

Hampshire Water Transfer and Water Recycling Project

Environmental Statement – Appendix 7.3 Detailed gradiometer survey report – Phase 1

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Addendum Appendix 7.3 Detailed gradiometer survey report – Phase 1

1. The following document forming ES Appendix 7.3 Detailed gradiometer survey report – Phase 1, Volume II (Document reference 6.2, DCO Volume 6) presents the results of the priority (Phase 1) geophysical survey conducted by Wessex Archaeology, commissioned by Southern Water Services Ltd., for the Hampshire Water Transfer and Water Recycling Project (hereafter referred to as the Proposed Development) between March and September 2023.
2. The results presented in this report have informed both decisions relating to the design of the Proposed Development and the assessment of the likely significant effects on archaeology and cultural heritage from the construction, operation, and decommissioning of the Proposed Development within Environmental Statement (ES) Chapter 7 Archaeology and cultural heritage, Volume I (Document reference 6.1, DCO Volume 6).
3. This report has therefore been included as an appendix to provide additional supporting detail to the assessment contained in ES Chapter 7 Archaeology and cultural heritage, Volume I (Document reference 6.1, DCO Volume 6).
4. Having been written at the time of the geophysical survey being conducted, this document includes references to terminology and documents in place at the point in time the geophysical survey was carried out. This appendix should as a result be read in conjunction with ES Chapter 7 Archaeology and cultural heritage, Volume I (Document reference 6.1, DCO Volume 6) and the associated appendices.



Hampshire Water Transfer and Water Recycling Project, Hampshire

Detailed Gradiometer Survey Report

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Unit R6
Sheaf Bank Business Park
Prospect Road
Sheffield
S2 3EN

www.wessexarch.co.uk

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Contents

Summary	iv
Acknowledgements	v
1 INTRODUCTION	1
1.1 Project background	1
1.2 Scope of document	1
1.3 The site	1
1.4 Geology and soils	3
2 ARCHAEOLOGICAL BACKGROUND	4
2.1 Introduction	4
2.2 Corridor Section DC	4
2.3 Corridor Section DA	4
2.4 Corridor Section E	5
2.5 Corridor Section F	7
2.6 Corridor Section G	7
2.8 Corridor Section K	8
2.9 Corridor Section L	9
3 METHODOLOGY	9
3.1 Introduction	9
3.2 Aims and objectives	10
3.3 Fieldwork methodology	10
3.4 Data processing	11
4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION	11
4.1 Introduction	11
4.2 Gradiometer survey results and interpretation	11
5 DISCUSSION	20
REFERENCES	22
APPENDICES	23
Appendix 1: Gradiometer Survey Equipment and Data Processing (Sensys)	23
Appendix 2 Geophysical interpretation	25
Appendix 3 OASIS form	26



List of Figures

Figure 1	Site location and survey extent
Figure 2	Detailed gradiometer survey results: Corridor Section DC, DA, and E greyscale plot overview
Figure 3	Detailed gradiometer survey results: Corridor Section DC, DA, and E interpretation plot overview
Figure 4	Detailed gradiometer survey results: Corridor Section E greyscale plot overview
Figure 5	Detailed gradiometer survey results: Corridor Section E interpretation plot overview
Figure 6	Detailed gradiometer survey results: Corridor Section F greyscale plot overview
Figure 7	Detailed gradiometer survey results: Corridor Section F interpretation plot overview
Figure 8	Detailed gradiometer survey results: Corridor Section G greyscale plot overview
Figure 9	Detailed gradiometer survey results: Corridor Section G interpretation plot overview
Figure 10	Detailed gradiometer survey results: Corridor Section J and K greyscale plot overview
Figure 11	Detailed gradiometer survey results: Corridor Section J and K interpretation plot overview
Figure 12	Detailed gradiometer survey results: Corridor Section L greyscale plot overview
Figure 13	Detailed gradiometer survey results: Corridor Section L interpretation plot overview
Figure 14	Detailed gradiometer survey results: greyscale plot GS001
Figure 15	Detailed gradiometer survey results: interpretation plot GS001
Figure 16	Detailed gradiometer survey results: greyscale plot GS002
Figure 17	Detailed gradiometer survey results: interpretation plot GS002
Figure 18	Detailed gradiometer survey results: greyscale plot GS003, GS004, GS005, GS023, and GS024
Figure 19	Detailed gradiometer survey results: interpretation plot GS003, GS004, GS005, GS023, and GS024
Figure 20	Detailed gradiometer survey results: greyscale plot GS003, GS004, GS005, GS023, and GS024
Figure 21	Detailed gradiometer survey results: interpretation plot GS003, GS004, GS005, GS023, and GS024
Figure 22	Detailed gradiometer survey results: greyscale plot GS004, GS005, GS006, and GS024
Figure 23	Detailed gradiometer survey results: interpretation plot GS004, GS005, GS006, and GS024
Figure 24	Detailed gradiometer survey results: greyscale plot GS004, GS006, GS025, and GS026
Figure 25	Detailed gradiometer survey results: interpretation plot GS004, GS006, GS025, and GS026
Figure 26	Detailed gradiometer survey results: greyscale plot GS007 and GS027
Figure 27	Detailed gradiometer survey results: interpretation plot GS007 and GS027
Figure 28	Detailed gradiometer survey results: greyscale plot GS008
Figure 29	Detailed gradiometer survey results: interpretation plot GS008
Figure 30	Detailed gradiometer survey results: greyscale plot GS008 and GS009
Figure 31	Detailed gradiometer survey results: interpretation plot GS008 and GS009
Figure 32	Detailed gradiometer survey results: greyscale plot GS009
Figure 33	Detailed gradiometer survey results: interpretation plot GS009
Figure 34	Detailed gradiometer survey results: greyscale plot GS010
Figure 35	Detailed gradiometer survey results: interpretation plot GS010
Figure 36	Detailed gradiometer survey results: greyscale plot GS010
Figure 37	Detailed gradiometer survey results: interpretation plot GS010
Figure 38	Detailed gradiometer survey results: greyscale plot GS012
Figure 39	Detailed gradiometer survey results: interpretation plot GS012
Figure 40	Detailed gradiometer survey results: greyscale plot GS012
Figure 41	Detailed gradiometer survey results: interpretation plot GS012
Figure 42	Detailed gradiometer survey results: greyscale plot GS012
Figure 43	Detailed gradiometer survey results: interpretation plot GS012
Figure 44	Detailed gradiometer survey results: greyscale plot GS013 and GS029
Figure 45	Detailed gradiometer survey results: interpretation plot GS013 and GS029
Figure 46	Detailed gradiometer survey results: greyscale plot GS013 and GS029
Figure 47	Detailed gradiometer survey results: interpretation plot GS013 and GS029
Figure 48	Detailed gradiometer survey results: greyscale plot GS014
Figure 49	Detailed gradiometer survey results: interpretation plot GS014
Figure 50	Detailed gradiometer survey results: greyscale plot GS015
Figure 51	Detailed gradiometer survey results: interpretation plot GS015
Figure 52	Detailed gradiometer survey results: greyscale plot GS015
Figure 53	Detailed gradiometer survey results: interpretation plot GS015
Figure 54	Detailed gradiometer survey results: greyscale plot GS016



