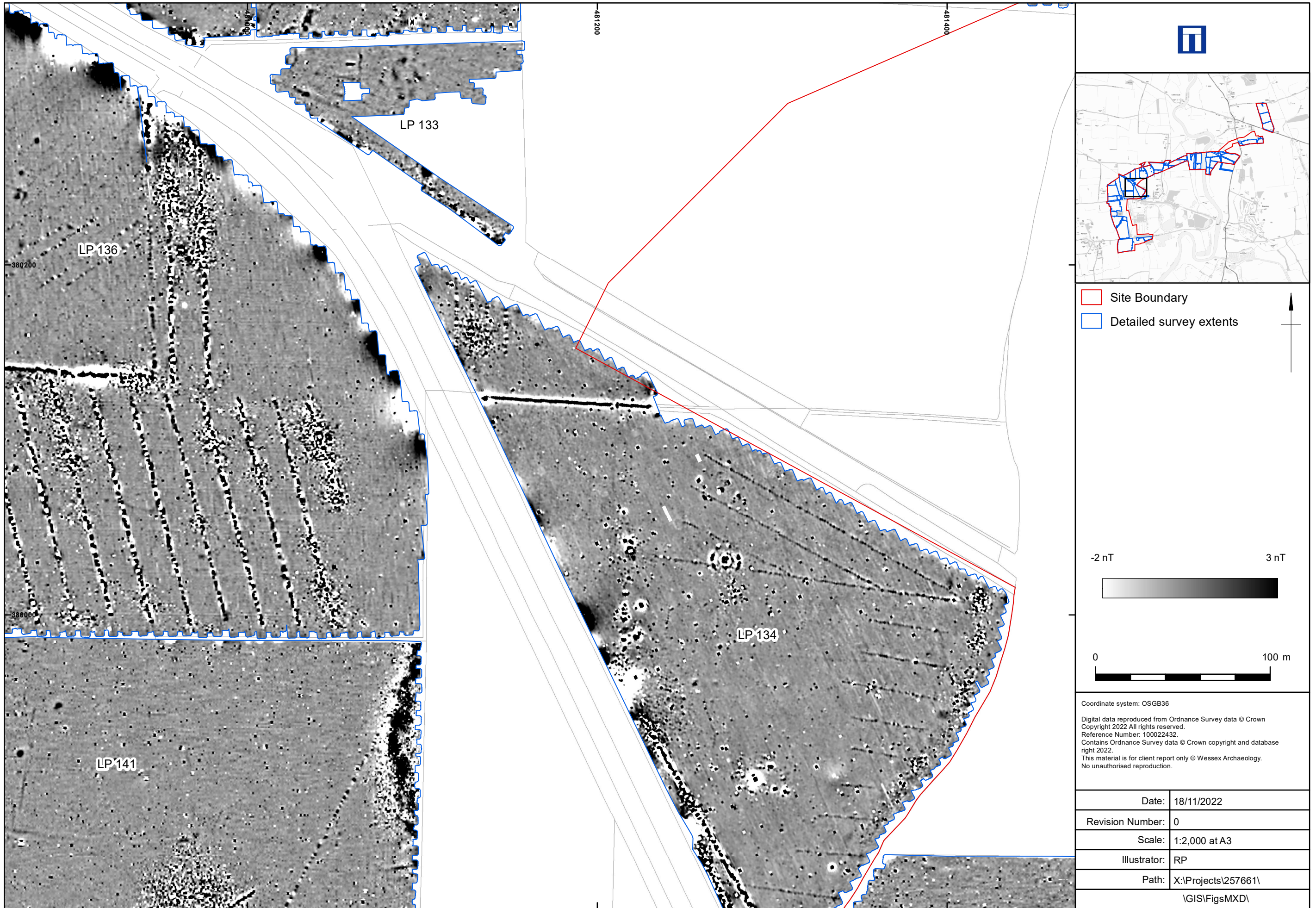


Detailed gradiometer survey results: grayscale plot (Fields 136 - 138)



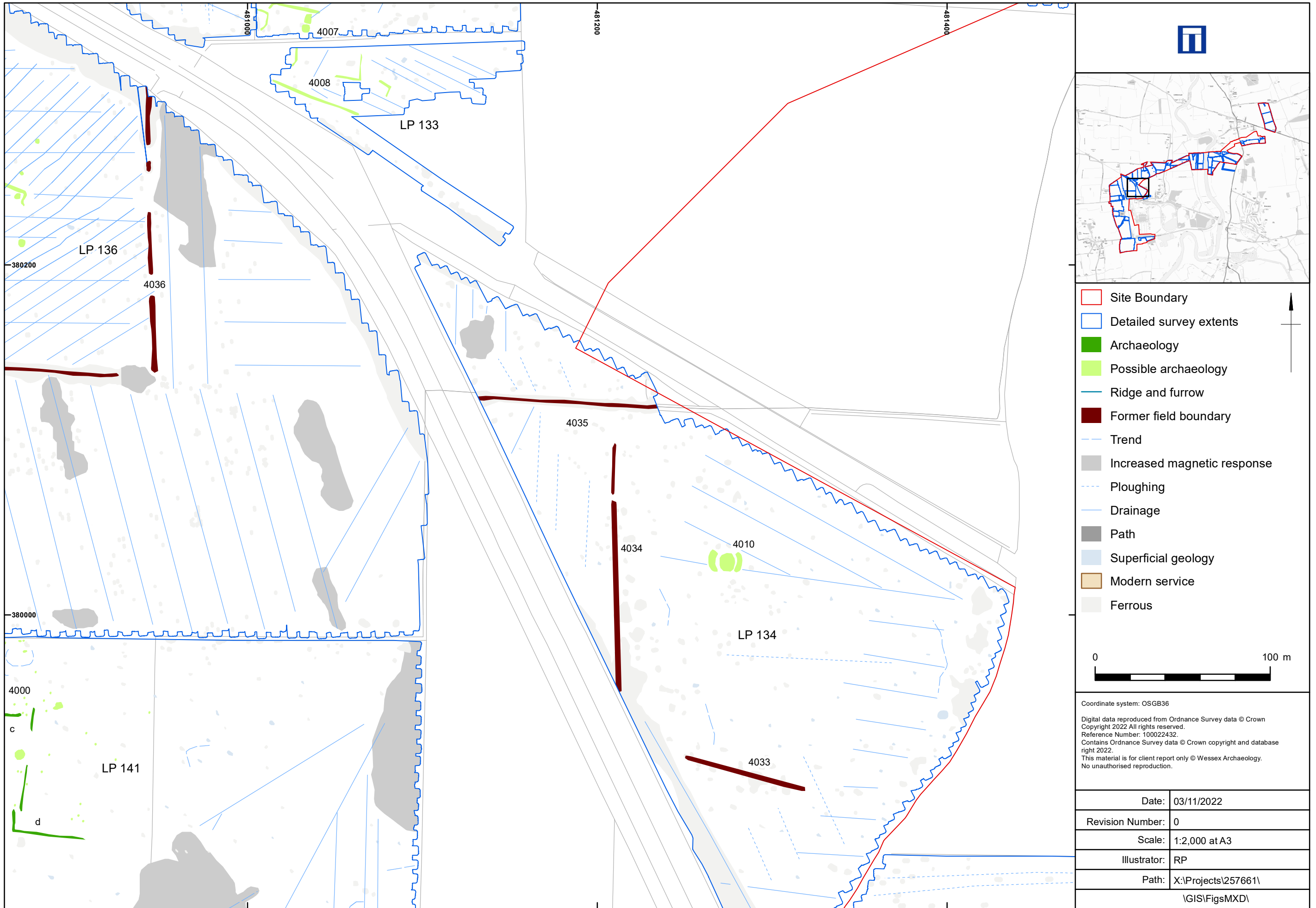
Detailed gradiometer survey results: interpretation (Fields 136 - 138)

Figure 33



Detailed gradiometer survey results: grayscale plot (Fields 133 - 136, 141)

Figure 34



Detailed gradiometer survey results: interpretation (Fields 133 - 136, 141)

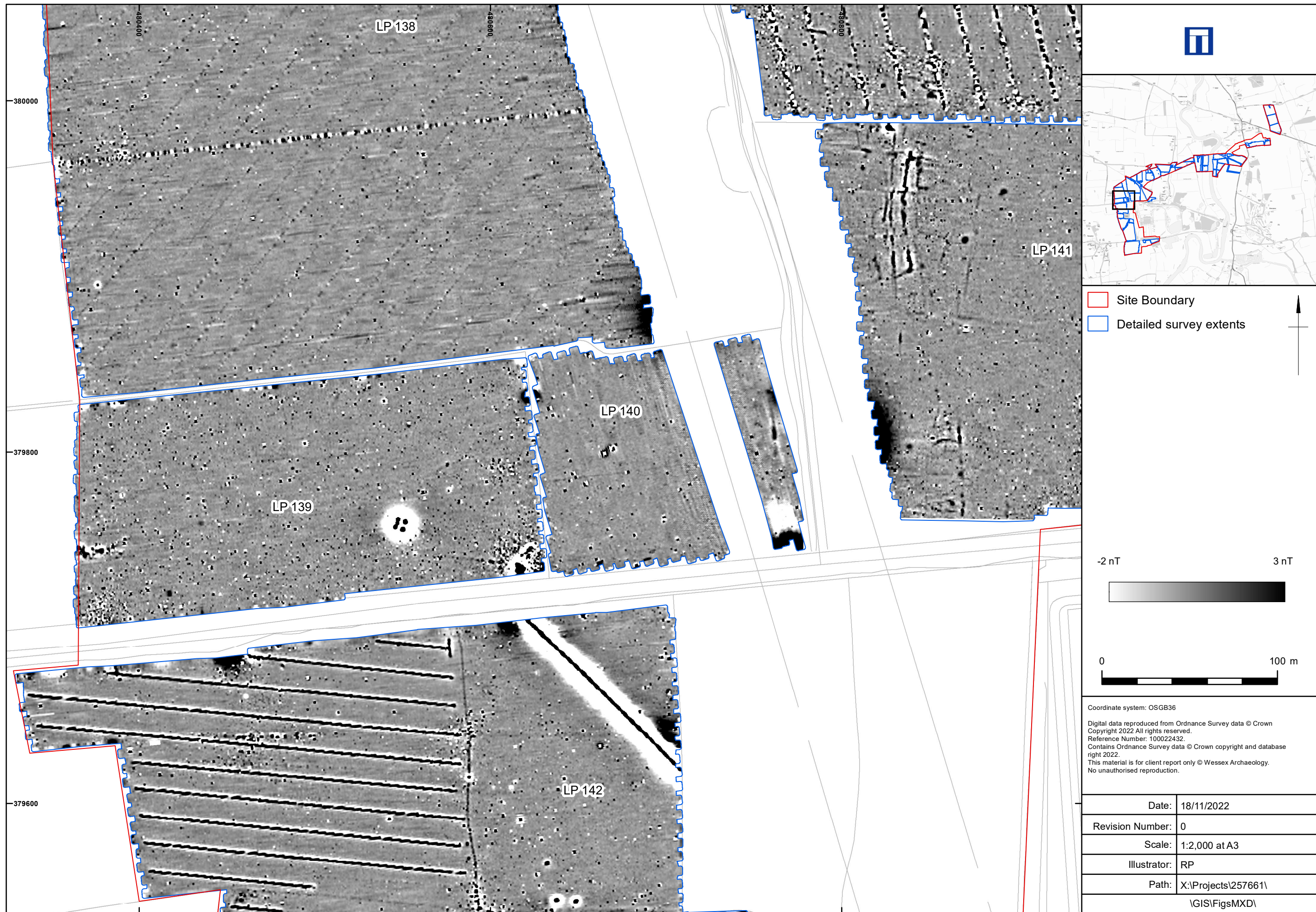
Figure 35

Site Boundary
 Detailed survey extents
 Archaeology
 Possible archaeology
 Ridge and furrow
 Former field boundary
 Trend
 Increased magnetic response
 Ploughing
 Drainage
 Path
 Superficial geology
 Modern service
 Ferrous

0 100 m

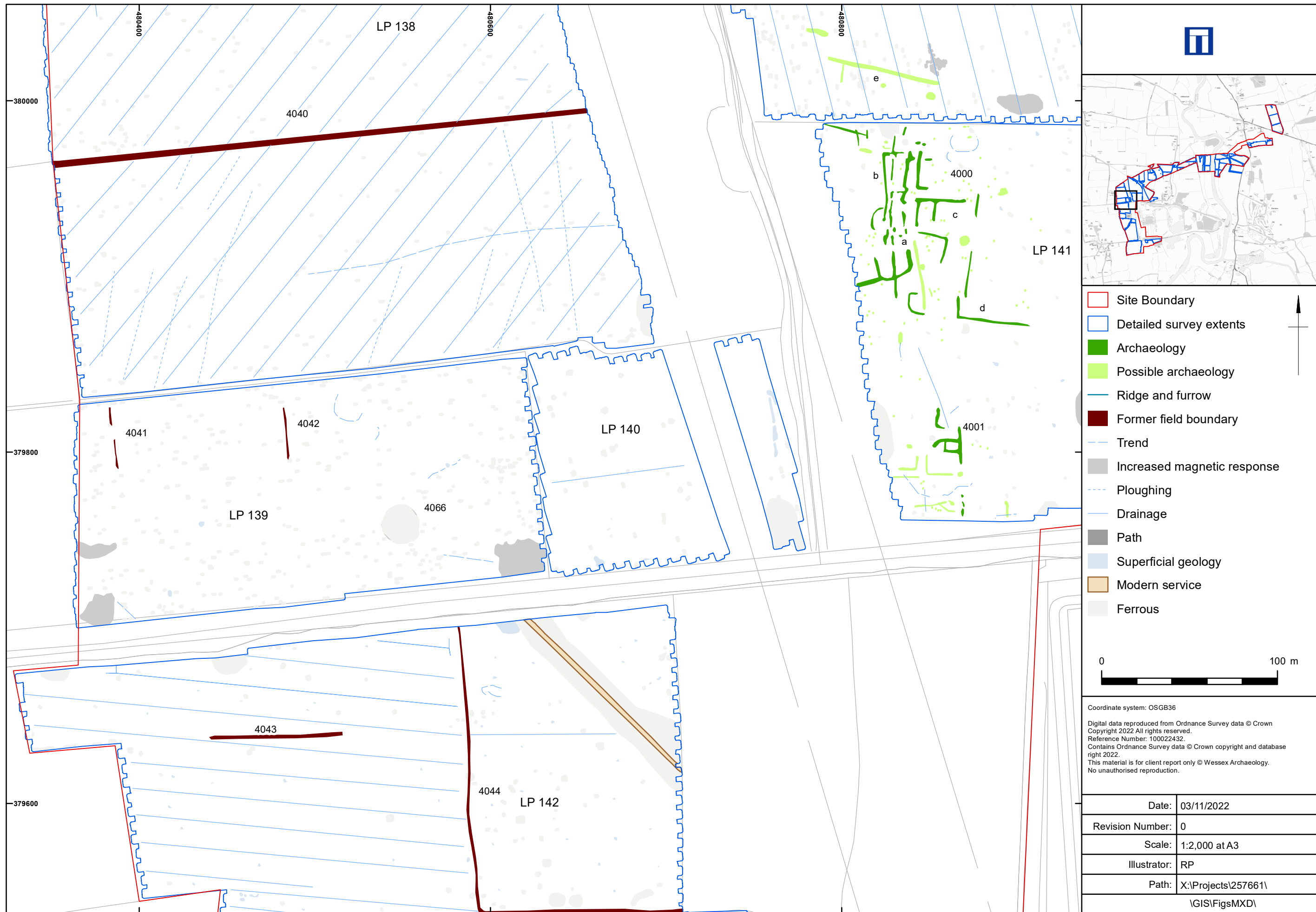
Coordinate system: OSGB36
 Digital data reproduced from Ordnance Survey data © Crown Copyright 2022 All rights reserved.
 Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2022.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.

Date:	03/11/2022
Revision Number:	0
Scale:	1:2,000 at A3
Illustrator:	RP
Path:	X:\Projects\257661\GIS\FigsMXD\



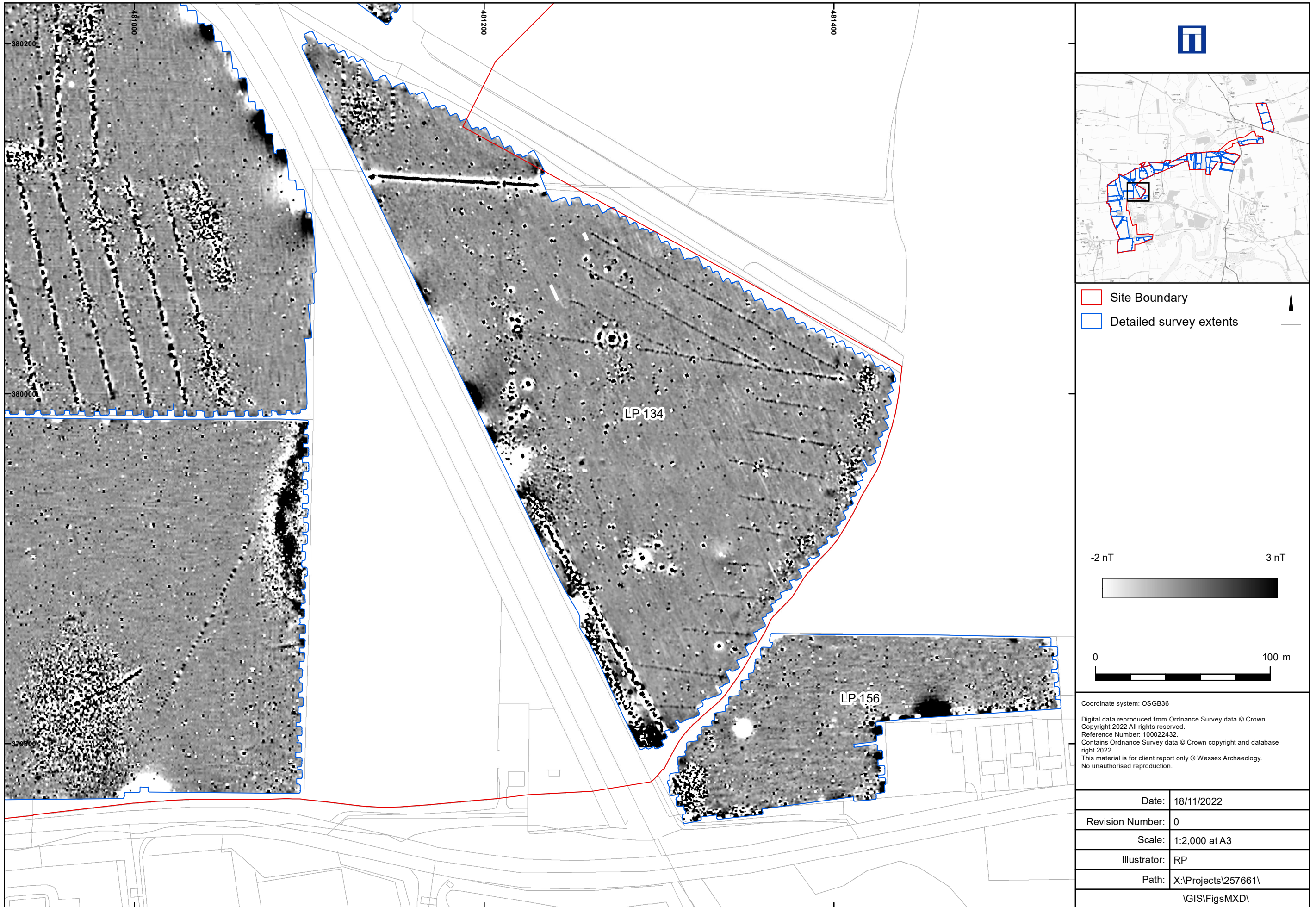
Detailed gradiometer survey results: grayscale plot (Fields 138 - 142)