- Figure 55** Detailed gradiometer survey results: interpretation plot GS016
Figure 56 Detailed gradiometer survey results: greyscale plot GS016
Figure 57 Detailed gradiometer survey results: interpretation plot GS016
Figure 58 Detailed gradiometer survey results: greyscale plot GS018 and GS017
Figure 59 Detailed gradiometer survey results: interpretation plot GS018 and GS017
Figure 60 Detailed gradiometer survey results: greyscale plot GS019
Figure 61 Detailed gradiometer survey results: interpretation plot GS019
Figure 62 Detailed gradiometer survey results: greyscale plot GS020, GS021, GS033
Figure 63 Detailed gradiometer survey results: interpretation plot GS020, GS021, GS033
Figure 64 Detailed gradiometer survey results: greyscale plot GS022 and GS032
Figure 65 Detailed gradiometer survey results: interpretation plot GS022 and GS032
Figure 66 Detailed gradiometer survey results: greyscale plot GS028 and GS009
Figure 67 Detailed gradiometer survey results: interpretation plot GS028 and GS009
Figure 68 Detailed gradiometer survey results: greyscale plot GS031 and GS030
Figure 69 Detailed gradiometer survey results: interpretation plot GS031 and GS030



Summary

Wessex Archaeology was commissioned by Southern Water Services Ltd to carry out a detailed gradiometer survey along a linear route between Bedhampton in the south-east and Fishers Pond in the north-west. The site has been split into sections:

Pipeline Corridor Section	Eastern Extent (NGR)	Western Extent (NGR)	GS Numbers
DC	469113, 106346	468913, 106439	GS002
DA	467011, 106300	466905, 106353	GS001
E	466663, 106638	462493, 107485	GS003, GS004, GS005, GS006, GS007, GS008, GS009, GS023, GS024, GS025, GS026, GS027, GS028
F	460109, 107859	457914, 109144	GS010, GS011, GS012
G	456722, 112017	456026, 111953	GS013, GS029
J	455278, 114969	454189, 115293	GS014, GS015
K	454174, 116495	452812, 117968	GS016, GS018, GS030, GS031
L	449755, 120548	448262, 120822	GS019, GS020, GS021, GS022, GS032, GS033

The survey forms part of an ongoing programme of archaeological works being undertaken in support of a planning application for Hampshire Water Recycling and Water Transfer Project. The development consists of a new treatment process to turn treated water into purified recycled water at a new Water Recycling plant south of Havant and associated new water pipeline.

The survey area comprises 275.2 ha of agricultural land, currently utilised as pasture, arable, and scrub. The geophysical survey was undertaken over several mobilisations between 6 March 2023 and 13 September 2023.

The gradiometer survey has identified anomalies of archaeological and possible archaeological origin across many of the different pipeline sections, though predominantly in Pipeline E, F, and G. In addition to these, anomalies interpreted as former field boundaries, ridge and furrow cultivation, historic landscape features, area of increased magnetic response, ploughing, drains, geology, and modern services were also identified.

Perhaps the clearest evidence of archaeological activity is that of a ring ditch within Pipeline F, which is the product of prehistoric settlement or funerary activity, such as a ploughed-out barrow. The known archaeological evidence from the surrounding landscape indicates the presence of Bronze Age to Romano-British activity.

Possible archaeological ditch boundary features, likely associated with land management enclosures for animals or possible settlement activity, have been identified across the site. Concentrations of the possible archaeology are seen in Pipeline E, F, and G. Many of the features do not follow the current field boundaries so suggest an earlier than post-medieval date.

Numerous possible archaeological pit features, associated with extraction or refuse, have been identified across the site. Some of these are associated with linear features or enclosures providing possible further evidence for settlement activity.



Numerous anomalies associated with former agricultural activity have been identified. These include former field boundaries noted on historical OS mapping and areas of ridge and furrow cultivation. The form of these features is suggestive of post-medieval cultivation practices.

Areas of increased magnetic response have been identified across the site. Many of these are associated with historical landscape features such as former sand pits, chalk pits, and a rabbit dell identified on historical OS mapping.

The remaining anomalies are thought to be modern or natural. The modern anomalies pertain to drainage, ploughing, made ground, and services.



Hampshire Water Transfer, Hampshire

Detailed Gradiometer Survey Report

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Southern Water Services Ltd to carry out a geophysical survey along a linear route between Bedhampton in the south-east and Fishers Pond in the north-west (**Figure 1**). The site has been split into sections:

Pipeline Corridor Section	Eastern Extent (NGR)	Western Extent (NGR)	GS Numbers
DC	469113, 106346	468913, 106439	GS002
DA	467011, 106300	466905, 106353	GS001
E	466663, 106638	462493, 107485	GS003, GS004, GS005, GS006, GS007, GS008, GS009, GS023, GS024, GS025, GS026, GS027, GS028
F	460109, 107859	457914, 109144	GS010, GS011, GS012
G	456722, 112017	456026, 111953	GS013, GS029
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L	449755, 120548	448262, 120822	GS019, GS020, GS021, GS022, GS032, GS033

1.1.2 The survey forms part of an ongoing programme of archaeological works being undertaken in support of a planning application for Hampshire Water Recycling and Water Transfer Project. The development consists of a new treatment process to turn treated water into purified recycled water at a new Water Recycling plant south of Havant and associated new water pipeline.

1.2 Scope of document

1.2.1 This report presents a brief description of the methodology followed by the detailed survey results and the archaeological interpretation of the geophysical data.

1.3 The site

1.3.1 The scheme runs on a linear route for 25 km from Bedhampton in the south-east to Fishers Pond in the north-west. The entire site comprises 275.2 ha of agricultural land, currently utilised as pasture, crop, and scrub.

Corridor Section DC

1.3.2 This area is situated 520 m west of Bedhampton, and 4 km north-east of Portsmouth, in the county of Hampshire.

1.3.3 The area is bounded by scrub land to the east, west, and north, with Portsdown Hill Road to the south.



- 1.3.4 The area is on a south facing slope at 50 m aOD in the south-east to 58 m aOD in the north-west.

Corridor Section DA

- 1.3.5 This area is situated 60 m south of Widley, and 2 km north of Portsmouth, in the county of Hampshire.
- 1.3.6 The area is bounded by scrub land on all side.
- 1.3.7 The area is situated on a south facing slope at 62 m aOD in the south-east to 82 m aOD in the north-west.

Corridor Section E

- 1.3.8 The eastern portion of the area is situated immediately adjacent to Widley, with the centre of the area 500 m north of Paulsgrove, Hampshire.
- 1.3.9 Most of the area comprises arable fields, bounded by more agricultural fields on all sides. The site is further bounded by Widley in the east and Portshill Down Road in the south-east, and Crooked Walk Lane to the west.
- 1.3.10 The site is undulating east to west between 58 m aOD and 67 m aOD; most of the site is on a north facing slope ranging from 38 m aOD in the north to 91 m aOD in the south.

Corridor Section F

- 1.3.11 The centre of this area is situated 500 m north of Fareham, Hampshire.
- 1.3.12 Most of the area comprises arable fields, bounded on all sides by crop fields. The eastern extremity of the site is bounded by Boarhunt Road, bisected by the River Wallington, with the western extremity 110 m east of Wickham Road.
- 1.3.13 The area crosses a valley east – west and undulates between 60 m aOD in the east, 7 m aOD where the river bisects the area, and 28 m aOD in the west.

Corridor Section G

- 1.3.14 The area is situated 320 m north-west of Wickham, 3.7 km north of Fareham, Hampshire.
- 1.3.15 The area comprises arable fields. The area is bounded by woodland to the east and west, is bisected by Titchfield Lane, further crop fields to the south and north, and an unnamed lane to the south-west.
- 1.3.16 The area is on a north-west facing slope at 48 m aOD in the east and 30 m aOD in the west.

Corridor Section J

- 1.3.17 The area is situated 725 m west of Waltham Chase, and 4.4 km east of Hedge End, Hampshire.
- 1.3.18 The area comprises of arable fields. The area is bounded by tree lines and hedgerows to the north, west, and south-east, is bisected by Curdridge Lane, and bounded by further agricultural fields to the east and south-west.
- 1.3.19 The area undulates between 30 m aOD in the north-west and 48 m aOD in the south-east.



Corridor Section K

- 1.3.20 The area is split in to three smaller areas. The south-eastern portion is situated 620 m south-west of Bishop's Waltham, with the northern portions situated 100 m east of Durley Street at their western extent, all in the county of Hampshire.
- 1.3.21 The area comprises arable fields in the south-east and pasture in the north. The southern portion of the area is bounded by woodland in the south-east and south-west, with field boundaries on all other sides. The northern portions are bounded by field boundaries, bisected by Winters Hill Road, and pastureland to the north-west.
- 1.3.22 The area is on a south-east facing slope, and ranges from 22 m aOD in the south-east to 62 m aOD in the north-west.

Corridor Section L

- 1.3.23 The area is centred around the village of Fisher's Pond, 2.8 km north-east of Eastleigh, Hampshire.
- 1.3.24 The area comprises agricultural land used for crop and pasture. The area is bounded by treelines and wooded areas to the south-east, south-west, and north. The area is bisected by the B3354 and is bounded by further agricultural land on the remainder of the extents.
- 1.3.25 The area is on a gentle south facing slope, and undulates between 48 m aOD in the south, to 33 m aOD in the north.

1.4 Geology and soils

Pipeline Corridor Section	Bedrock	Superficial Geology	Soils
DC	Spetisbury Chalk Member – chalk in the southern portion of the area, with Portsdown Chalk Formation in the northern portion.	N/A	Undetermined Urban Environment
DA	Spetisbury Chalk Member – chalk	N/A	342a (Upton 1) grey rendzinas
E	Portsdown Chalk Formation in the south-west; Spetisbury Chalk Member – chalk central band from the south-east to north-west; a band of Lambeth Group, clay, silt, and sand in the south-east, with a further band of London clay formation in the north-east.	Head clay, silt, sand, and gravel	342a (Upton 1) grey rendzinas in the east; 711h (Wickham 4) typical stagnogley soils
F	Portsdown Chalk Formation in the south-eastern portion of the site, with bands of Spetisbury Chalk Member in the north-western portion	Head clay, silt, sand, and gravel	581d (Carstens) typical paleo-argillic brown earths
G	Bands of Wittering Formation – sand, silt, and clay, Earnley Sand Formation – sand, silt, and clay,	Head clay, silt, sand, and gravel	343h (Andover 1) brown rendzinas
J	Whitecliffe Sand Member – sand, Wittering Formation – sand, silt, and clay, and London Clay Formation – clay, silt, and sand	Head clay, silt, sand, and gravel	711g (Wickham 3) typical stagnogley soils in the south-east; 712c (Windsor) pelo-stagnogley soils in the north-west
K	London Clay Formation – clay, silt, and sand, and Lambeth Group – clay, silt, and sand	Head clay, silt, sand, and gravel	712c (Windsor) pelo-stagnogley soils



L	London Clay Formation – clay, silt, and sand	Head clay, silt, sand, and gravel; Alluvium – clay, silt, sand, and gravel	712c (Windsor) pelo-stagnogley soils
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- 1.4.1 The soils underlying the site are derived from such geological parent material to have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey (SSEW SE Sheet 6 1983).

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

- 2.1.1 The archaeological and historical background set out below has considered the recorded historic environment within a 1 km study area of the scheme. The following archaeological background is not exhaustive but discusses known heritage assets relevant to the interpretation of the geophysical survey data. It uses publicly available online resources such as the Historic Environment Record (HER) for Hampshire, the National Heritage List for England (NHLE) and historical Ordnance Survey mapping (OS) (National Library of Scotland (NLS)). All distances discussed are from the nearest site boundary.

2.2 Corridor Section DC

Late Neolithic – Bronze Age

- 2.2.1 The scheduled monument of 'Bevis's Grave long barrow and early medieval cemetery' (NHLE 1012831) can be found 150 m north-east of GS001. Overlying deposits produced sherds of late Neolithic and Bronze Age pottery, while part of an antler, probably the remains of a pick, was found at the bottom of the ditch.
- 2.2.2 Located 60 m west of GS001, is a collection of Iron Age findspots. Containing beads, pottery, oyster shells, and burnt flint pot boilers.

Iron Age

- 2.2.3 Found 680 m west of GS001 is an Iron Age pit and ditch. During the creation of a pipeline trench in 1969, the pit was partially excavated, and several pottery sherds were found.
- 2.2.4 The scheduled monument of 'Roman villa and section of Roman road south-west of Littlepark Wood' (NHLE 1001859) is 770 m north-east of GS001.

Modern

- 2.2.5 Within the boundary of GS001 are some rectilinear features that may be part of a wartime trench system.
- 2.2.6 Located 300 m south of GS001 is the site of the Second World War Belmont Camp, which consists of four buildings and a series of patch marks that could indicate storage areas or demolished buildings.

2.3 Corridor Section DA

Late Neolithic – Bronze Age

- 2.3.1 Two burial sites have been identified 330 m west of GS002, both are dated to the Neolithic. The first is a long barrow, which is said to have contained 12 skeletons first identified in 1816. The second burial is within the immediate area of the long barrow.



- 2.3.2 A collection of Neolithic flints and pottery were found 440 m north-west of GS002, alongside similar finds dating to the Iron Age.

Bronze Age

- 2.3.3 Several features relating to Bronze Age funerary monuments are recorded 100 m north of the survey area. These include twin barrows with a cist, inhumation burial, grave goods and several cremation burials excavated in the late 1920s.

- 2.3.4 A Bronze Age round barrow titled 'Gobs Barrow, Portsdown Hill' is located 370 m north-east.

Iron Age

- 2.3.5 An Iron Age settlement, abutting an earlier Bronze Age 'ranch enclosure' was identified during excavations ahead of roadworks 225 m east of GS002. Removal of topsoil revealed evidence of Iron Age occupation with features indicating settlement, areas of manufacturing. A number of possibly later Saxon graves were also recorded.

- 2.3.6 A gas pipe trench, 325 m north-east of GS002 was excavated in 1969 and truncated the ditches of Portsdown Hill Iron Age enclosure near its south-west extent.

Roman

- 2.3.7 Roman coins were found in a rectory garden in 1974, 330 m north of GS002.

Anglo-Saxon

- 2.3.8 The afore mentioned Neolithic Long Barrow, which is located 330 m west of GS002, also records a Saxon cemetery clustering around its perimeter with the barrow forming the nucleus of the cemetery. Distinct graves were recorded less than 1 m apart, with single inhumations with the heads placed to the west. In one of the skeletons skulls an iron pike was found suggesting that this was a war cemetery.

- 2.3.9 Post-medieval

- 2.3.10 The scheduled monument of 'Fort Purbrook, including covered-way to east' (NHLE: 1001842) is a Palmerston fort constructed in the 1860's, and is 895 m east of GS002.

2.4 Corridor Section E

Mesolithic – Neolithic

- 2.4.1 Two findspots are situated 660 m west and 320 m south of GS028.1 respectively. These both contained Mesolithic and Neolithic worked flint.

- 2.4.2 In the field to the south-west of GS009 are two bowl barrows, one located 500 m away, and the other 220 m. Several Mesolithic flints were found in the same field, including a Mesolithic microlith.

- 2.4.3 A Mesolithic findspot that contained a blade, and some waste flakes was identified 100 m north of GS008.1.

- 2.4.4 Along the southern border of GS009 are two findspots, one of which is a collection of prehistoric flints, likely Neolithic or Bronze Age in date. The other is a collection of medieval pottery.