Figure 36

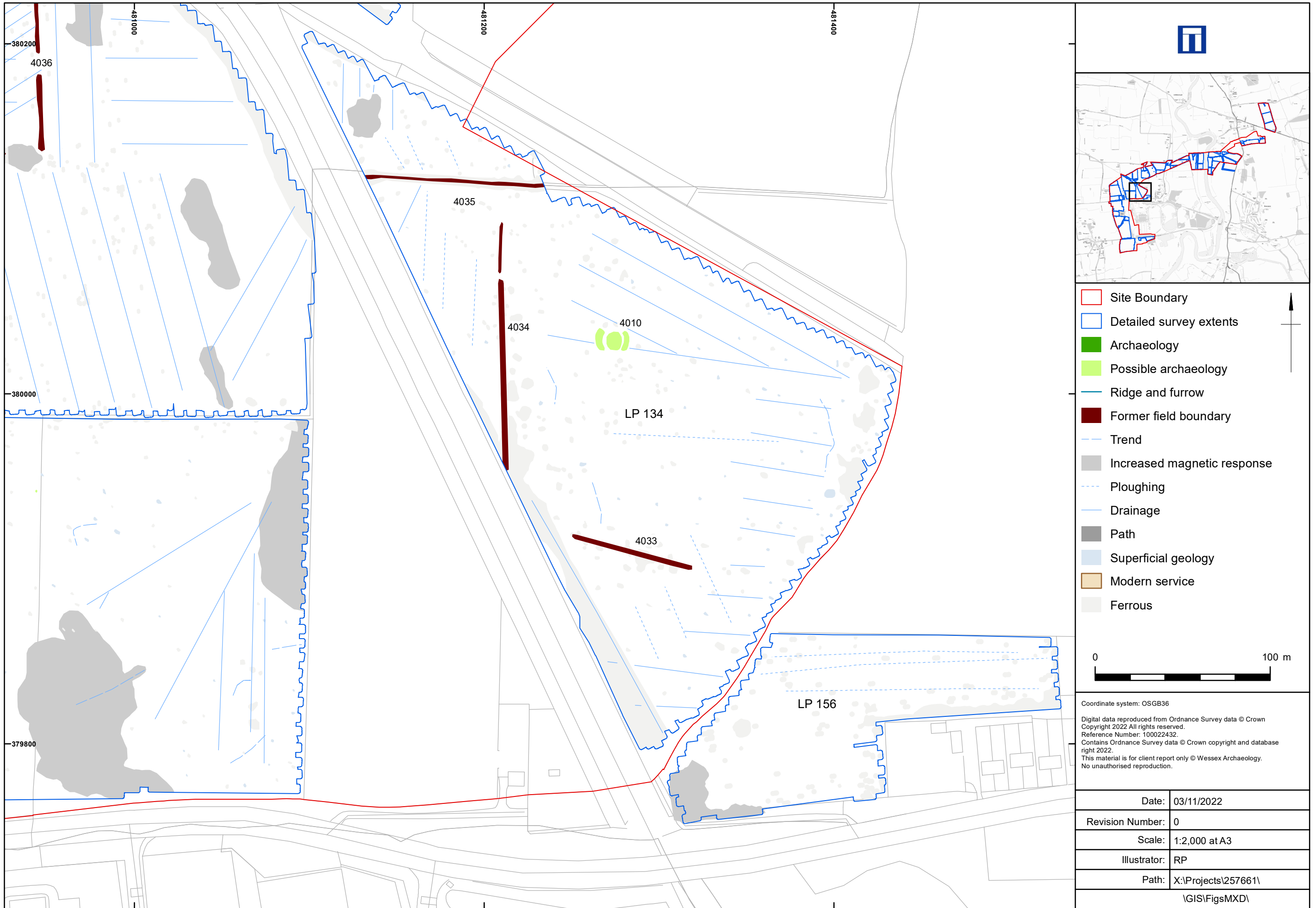


Detailed gradiometer survey results: interpretation (Fields 138 - 142)

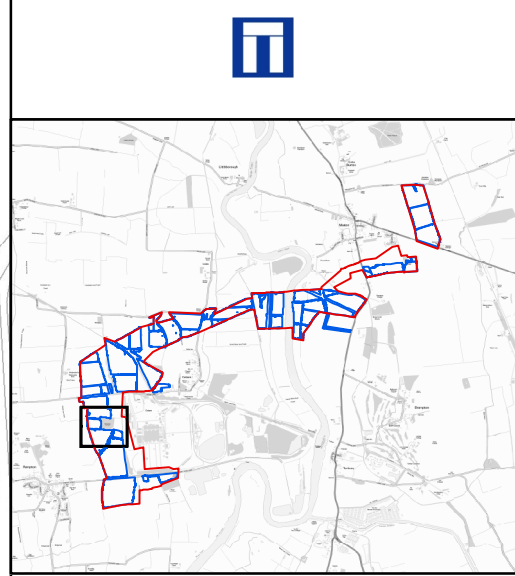
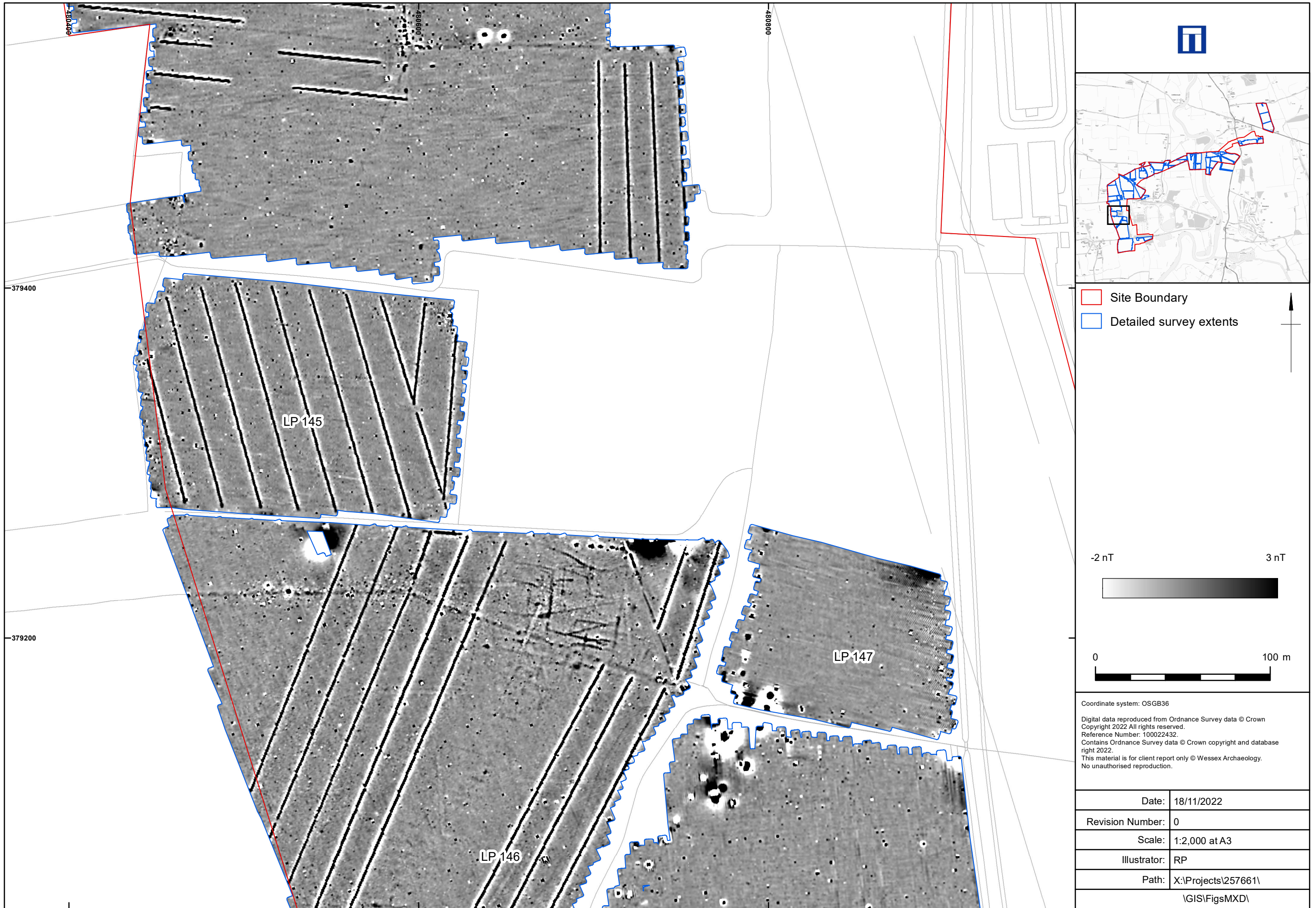
Figure 37