Bronze Age – Iron Age

- 2.4.5 Located 320 m south of GS007 is a collection of Bronze and Iron age activity, centred around a bowl barrow and inhumation, but also including post holes and pits. Additionally, there are four pits associated with Bronze Age cremation burials. Also on the site is a Saxon cemetery containing 17 burials, 3 of which held grave goods.
- 2.4.6 Several Iron Age findspots have been identified. The first, 240 m south of GS007, contained sherds of pottery. The second is located on the boundary of GS024 and consisted of flint 'pot boilers', oyster shells, and two pottery sherds. Finally, 250 m south of GS008.2 is a findspot that contained Iron Age and medieval pottery.

Roman

- 2.4.7 A Roman inhumation burial, with associated undated, but likely Roman, burial, was identified 30 m south-west of GS004.2.

Medieval

- 2.4.8 Within GS024 is the possible deserted medieval village of Widley. The 1998 OS map suggests that there is something present. Widley Farm is located directly north of GS024 and is dated back to the medieval period, first documented in 1242.
- 2.4.9 Within GS009 are two medieval pits, one of which has been excavated and was found to contain medieval pottery and faunal remains.
- 2.4.10 Located 195 m south of GS007 are some flint foundations, these foundations have not been accurately dated.
- 2.4.11 To the northern side of GS008.2, between GS008.1 and GS027, is the site of a former medieval manor house and deserted medieval village that has now become Pigeon House Farm.
- 2.4.12 Located 50 m north of GS009, within the grounds of New Barns Farm, are indications of medieval earthworks in the large open areas between the buildings.

Post-medieval

- 2.4.13 The scheduled monument of Fort Widley (NHLE: 1001862) is situated 120 m south of GS006.6. The fort is one of many built to protect Portsmouth from a rearward, land-based attack during the Victorian Period.
- 2.4.14 The scheduled monument of Fort Southwick (NHLE 1104368, 1001808, 1003802) lies 500 m south of GS009. The fort is another Palmerston Fort, like Purbrook Fort, and was built in the 1860's. The grounds of the fort also contain the possible site of a barrow.

Modern

- 2.4.15 There are numerous sites of Second World War activity within the vicinity. On the west side of GS005.2 and GS004.1 are the remains of a Second World War era searchlight and associated trenches and ring ditch. 185 m south of GS008.2 is the site of a Second World War Hurricane crash. The same field also contains a Second World War radar station, associated earthworks, and an underground establishment.

Undated

- 2.4.16 Undated possible Lynchets have been identified from aerial photography within the pipeline section, west of New Down Lane.



2.5 Corridor Section F

Mesolithic

- 2.5.1 Evidence of pre-Bronze Age activity can be found 100 m east of GS011 and is a findspot which contained a collection of Mesolithic flint flakes. A findspot that contained a scatter of flint flakes is 190 m south of the eastern end of GS012.1, these, however, are undated.

Bronze Age

- 2.5.2 North of Heytesbury Farm, 720 m north-west of GS012.1, is a Bronze Age pit excavated in 2013. The excavation revealed that the pit contained 300 sherds of pottery. Several ditches were found in the same field. Although they cannot be dated, large quantities of burnt flint suggest that they are related to the pit.

Iron Age

- 2.5.3 Located 665 m south-east of GS010.2 is a collection of findspots that contained Iron Age pottery, alongside a medieval whetstone, and medieval pottery.

Romano-British

- 2.5.4 A findspot for a collection of Roman pottery and faunal remains was uncovered 840 m south of GS010.2.

Medieval

- 2.5.5 In a field 290 m west of GS012.1 is a possible medieval field system. In the same field is a post-medieval quarry and post-medieval or possible modern sand pit.

Post-Medieval

- 2.5.6 The area surrounding Pipeline F contains many localised chalk pits and other small quarries. Some examples of these are located within the boundaries of GS012.1 and 145 m south of GS012.2.
- 2.5.7 Seen 300 m north-west of GS012.1 is a linear bank, 120 m in length, thought to be a former field boundary or pathway.
- 2.5.8 A terrace edge or possible lynchet, and a trackway associated with this feature is situated 180 m north of GS011.
- ### *Modern*
- 2.5.9 The scheduled monument of 'World War II Heavy Anti-aircraft gun site (P12) at Monument Farm' is 350 m south of GS010.2.
- 2.5.10 A Second World War Hawker Hurricane crash is recorded 410 m south of GS012.2.

2.6 Corridor Section G

Prehistoric

- 2.6.1 Located 980 m north-west of GS013 is the possible site of a Bronze Age barrow, a sub-circular mound 17 m across, surrounded by a circular banked enclosure. On the northern border of GS013 is the findspot for a Neolithic or Bronze Age flint scatter.

Romano-British

- 2.6.2 Within the bounds of GS029 is the line of the Roman Road, which was discovered along with other objects. 400 m south-east of GS029 is a findspot that contained four Roman coins and a bone hair pin.



Medieval – Post-medieval

- 2.6.3 The area surrounding Pipeline F contains many localised chalk pits and other small quarries. A group of four post-medieval extraction pits can be found within GS029. Other pits and quarrying activity can be seen throughout the area, for example 275 m east of GS013 are two linear mounds that are likely spoil heaps or agricultural features. Close to Park Place, 135 m south-west of GS029, is Wickham deer park, originally recorded in John Speed's 1611 map.

2.7 Corridor Section J

Bronze Age

- 2.7.1 The only nearby evidence of prehistoric activity is a findspot 640 m west of GS014 which contained a Bronze Age axe.

Romano-British

- 2.7.2 The site of the Roman Road from Winchester to Wickham lies 70 m west of GS014.

Medieval

- 2.7.3 Evidence of medieval activity include a medieval or post-medieval pathway 620 m north-east of GS015.2, as well as the site of a possible former gibbet 1 km north-east from GS015.2.
- 2.7.4 Some medieval agricultural activity can be seen 75 m south of GS015.1 and is a site of ridge and furrow.

2.8 Corridor Section K

Bronze Age

- 2.8.1 Located 560 m east of GS018 is the site of a possible Bronze Age disc barrow that has been ploughed out, as well as an enclosure.

Romano-British

- 2.8.2 The Roman Road running from Winchester to Wickham lies 180 m south of GS017.2.

Medieval

- 2.8.3 The scheduled monument of 'Bishop's Waltham Palace and associated fishponds' (NHLE: 1016169) is situated 940 m north-east. This site was originally constructed in the 12th century and was in use until its ruin during the civil war.
- 2.8.4 Further medieval activity includes a field system 465 m west of GS016.1 as well as two curved banks of a nearby field system 585 m north-west of GS016.1. A medieval or post medieval bank, that follows the parish boundary line is 190 m south of GS030. An area of short linear features which may form parts of enclosures are 790 m east of GS017.1. Finally, 100 m east of GS016.5, is a medieval trackway.

Modern

- 2.8.5 The Bishops Waltham Second World War prisoner of war camp was located 360 m south-east of GS017.2.
- 2.8.6 13 oval features can be seen 70 m west of GS016.4 in aerial photography. Thought to be recent in origin, possibly tree removal holes or charcoal burning platforms.



2.9 Corridor Section L

Mesolithic

- 2.9.1 A findspot containing a Thames pick and a small, flaked flint knife was located 300 m west of GS022.

Bronze Age

- 2.9.2 Located 500 m north of GS022 is a findspot containing a collection of Bronze Age axe heads.

Iron Age

- 2.9.3 Upper Barn Copse earthworks along Fishers Pond are distinguished as a significant Iron Age feature. The earthwork is likely the scale of the deer park boundary, however, traces of the western ditch suggest it once acted as a defensive boundary of an enclosure. This is situated 580 m west of GS020.