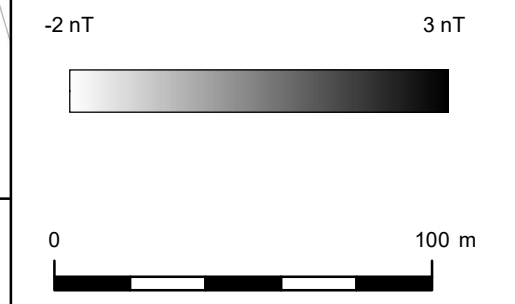
Detailed gradiometer survey results: grayscale plot (Fields 134, 136, 141, 156)



Detailed gradiometer survey results: interpretation (Fields 134, 136, 141, 156)



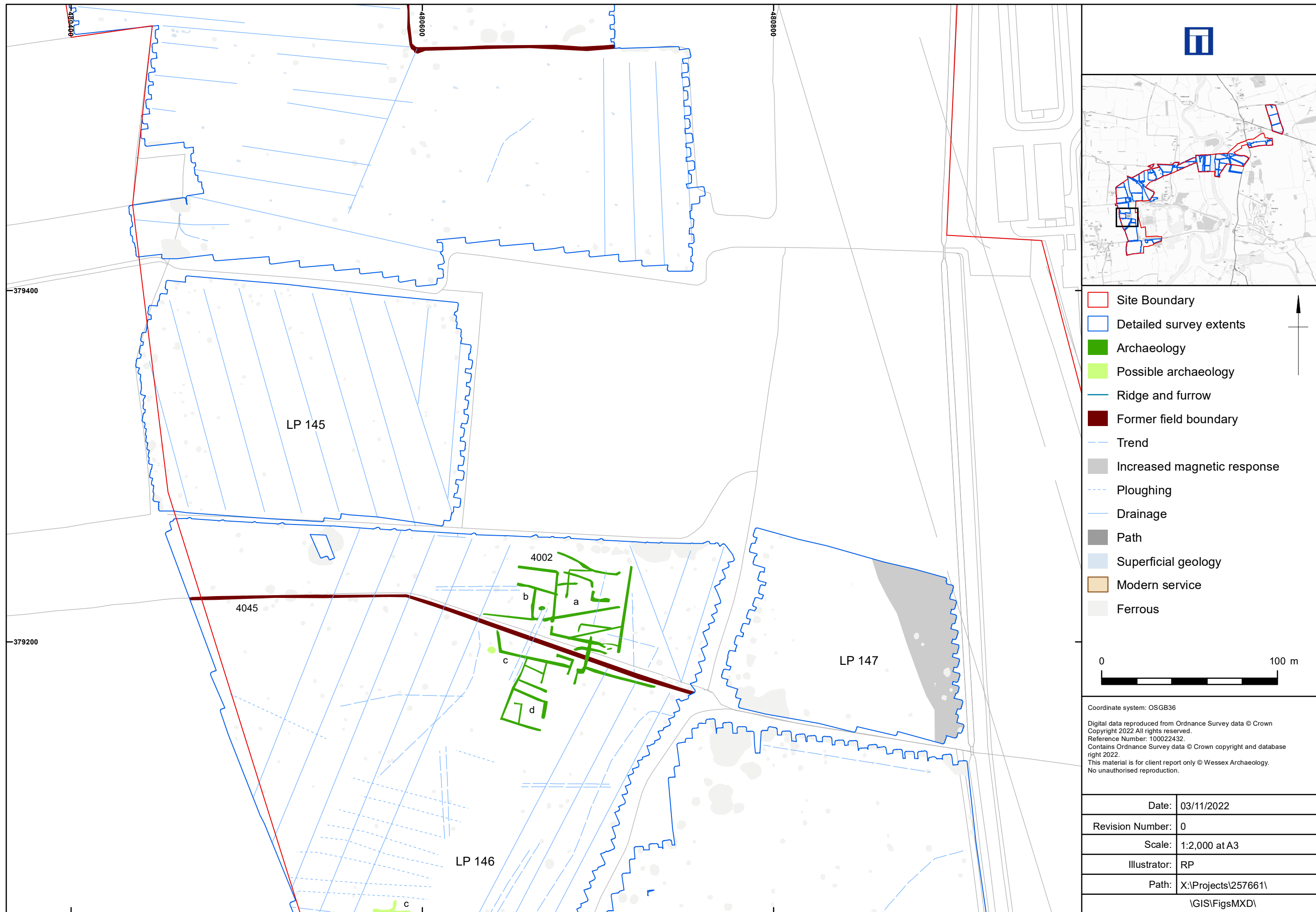
□ Site Boundary
□ Detailed survey extents



Coordinate system: OSGB36
 Digital data reproduced from Ordnance Survey data © Crown Copyright 2022 All rights reserved.
 Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2022.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.

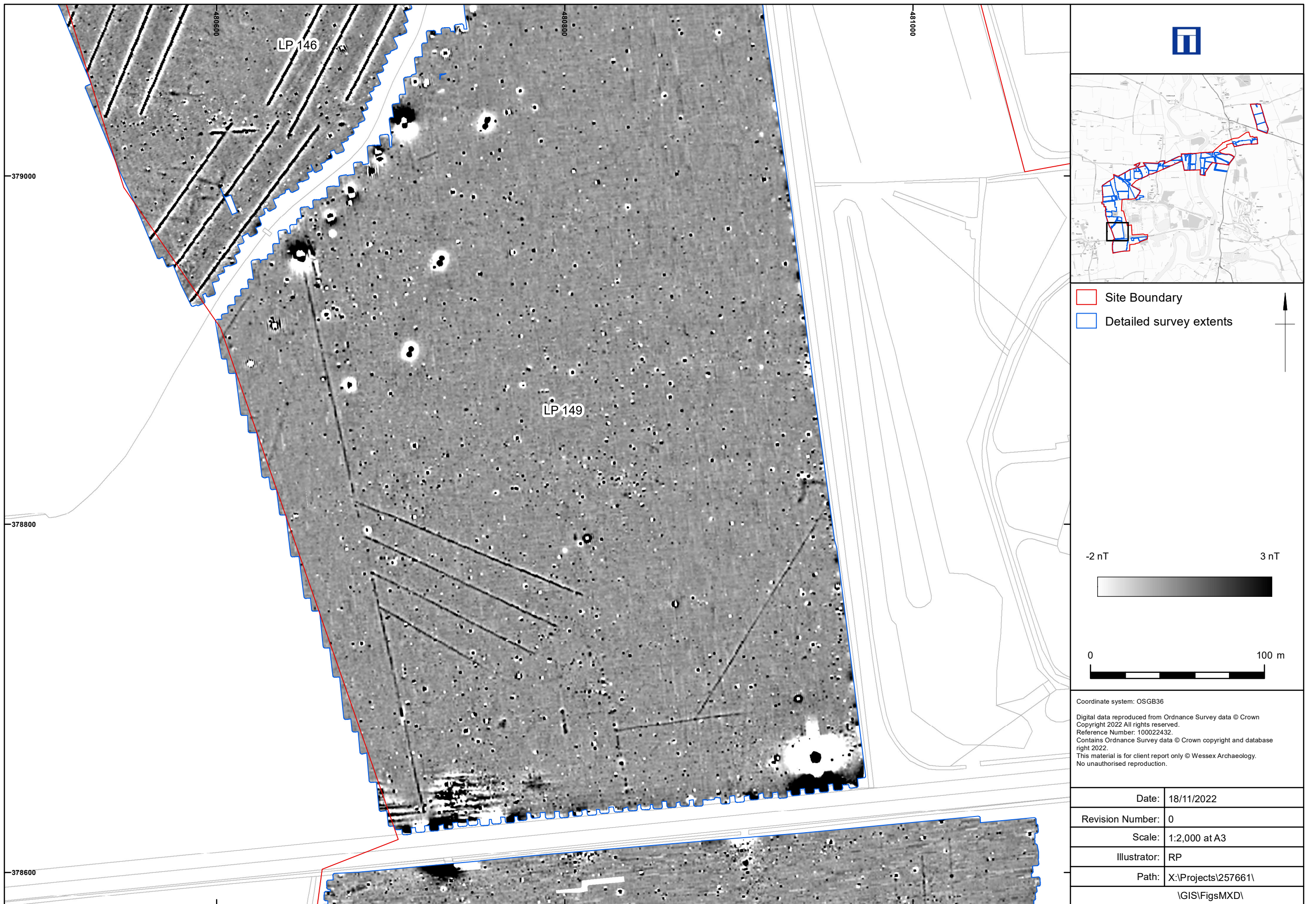
Date:	18/11/2022
Revision Number:	0
Scale:	1:2,000 at A3
Illustrator:	RP
Path:	X:\Projects\257661\GIS\FigsMXD\