- 2.9.4 Located 850 m south-west of GS020 is a single ditch curvilinear feature. The exact origin is unknown, but it is thought to be either an Iron Age/Romano-British roundhouse, or the remains of a Bronze Age barrow which has been plough-levelled. Alongside this find are the remains of an enclosed settlement. Within the same field are possible post-medieval pits.

Medieval – Post-Medieval

- 2.9.5 The scheduled monument of 'Moated site at Marwell' (NHLE: 1012196) is located 300 m to the north-west of GS019.5. Further, the scheduled monument of 'Park pale at Marwell, south of Fisher's Pond' (NHLE: 1012309) is situated immediately adjacent to the east of GS021.2 and 'Park pale at Marwell, 400 m west of Marwell Manor' (NHLE: 1012308) is situated 140 m north-west of GS019.2.
- 2.9.6 Two single ditch linear features are visible 850 m south-west of GS020 and are likely to be a part of a field system. A group of single ditch linear features are visible 800 m west of GS020, likely a medieval field system.
- 2.9.7 Within GS021 is a medieval fishpond known as Eleven Acre Pond.

3 METHODOLOGY

3.1 Introduction

- 3.1.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 6 March and 13 September 2023. Field conditions were variable throughout the survey period. An overall coverage of 222.42 ha was achieved. Reductions are attributable to ground conditions being non-conductive to survey and inaccessible areas due to permissions issues.

GS Numbers	Figure Numbers	Reasons for no survey
GS001, GS014, GS015, GS016, GS017, GS030	Fig. 22, 26, 36, 38, 42, 44, 64, 66	Overgrown vegetation or no access
GS006, GS010, GS012, GS021, GS022, GS027, and GS033	Fig. 22, 26, 36, 38, 42, 44, 64, 66)	Partially surveyed due to overhead cable and pylons interfering with data collection
GS013	Fig. 48	Partially surveyed due to a fenced dog park and wedding tent



GS Numbers	Figure Numbers	Reasons for no survey
GS018 and GS031	Fig. 60 & 62	Partially surveyed. Areas along the edges of the fields unsurveyed due to tree cover
GS019	Fig. 64	Partially surveyed due to uneven ground and partially flooded fields
GS020	Fig. 64	Partially surveyed due to debris, sheds, very uneven ground impeding data collection and horses in paddocks
GS023 and GS026	Fig. 18 & 24	Partially surveyed due to overgrown vegetation within the fields
GS025	Fig. 22 & 24	Partially surveyed due to muddy conditions impeding data collection
GS028	Fig. 34	Partially surveyed due to a large pile of compost within the field

3.1.2 The methods and standards employed throughout the geophysical survey conform to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2014) and European Archaeologiae Consilium (Schmidt *et al.* 2015).

3.2 Aims and objectives

3.2.1 The aims of the survey comprise the following:

- To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
- To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

3.2.2 In order to achieve the above aims, the objectives of the geophysical survey are:

- To conduct a geophysical survey covering as much of the specified area as possible, allowing for on-site obstructions;
- To clarify the presence/absence of anomalies of archaeological potential; and
- Where possible, to determine the general nature of any anomalies of archaeological potential.

3.3 Fieldwork methodology

3.3.1 The detailed gradiometer survey was undertaken using four Sensys FGM 650/3 gradiometers spaced at 1 m intervals and mounted on a non-magnetic cart. Data were collected with an effective measurement range of $\pm 8\mu\text{T}$ at a rate of 20 Hz, producing intervals of 0.05 m along transects spaced 4 m apart.

3.3.2 The cart-based gradiometer system used a Carlson BRx7 RTK GNSS instrument, which receives corrections from a network of reference stations operated by the Ordnance Survey (OS) and capable of multi-frequency GPS, GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas L-Band. Such instruments allow positions to be determined with a precision of 0.02 m in real-time and therefore exceeds European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015).



3.4 Data processing

- 3.4.1 Data from the survey were subjected to minimal correction processes using in-house software. These comprise a remove overlap, median background, and Savgol smooth, applied to correct for any variation between the sensors and background magnetic data, as well as a gridding function for appropriate TIFF output.
- 3.4.2 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

4.1 Introduction

- 4.1.1 Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:15000 (**Fig. 2 – 13**) for overview figures and a scale of 1:2000 (**Fig. 14 – 69**) for detailed figures. The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale image.
- 4.1.2 The interpretation of datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (odd numbered figures). Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.
- 4.1.3 Numerous ferrous anomalies are often visible throughout a dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 4.1.4 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 4.1.5 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g., CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

4.2 Gradiometer survey results and interpretation

- 4.2.1 It has been determined that, due to the size and separate locations of the survey areas, the results and interpretation of the data will be split into specific pipeline sections for ease of display and discussion of results.

Pipeline DC (Figure 17)

- 4.2.2 A small area of weak positive linear anomalies has been identified in the northern portion of the area, at **4100 (Figure 17)**. The anomalies cover an area 36 m by 10 m. These have been interpreted as historic cultivation in the form of medieval or post-medieval ridge and furrow. However, these features are weak and may be attributable to more modern ploughing or variation in the geology.
- 4.2.3 Numerous strong dipolar linear anomalies have been identified across the area, at **4101 to 4103 (Figure 17)**. These have been interpreted as modern services.

Pipeline E: GS002 – GS009 and GS023 – GS028 (Fig. 19 – 35)

- 4.2.4 Weak positive linear anomalies have been identified within GS023, at **4200 – 4201 (Fig. 19 and 21)**. The anomaly at **4200** is 100 m long north – south, with a return to the west 160 m



long east – west and is between 1 and 4 m wide. A smaller right-angled anomaly is present 28 m north of **4200** at **4201**. The anomaly is 11 m long south-east to north-west, turns to the south-west for 7 m, and is 2 m wide. These have been interpreted as possible archaeological ditch boundary features, likely associated with land management prior to the post-medieval agricultural field systems, as they do not conform to orientation and alignment of the current field systems.

- 4.2.5 Weak positive linear anomalies have been identified within GS004.2, at **4202 – 4203 (Fig. 19 and 21)**. The anomaly at **4202** is 76 m long NNE – SSW and is 3 m wide. The anomaly **4203** is 44 m long ESE – NNW and is 2 m wide. These have been interpreted as possible archaeological ditch boundary features, likely associated with land management prior to the post-medieval agricultural field systems. While there is no clear relationship with the boundary at **4200**, the shared alignment suggests they may be contemporaneous. They are, however, extremely weak and may instead be attributable to variation in local geology noted in this area, or modern plough activity.
- 4.2.6 A strong linear anomaly is evident in GS024, at **4204 (Fig. 23 and 25)**. The anomaly is 38 m north – south and 4 m wide. This has been interpreted as a possible archaeological ditch feature, likely corresponding to a boundary. It is contiguous with Widley Walk to the west and may be part of a former field boundary of post-medieval date. However, this may be attributable instead to modern activity, such as land drainage.
- 4.2.7 A weak positive right-angled anomaly has been identified in GS006.5, at **4205 (Figure 23)**. The anomaly is 50 m long north – south, turns to the east at its northern extent, continues for a further 25 m up to the survey extent, and is 2 m wide. This has been interpreted as a possible archaeological enclosure ditch. The feature appears to be on the same alignment as Widley Walk and the current field boundary suggesting a post-medieval date.
- 4.2.8 Several weak positive curvilinear anomalies, and one weak positive linear anomaly, are noted in GS006.5, at **4206 – 4210 (Fig. 23 and 25)**. The curvilinear anomalies at **4206 – 4209** range between 8 m – 18 m in diameter and are 2 m wide, with the anomaly at **4210** 54 m long ESE – WNW by 2 m wide. These have been interpreted as possible archaeological ditch features, corresponding to enclosure boundaries. However, they could instead be attributable to variation in local geology, or in the case of the linear element to modern ploughing.
- 4.2.9 A weak positive linear anomaly is evident in GS007, at **4211 (Figure 27)**. The anomaly is 92 m long from east curving toward south-west and is 3 m wide. This has been interpreted as a possible archaeological ditch feature, likely a boundary. It may parallel the field boundary to the south, but without further extending the survey area south it is not possible to determine any further relationship. This feature may instead be attributed to modern ploughing or drainage.
- 4.2.10 A strong positive right-angled anomaly is present in GS008.1, with a possibly related weaker positive linear anomaly to its north-west, at **4212 and 4213 (Figure 29)**. The anomaly at **4212** is 60 m in total length, from the south-east toward north-west before turning 90 degrees and continuing toward the south-west and is 3 m wide. It is possible that this represents a ditched enclosure feature that continues to the south beyond the survey area. The linear anomaly at **4213** is 192 m in length from east curving to south-west and 2 m wide. It is possible that this is a boundary associated with the enclosure to the south, but a more confident interpretation is limited by the survey extents. The anomalies do not appear to conform to current field systems suggesting that they pre-date the post-medieval landscape.
- 4.2.11 A collection of weak positive linear anomalies are evident in GS008.1, at **4214 (Fig. 29 and 31)**. These anomalies cover an area 84 m east – west by 55 m north – south, are all 2 m in