Detailed gradiometer survey results: grayscale plot (Fields 142 - 147)



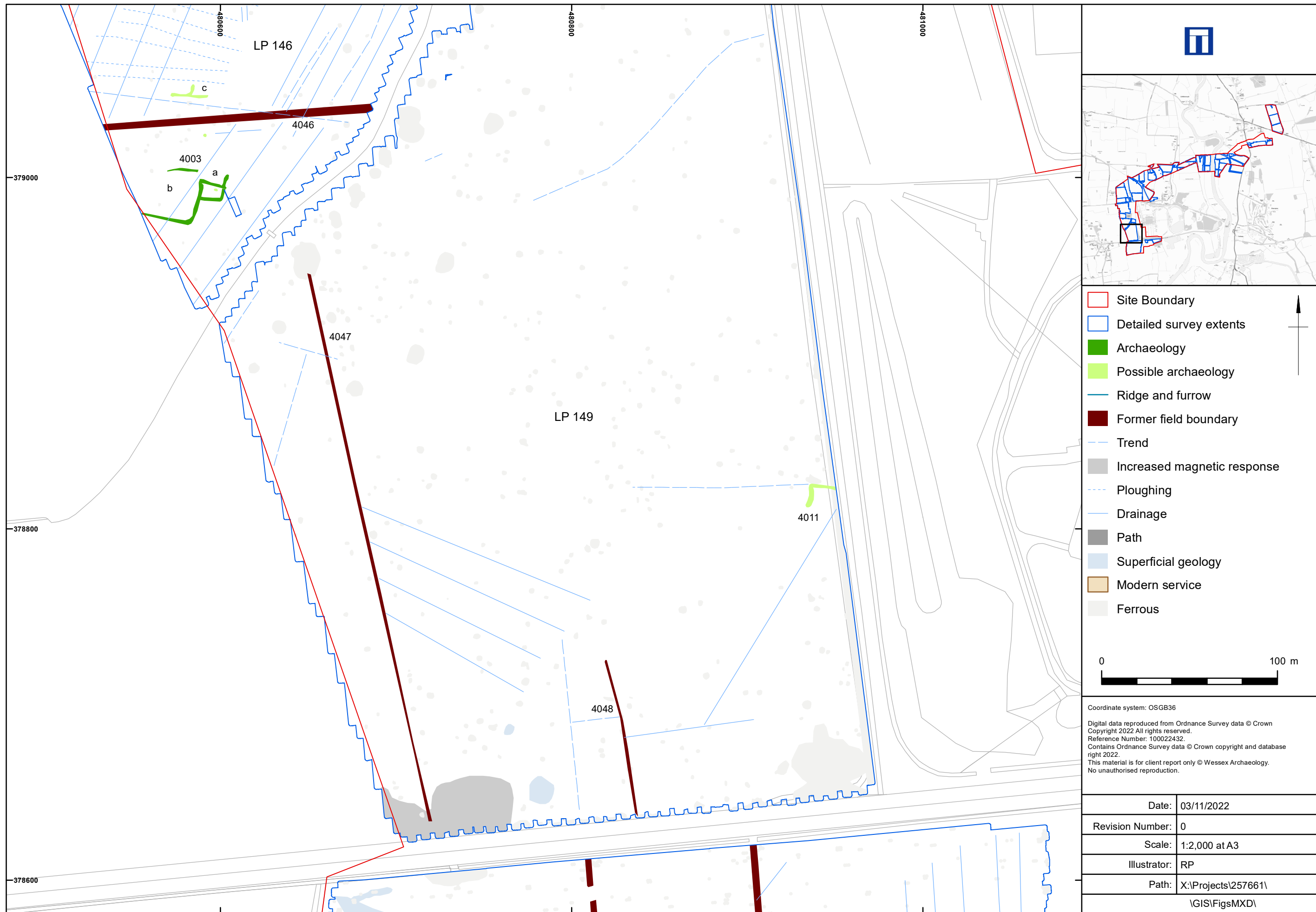
Detailed gradiometer survey results: interpretation (Fields 142 - 147)

Figure 41



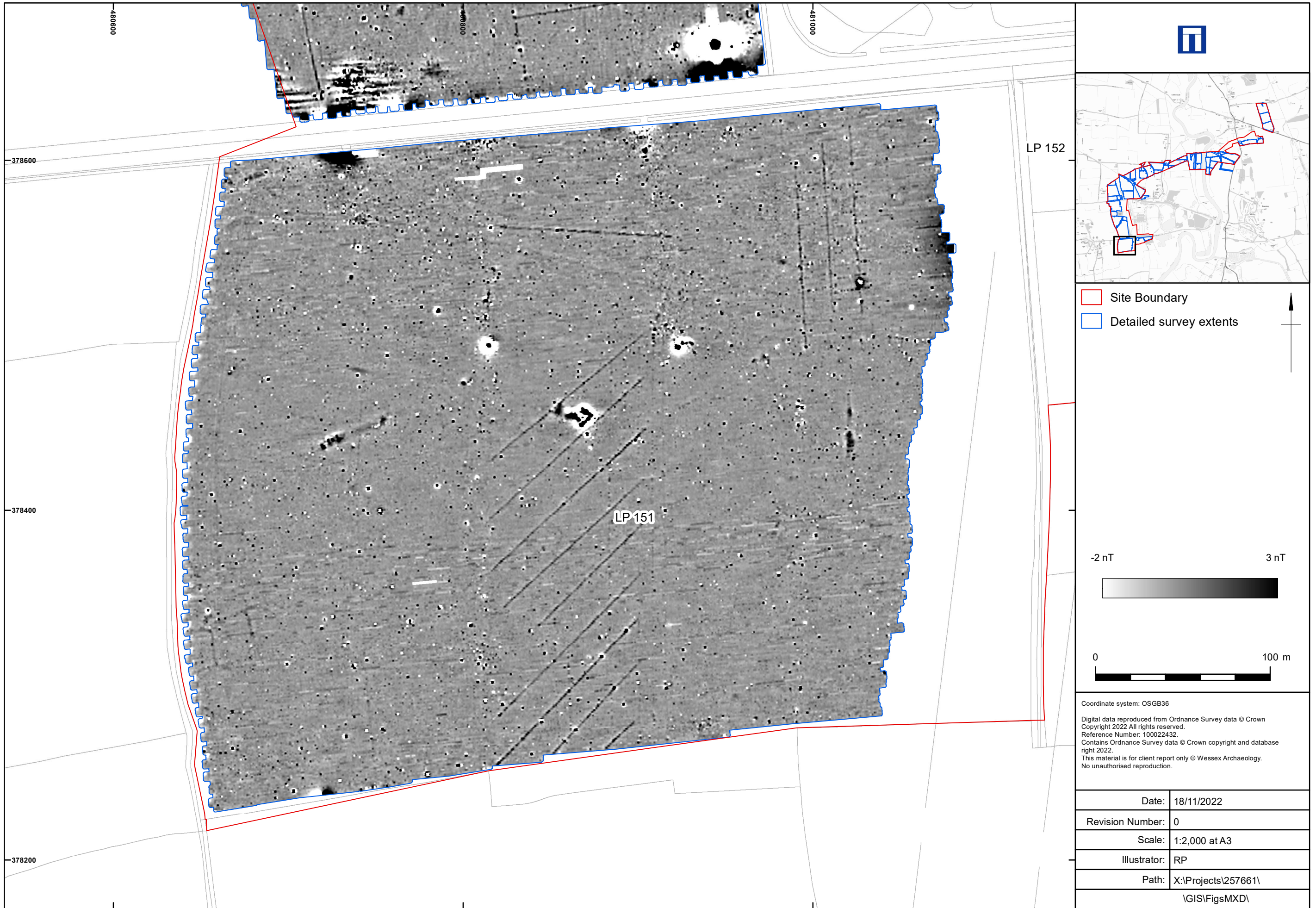
Detailed gradiometer survey results: grayscale plot (Fields 146, 149)

Figure 42

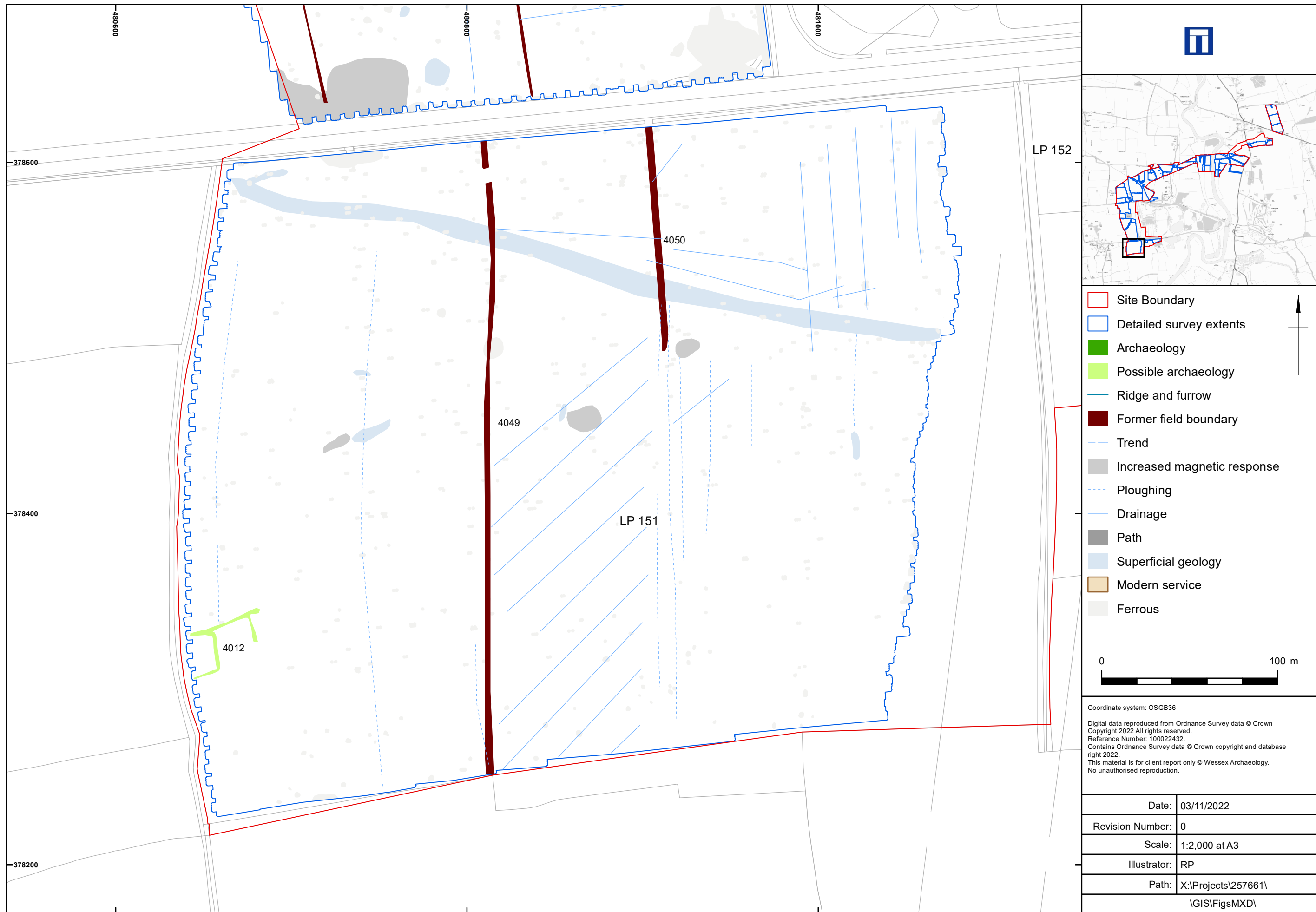


Detailed gradiometer survey results: interpretation (Fields 146, 149)

Figure 43

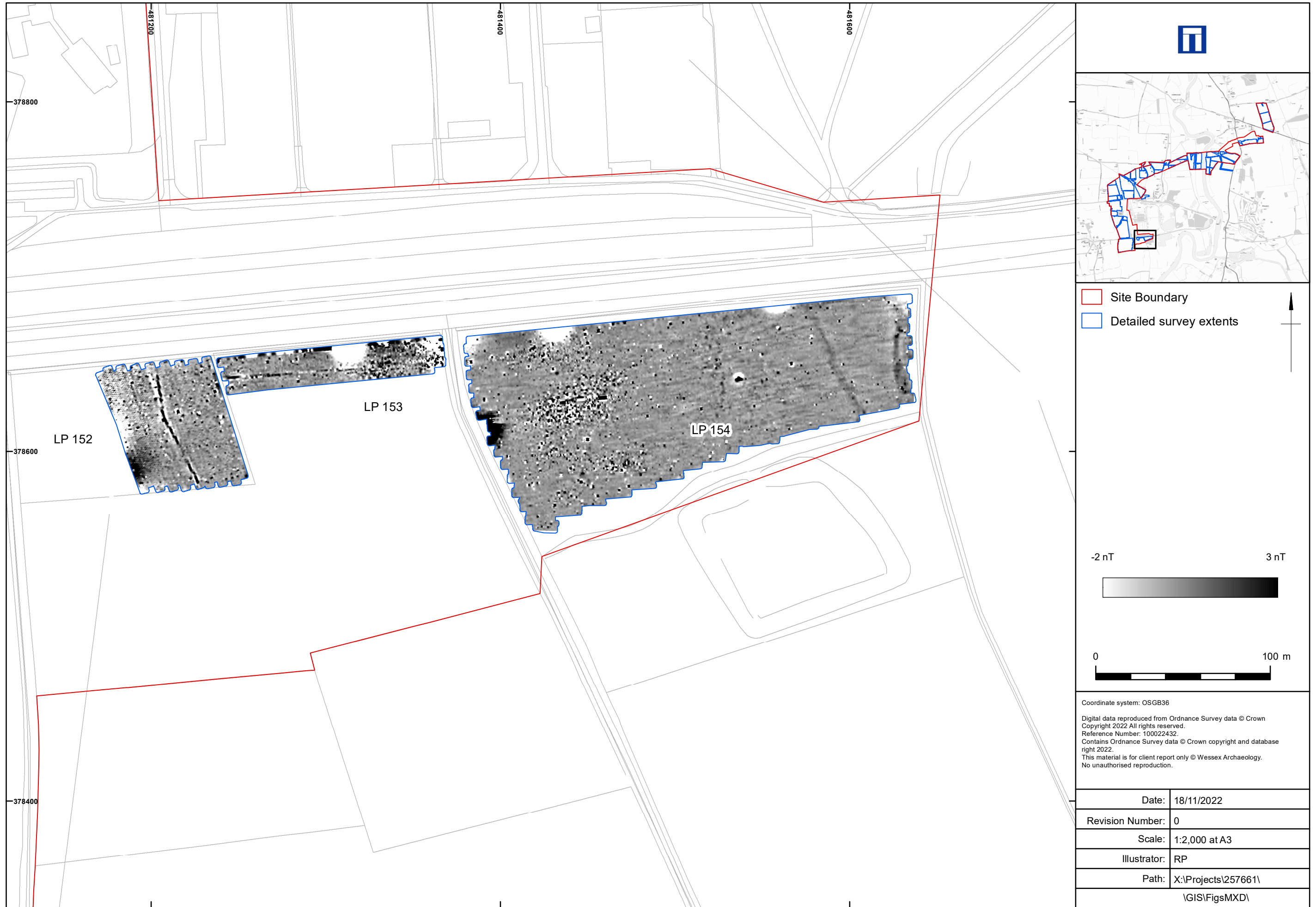


Detailed gradiometer survey results: grayscale plot (Field 151)



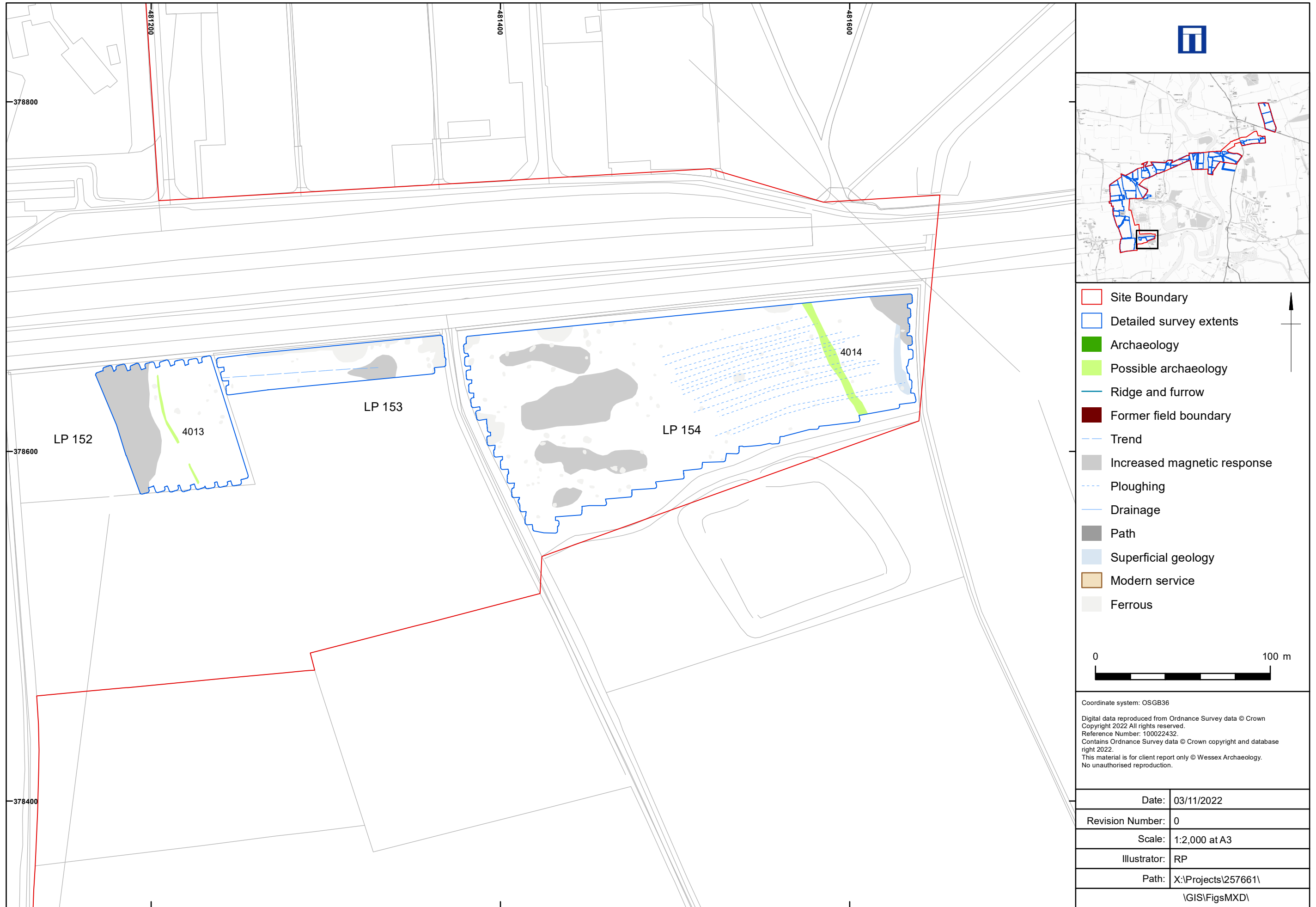
Detailed gradiometer survey results: interpretation (Field 151)