width, and present on differing alignments, mostly perpendicular to one another. These have been interpreted as possible archaeological ditch features representative of a field system. These features are weak, segregated, and are too small to infer a true alignment, so a confident date cannot be determined. These features may instead relate to geological variation or modern drainage or ploughing.

- 4.2.12 A weak positive curvilinear anomaly, possibly enclosing numerous discrete positive anomalies, has been identified in GS009 at **4215 (Figure 31)**. The curvilinear anomaly is 13 m long by 2 m wide curving from north-west to the south. The discrete anomalies within cover an area 42 m north – south by 34 m east – west and are between 1 m and 3 m in diameter. It is possible that the curvilinear anomaly is an enclosing boundary ditch, with the discrete anomalies interpreted as possible pits for refuse or extraction. Archaeological remains in the immediate vicinity have revealed the presence of medieval pits, of which this may be further evidence. However, these may also be variation in local geology or possible activity related to modern agriculture or the construction of the adjacent B2177.
- 4.2.13 Several weak positive linear and right-angled anomalies are present in GS009, at **4216 – 4222 (Fig. 31 and 33)**. The anomalies at **4216** and **4217** form a rectangle 96 m long north – south by 55 m wide east – west, with breaks in the north-east and south-west corner. This may form a ditched enclosure of unknown date, although surrounding activity would suggest it is medieval.
- 4.2.14 The anomalies at **4218** and **4219** are a pair of parallel linear features, with **4218** being 160 m long by 2 m – 3 m wide and curving toward the north-west at its eastern extent. The anomaly at **4219** is the southern parallel linear to **4218** and is 84 m by 6 m wide, with both anomalies separated by 8 m. The anomalies at **4220** and **4221** are similarly spaced to **4218** and **4219** but are perpendicular in orientation. The anomaly at **4220** is 95 m long north-east to south-west by 3 m wide, while the anomaly at **4221** is 54 m long by 3 m wide on the same orientation. The anomaly at **4222** is 128 m long by 3 m wide, beginning in the ESE and right-angle turning to the NNW. These anomalies have been interpreted as a field system, likely associated with the enclosure to the east at **4216** and **4217**. The anomalies at **4218 – 4221** form possible trackways. Given the possible medieval date for the enclosed pits to the north, at **4215**, it is possible these features represent further medieval activity.
- 4.2.15 Further weak positive linear anomalies have been identified in GS009, at **4223 – 4227 (Fig. 31 and 33)**. The anomaly at **4223** is 44 m long NNE to SSW, and between 1 m and 4 m wide. The anomaly at **4224** is 106 m long in total from NNE with a right-angled turn at its southern extent towards the west, and between 1 m and 4 m wide. The anomaly at **4225** is broadly rectilinear with a break in the western section, it covers an area 27 m north – south and 23 m east – west, with an anomaly width of 2 m to 3 m wide. The anomaly at **4226** is 75 m in total length, between 2 m and 4 m wide with a turn toward the NNE at its northern extent. The anomaly at **4227** is an irregular linear covering an area 42 m north – south by 25 m east – west, between 1 m and 2 m wide, with a D-shaped enclosed area on its eastern side. These anomalies have been interpreted as possible archaeological field boundary ditches, possibly associated with the field system discussed previously to the south-east at **4218 – 4222**. The anomalies at **4223** and **4224** infer the edges of another trackway between fields, with **4225** and **4227** interpreted as possible enclosures, for activity such as animal control or settlement. Given the possible medieval date for the enclosed pits to the north-east, at **4215**, it is possible these features represent further medieval activity.
- 4.2.16 A weak positive curvilinear anomaly with associated discrete anomalies, is evident in GS009, at **4228 (Figure 35)**. The anomalies cover an area 23 m by 18 m, with the curvilinear between 1 m and 2 m wide and the discrete anomalies between 3 m and 11 m in diameter. These anomalies have been interpreted as parts of a possible ditched enclosure feature,

such as an animal control boundary. However, these are extremely weak and may be attributable to variation in local geology.

- 4.2.17 A weak positive curvilinear anomaly is present in GS009, at **4229 (Figure 35)**. The anomaly is 12 m long north curving toward the south-east, and between 1 m and 2 m wide. This has been interpreted as a possible archaeological ditch, possibly used as a boundary for animals. However, this feature is very weak and may be attributed to variation in geology.
- 4.2.18 A weak positive linear anomaly is located in the western portion of GS009, at **4230 (Figure 35)**. The anomaly is 80 m in total length: 7 m from west to east at the northern extent, then a right angle toward the south continues for 57 m, followed by a right-angled turn to the west for 16 m. This has been interpreted as a possible archaeological ditch feature, which may correspond to the current field systems inferring a post-medieval date.
- 4.2.19 A series of weak positive linear anomalies are present in GS028.1, at **4231 – 4237 (Figure 35)**. The anomalies range in length and orientation but are between 1 m and 3 m wide. The most coherent of these anomalies are at **4233 – 4237**. The anomalies at **4233, 4235 – 4237** appear to form three sides of a rectilinear feature, open to the south, covering 140 m east – west by 125 m north – south. Within this are linear anomalies on a similar alignment, possibly representing subdivisions of the wider enclosure. Combined with the surrounding anomalies (**4231 – 4232**) this likely represents an area of undated agricultural activity as there is no evidence of settlement. However, it is possible that these features are associated with later ploughing or land drains.
- 4.2.20 Numerous discrete positive anomalies are present across the western half of the area in GS009, GS028.1, and GS028.2, with examples at **4238 – 4244 (Fig. 31 – 35)**. The anomalies range in size and shape but are between 1 – 11 m in diameter. These anomalies have been interpreted as possible archaeological pit features, such as refuse or extraction pits. Evidence for this is supported by the known medieval pits within GS009 where medieval pottery and faunal remains were discovered. However, these features may instead be attributed to variation in local geology, such as natural pitting.
- 4.2.21 Several weak and strong positive linear anomalies have been identified across the western portion of the area in GS027, GS008.1, GS009, and GS028.1 at **4245 – 4256 (Fig. 25, 27, 31, 35)**. The anomalies range in length and orientation but are between 1 – 3 m wide. These correspond to known former field boundaries noted on OS 25 Inch maps from 1892 – 1914, and except for **4248 – 4252**, the boundaries are either parallel or perpendicular to current boundaries in the wider landscape.
- 4.2.22 Multiple areas of weak positive linear anomalies are present across the area in GS005.1, GS006.3 GS007, GS027, GS008.1, GS028.1, GS028.2, at **4257 – 4265 (Fig. 21 – 31, 35)**. These anomalies vary on their orientation. These likely correspond to ridge and furrow ploughing. Where the features are curved and wider spaced, it is likely they are of an earlier, medieval, date, but where they are straight, they are often associated with later post-medieval date. Given the alignments of many of the areas, it is likely they are post-medieval in origin and respect many of the former field boundaries noted on historical mapping. However, the weak nature of many of these features creates the possibility they are attributable to other sources, such as modern ploughing or drainage.
- 4.2.23 Four areas of increased magnetic response have been interpreted as historic landscape features in GS003, GS027, GS028.1, at **4266 – 4269 (Fig. 21, 27, and 35)**. The anomaly at **4266 (Figure 21)** is 42 m in diameter, with the remainder of the anomalies as smaller responses – possibly the edges of larger anomalies outside the survey extent. The anomaly at **4266 (Figure 21)** is indicated on historical maps as a depression in the landscape, with OS 1:10, 560 Air Photos, 1944 – 1950 showing this to be an area of trees and vegetation,