Figure 45



Detailed gradiometer survey results: grayscale plot (Fields 152, 154)

Figure 46



- Site Boundary
- Detailed survey extents
- Archaeology
- Possible archaeology
- Ridge and furrow
- Former field boundary
- Trend
- Increased magnetic response
- Ploughing
- Drainage
- Path
- Superficial geology
- Modern service
- Ferrous



Coordinate system: OSGB36
 Digital data reproduced from Ordnance Survey data © Crown Copyright 2022 All rights reserved.
 Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2022.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.

Date:	03/11/2022
Revision Number:	0
Scale:	1:2,000 at A3
Illustrator:	RP
Path:	X:\Projects\257661\
\GIS\FigsMXD\	

Detailed gradiometer survey results: interpretation (Fields 152, 154)

Figure 47



Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk [REDACTED]



Appendix

Shared Cable Route Corridor: relevant sections from the West Burton 3 Solar Site Geophysics Report (NAA 2022), which are located within the Cottam Solar Scheme shared cable route

Introduction

Northern Archaeological Associates (NAA) was commissioned by West Burton Solar Project Ltd to undertake a geophysical (gradiometer) survey on land within the proposed West Burton 3 Solar Scheme, which is centred on Stow Park Farm, Lincolnshire (NGR: SK 85407 80186).

The geophysical survey was carried out sporadically between August 2021 and April 2022, and covered 33 fields totalling c.353ha

Methodology

All survey work was completed to appropriate standards set out in current guidelines (CIfA 2014; Schmidt et al. 2015). The gradiometer survey used Bartington Grad601-2 dual magnetic gradiometer systems with data loggers. Readings were recorded at a resolution of 0.01nT and data was collected with a traverse interval of 1m and a sample interval of 0.25m. The survey data was collected with reference to a site survey grid comprised of individual 30m x 30m squares. All data was located using Real Time Kinematic (RTK) differential GPS equipment with a positional accuracy of at least 0.1m.

The processing was undertaken using Geoplot 3.0 and Terrasurveyor version 3.0.37 software and consisted of standard processing procedures.

Results

Area Q9 (Field 103)

Several rectilinear, linear and amorphous anomalies and trends (Q9a) were identified in the north of Area Q9 that are likely to be caused by infilled archaeological features. It can be postulated that anomalies are suggestive of a roadside settlement to the south of a Roman Road linking Ermine Street to a crossing at the River Trent in Marton.

One field boundary was identified that is on the 1885 OS map (Q9b).

Regularly spaced linear anomalies occur on an east-west orientation that possibly denote ridge and furrow. Generally, these anomalies are composed of weak increases in magnetic value and so a tentative interpretation applies. Several regimes of land drain occur in Area Q9 and follow a herring bone pattern.

A linear bipolar anomaly (Q9c) is caused by a buried utility and continues to both the north-east (Q10a) and south-west (Q12b and Q13c).

Area Q1 (Field 104)

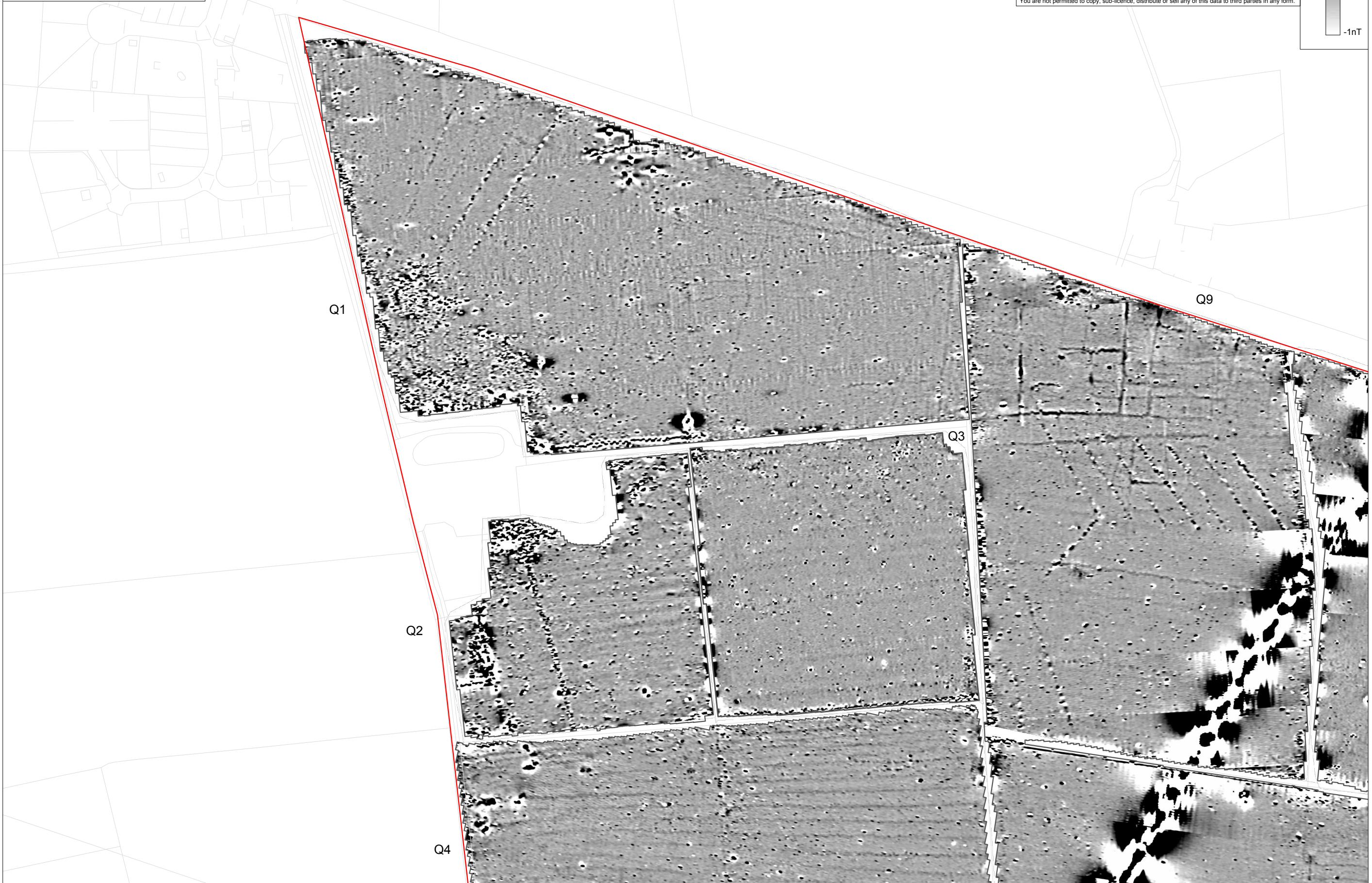
Several trends were identified in Area Q1 that are composed of weak increases in magnetic value and poor patterning and so their origin is unknown. Of particular note are the weak and diffuse trends (Q1a) in the east of Area Q1 that appear on similar orientations to anomalies

suggested to be agricultural in nature and anomalies in Area Q9 that are likely to be of an archaeological origin (Q9a). Interpretation of Q1a is very tentative and it is not possible to ascertain if they denote infilled features of an archaeological nature or relate to agricultural activity.












A field boundary was identified that is on the 1885 OS map (Q1b).

Linear anomalies running on a west-northwest to east-south-east orientation relate to modern ploughing. Field drains were identified running on a north-east to south-west orientation. Several regularly spaced anomalies were identified running on an east-west orientation that are plausibly of an agricultural origin.