likely within a hollow. The feature at **4267 (Figure 27)** is likely the edges of a rabbit dell identified on the OS Six Inch, 1888 – 1913 historical map. The features at **4268** and **4269 (Figure 27 and 35)** are likely the edges of chalk pits identified on the OS Six Inch, 1888 – 1913 historical map.

- 4.2.24 Several amorphous areas of increased magnetic response have been identified across the area in GS004.3, GS006.4, GS025, GS026, and GS008.1, at **4270 – 4275 (Fig. 19, 21, 23, 25, and 31)**. The anomalies at **4270 (Figure 21)** cover an area 35 m by 20 m and are likely the product of modern fertilisation or a spread of material from the creation of the building complex immediately west. The anomaly at **4271 (Figure 23)** covers an area 51 m east – west by 10 m and has been interpreted as ground disturbance at the edge of Widley Dell, noted on OS Six Inch, 1888 – 1913 historical map, possibly associated with the Dell or with modern agricultural fertilisation. The anomalies at **4272 – 4275 (Figure 25)** range in size but are likely associated with modern agricultural fertilisation.
- 4.2.25 Areas of weak positive parallel linear anomalies, broadly oriented in the same direction, are evident across the area in GS003, GS004.3, GS004.2, GS006.5, and GS027, with examples at **4276 – 4281 (Fig. 19, 21, 23, 25, and 31)**. These have been interpreted as modern ploughing, however given their weak nature they may instead be attributable to variation in modern geology.
- 4.2.26 Large areas of magnetic variation have been identified across the area in GS004.1, GS004.2, GS003, GS023, GS024, GS025, GS026, GS027, GS008.1, and GS009. Also, areas containing parallel linear anomalies related are noted at **4282 – 4284 (Fig. 19 and 21)**. These have all been interpreted as variation in local geology, with **4282 – 4284** noted due to the linear fashion. These areas are likely colluvial activity which feed into wider valley basins evident on LiDAR DTM 50 cm – 1 m Eng, Scot, Wales. However, some of these may instead be evidence of ridge and furrow cultivation.
- 4.2.27 Some weak positive and negative linear anomalies have been identified across the area in GS004.3, GS027, and GS009, with examples given at **4285 – 4288 (Fig. 19, 21, 25, and 33)**. These have been interpreted as drains.
- 4.2.28 Large linear and amorphous strong dipolar anomalies are present across the site. These have been interpreted as modern services.

Pipeline F: GS010.1, GS010.2, GS011, GS012.1, and GS012.2 (Fig. 37 – 45)

- 4.2.29 A strong positive circular anomaly, surrounded by weak positive linear anomalies, is present in the eastern portion of the area in GS010.2, at **4300 – 4306 (Figure 37)**. The anomaly at **4300** is 23 m in diameter with the ring itself 2 m wide. The anomalies **4301 – 4303** and **4304** range in length and orientation and are between 1 m – 4 m wide. The features at **4305** and **4306** present as curvilinear in nature, between 13 m and 16 m in diameter. The anomaly at **4300** has been interpreted as a ditched prehistoric enclosure feature, such as an animal enclosure, or possible ploughed out barrow ditch. The recorded archaeology of the area is that of findspots related to the Bronze Age to Romano-British periods, these features could fall within any of those dates and so would require further intrusive investigation. The anomalies at **4301 – 4304** may represent a wider enclosure, with **4300** as a focus. The feature at **4303** at the western extremity of **4302** may be a small, self-contained enclosure, or possible structure. The anomalies at **4305** and **4306** have been interpreted as possible partial ring ditch features, such as at **4300**.
- 4.2.30 Weak positive linear anomalies have been identified in the eastern portion of the area in GS010.2 and GS010.1, at **4307 – 4311 (Fig. 37 – 39)**. The anomaly at **4307** is 35 m long north – south by 3 m wide, the anomaly at **4308** is 15 m long east – west by 2 m wide, the anomaly at **4309** is 300 m long south-east to north-west by 5 m wide, the anomaly at **4310** is 24 m long south-east to north-west by 2 m wide, and the anomaly at **4311** is 190 m south-

east to north-west by 4 m wide. These anomalies have been interpreted as possible archaeological boundary ditch features. Given their orientation it is likely they are contemporary with the ring ditch (**4300**) and enclosure (**4301 – 4304**) discussed previously and represent a wider field system within the landscape.

- 4.2.31 A weak positive set of linear and curvilinear anomalies are present in GS010.2, at **4312** (**Figure 37**). The anomalies cover an area 53 m by 34 m with linear anomaly widths of 2 m – 3 m. These anomalies have been interpreted as possible archaeological ditches forming an enclosure feature, likely used for an animal enclosure. The features are bisected by **4310** suggesting a different phase of activity, though there is a correlation of the orientations.
- 4.2.32 A weak positive linear anomaly is present in GS010.2, at **4313** (**Figure 39**). The anomaly is 140 m long broadly north – south by 3 m wide. This anomaly has been interpreted as a possible archaeological ditch feature, associated with the activity noted to the east. However, it is on a different orientation, one similar to former field boundaries present in OS Six Inch, 1888 – 1913 historical maps.
- 4.2.33 Weak positive linear and curvilinear anomalies are evident across GS010.2, at **4314 – 4319** (**Fig. 39 – 41**). The anomaly at **4314** is 36 m long east – west by 4 m wide, the anomaly at **4315** is 25 m south-east to north-west by 3 m wide, the anomaly at **4316** is 32 m long south-west to north-east and is 3 m wide, the anomaly at **4317** is 18 m broadly east – west by 2 m wide, the anomaly at **4318** is 24 m ENE – WSW by 2 m wide, and the anomaly at **4319** presents as a cross shape covering an area 32 m by 32 m with anomalies 4 m wide. These have been interpreted as possible archaeological ditch features, of unknown date. They show no correlation to the current field boundaries, with the possible exception of **4319**, suggesting that they are prior to the post-medieval agricultural landscape.
- 4.2.34 A series of weak positive linear anomalies are present in GS011, at **4320 – 4323** (**Figure 41**). The anomalies cover an area 260 m by 200 m, with linear anomaly widths between 2 m and 5 m wide. These have been interpreted as possible archaeological ditches pertaining to a potential field system. These were likely created due to the slope of the landscape down towards the west. A date for these is also unknown, however they do respect the current alignment of the eastern and southern field boundaries inferring a post-medieval date. All of these anomalies vary in strength; however, many are weak and so may be related to other factors such as variation in local geology or more modern agricultural practices such as drainage or ploughing.
- 4.2.35 A series of weak positive linear anomalies are present in GS012.2, at **4324 – 4328** (**Figure 43**). The anomalies cover an area 185 m by 183 m, with linear anomaly widths between 2 m and 5 m wide. These have been interpreted as possible archaeological ditches pertaining to a potential field system. The features at **4325 – 4327** may be parts of a trackway between fields. A date for these is also unknown, however **4324** does respect the current alignment of the south-eastern field boundary inferring a post-medieval date. All of these features vary in response strength; however, many are weak and so may be related to other factors such as variation in local geology or more modern agricultural practices such as drainage or ploughing.
- 4.2.36 Another series of weak positive linear anomalies are present in GS012.2, at **4329 – 4332** (**Fig. 43 and 45**). The anomalies cover an area 271 m by 172 m, with linear anomaly widths between 2 m and 5 m wide. These have been interpreted as possible archaeological ditches pertaining to a potential field system. The anomalies at **4329** are separated by 5 m and may infer another trackway between fields, possibly continued at **4330**. A date for these is unknown, however many of the anomalies respect the current alignment of the surrounding field boundaries inferring a post-medieval date. All of these anomalies vary in magnetic strength; however, many are weak and so may be related to other factors such as variation in local geology or more modern agricultural practices such as drainage or ploughing.