The area of magnetic disturbance in the south-west of Area Q1 is caused by modern material in the topsoil and periphery of the site. The linear bipolar anomaly (Q1c) in the south of Area Q1 is plausibly caused by a buried utility.

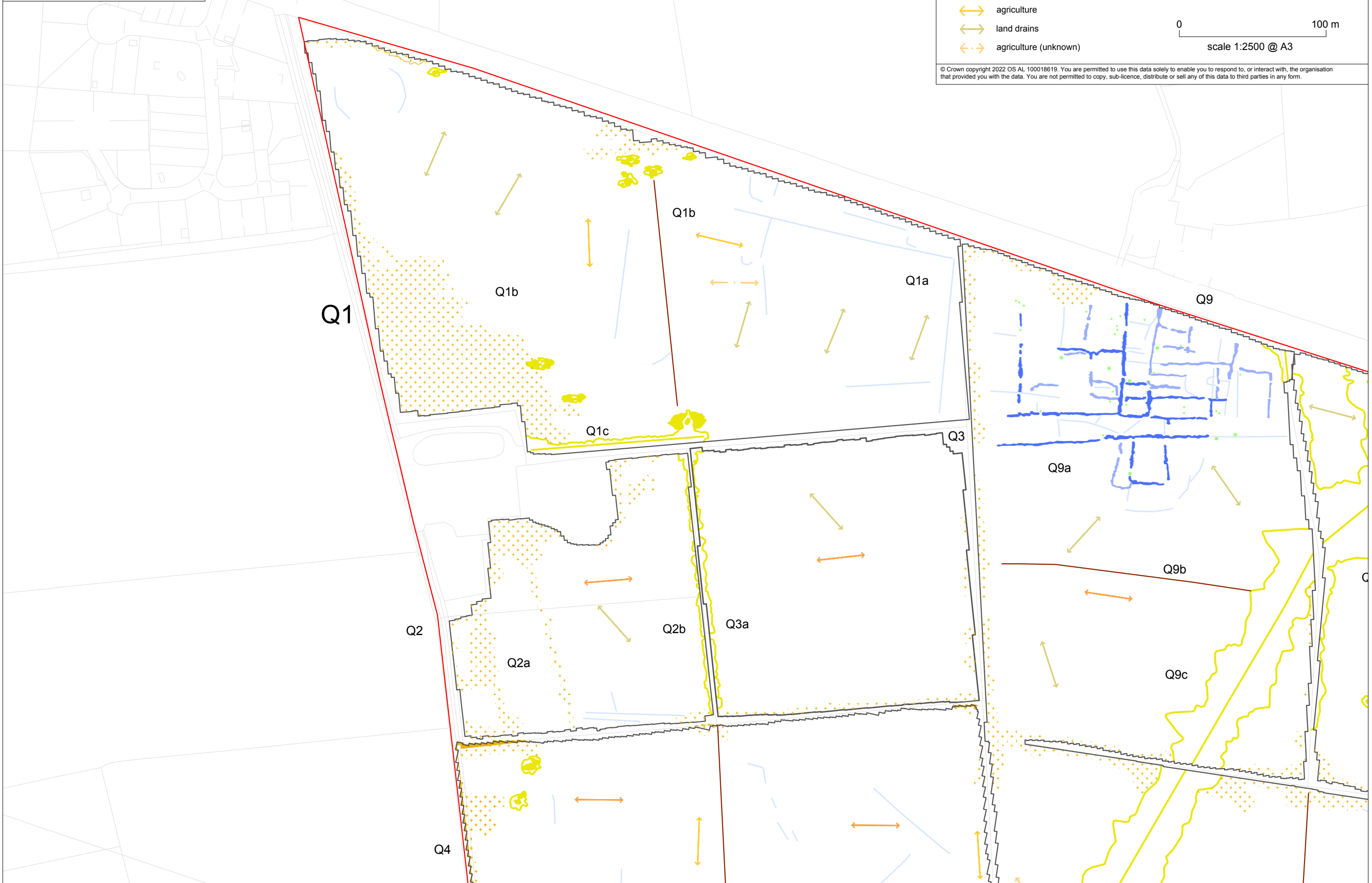


KEY

 linear anomaly (archaeology) (greater / lesser)	 bipolar anomaly (modern)
 field boundary	 magnetic disturbance (modern)
 trends	 edge of geophysical survey
 ridge and furrow	 proposed development area
 agriculture	
 land drains	
 agriculture (unknown)	

0 100 m
scale 1:2500 @ A3

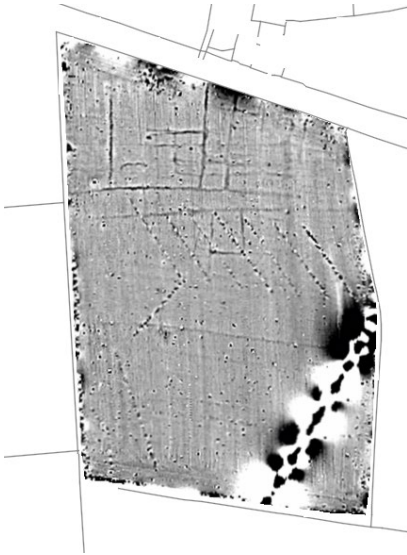
© Crown copyright 2022 OS AL 100018619. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.



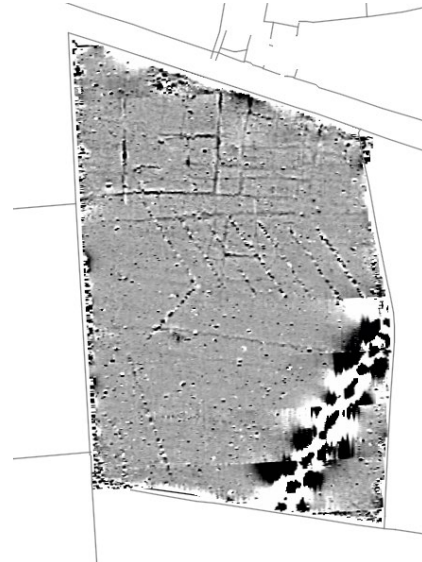
10 Appendix 7

Control Data

Shared Cable Route Corridor - Field 103

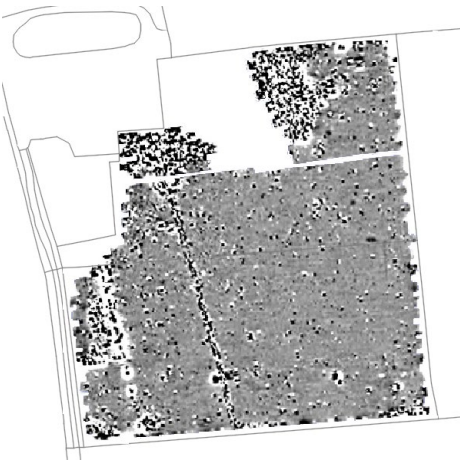


ASWYAS 2022

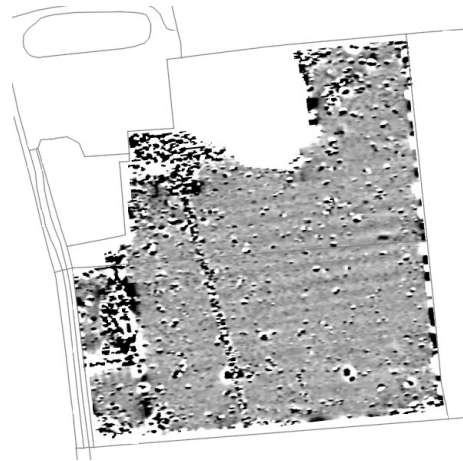


NAA 2022

Shared Cable Route Corridor - Field 105

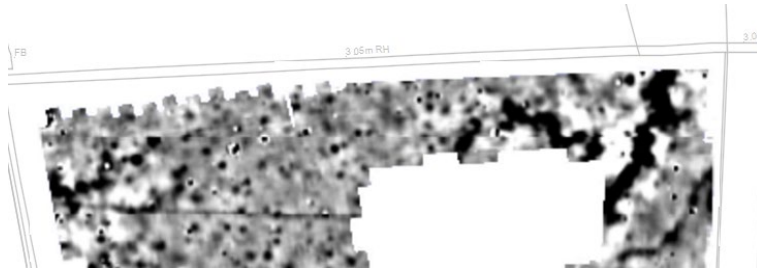


Wessex Archaeology 2022

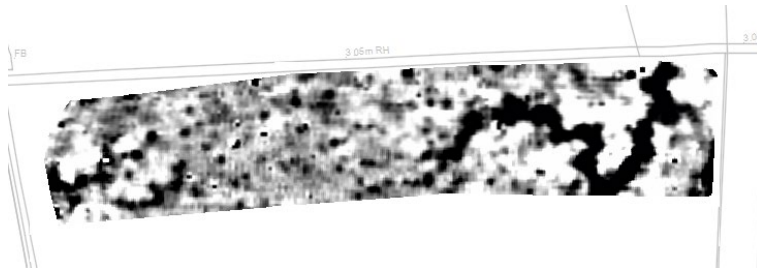


NAA 2022

Shared Cable Route Corridor - Field 119



Wessex Archaeology 2022



ASWYAS 2022