- 4.2.37 Numerous discrete positive anomalies have been identified across the area in GS010.2, GS012.2, at **4333 – 4341 (Fig. 37, 39, 41, and 43)**. The anomalies range in diameter between 1 m and 27 m. The largest of these is noted at **4338 (Figure 39)**. These have all been interpreted as possible archaeological pit features, used for extraction or refuse. Evidence for post-medieval extraction and chalk pits have been noted in the archaeological record for the area. The features at **4333 – 4336** may be associated with the enclosure feature (**4301 – 4304**) discussed above, however, these anomalies may in fact be variation in local geology, due to the noted geomorphological activity in the same area.
- 4.2.38 Several strong linear anomalies on a north-east to south-west orientation have been identified in GS010.2, GS012.2, at **4352 – 4345 (Fig. 37, 39, and 41)**. These correspond to former field boundaries noted on OS Six Inch, 1888 – 1913 historical maps.
- 4.2.39 Two amorphous areas of increased magnetic response are noted in GS010.2 and GS012.1, at **4346 and 4347 (Fig. 37 and 45)**. The anomaly at **4346 (Figure 37)** is 41 m by 33 m and corresponds to a former sand pit noted on OS Six Inch, 1888 – 1913 maps. The anomaly at **4348 (Figure 45)** is 72 m by 52 m and corresponds to a former chalk pit noted on OS Six Inch, 1888 – 1913 maps.
- 4.2.40 Numerous amorphous areas of magnetic variation are noted across the area in GS010.1, GS010.2, GS011, and GS012.2 at **4349 – 4355 (Fig. 37, 39, 41, 43, and 45)**. The anomalies vary in size between 13 m – 75 m. These have been interpreted as possible extraction pits, possibly related to the known extraction activity across the area. The feature at **4353 (Figure 41)** is likely a former chalk pit, although not on historical maps, as it is similar in size and character to known chalk pits. An area of increased magnetic response is noted at **4352**, 78 m long north-east to south-west by 8 m wide, and may infer extraction activity, but could equally relate to natural deposits.
- 4.2.41 An area of weak positive linear anomalies is noted in GS010.1, at **4356 (Figure 39)**. These have been interpreted as post-medieval ridge and furrow cultivation due to their equidistant spacing. They may instead be attributed to variation in local geology or modern ploughing.
- 4.2.42 Wide areas of magnetic variation are evident across the survey area, in GS010.1, GS010.2, GS011, and GS012.2, with examples at **4357 – 4361 (Fig. 37, 39, 41, 43, and 45)**. These have been interpreted as geology, geomorphology, and geomorphological trends. The geomorphological areas have been noted at **4358 – 4360 (Fig. 39 and 43)** in the centre of the south-eastern portion and the north-western portion of the area. These denote low areas on LiDAR indicative of paleochannels. The large areas of geomorphological trends immediately east and west, indicate colluvial activity.
- 4.2.43 Strong dipolar linear anomalies are evident bisecting the entire area NNW – SSE. These have been interpreted as modern services.
- Pipeline G: GS013 and GS029 (Fig. 47 and 49)*
- 4.2.44 Three weak positive linear anomalies on the same orientation are noted in GS029, at **4400 – 4402 (Fig. 47 and 49)**. The anomaly at 4400 is 23 m long NNE – WSW and 2 m wide, the anomaly at **4401** is 48 m long NNE – WSW by 3 m wide, and the anomaly at **4402** is 109 m long NNE – WSW by 3 m wide. These have been interpreted as possible archaeological ditch features, which could pertain to field boundaries, or edges of broad trackways. However they are weak and follow the alignment of the current field boundary so may be associated with ploughing.
- 4.2.45 Multiple weak positive linear anomalies on perpendicular alignments are present in GS029, at **4403 a – I (Fig. 47 and 49)**. The anomalies range in length, are between 1 m and 5 m wide and cover an area of 224 m by 145 m. Amorphous positive anomalies are also present in the area, with examples at **4404 – 4406 (Figure 47)**. These anomalies range between



1 m and 15 m in diameter. The linear anomalies have been interpreted as a possible enclosure ditch system, with the amorphous anomalies representative of extraction or refuse pits. It is possible these pertain to a ladder settlement with **e** and **f** the edges of a central routeway between field systems Romano-British or medieval in date. This is supported by the presence of a known intersection of two Roman Roads within GS013. However, the features are often weak, and many show little correlation with one another which may infer an alternative cause such as more modern agricultural processes for drainage or ploughing.

- 4.2.46 A series of weak positive linear anomalies are present in GS013, at **4407 – 4414 (Fig. 47 and 49)**. The clearest of these is at **4409** and is 110 m long ENE – WSW by 2 m wide. These anomalies have been interpreted as possible archaeological ditch features, likely pertaining to field boundaries, with **4409 – 4411** and **4413** possible edges of wider trackways between fields, possibly Romano-British or medieval in date. These may be associated with the known intersection of two Roman Roads within GS013 and/or the possible settlement to the south at **4403**.
- 4.2.47 Linear alignments of dipolar anomalies have been noted on a south-east to north-west orientation in GS013 and GS029, at **4415 – 4418 (Fig. 47 and 49)**. The largest of these anomalies, at **4443**, is 178 m by 5 m wide. These all relate to former field boundaries as noted on OS Six Inch, 1888 – 1913 maps.
- 4.2.48 A strong area of increased magnetic variation is evident in the north-western portion of the area in GS013, at **4419 (Fig. 47 and 49)**. The anomaly is 48 m by 62 m and corresponds to a pond on OS Six Inch, 1888 – 1913 maps.
- 4.2.49 Two areas of weak linear anomalies are noted in GS013 and GS029, at **4420** and **4421 (Fig. 47 and 49)**. The anomalies are oriented north-east to south-west and have been interpreted as areas of post-medieval ridge and furrow cultivation. They are interpreted as such due to their alignment respect for contemporary field boundaries, which largely formed as part of the post-medieval agricultural landscape.
- 4.2.50 Two areas of amorphous increased magnetic response have been identified in GS013 and GS029, at **4422** and **4423 (Fig. 47 and 49)**. These are likely associated with ground disturbance along the former field boundaries, possibly as a result of their removal.
- 4.2.51 Amorphous areas of weak magnetic variance are noted in both GS013 and GS029 (**Fig. 47 and 49**). These have been interpreted as natural variation in geology.

Pipeline J: GS014, GS015.1, and GS015.2 (Fig. 51 and 55)

- 4.2.52 Several weak positive and dipolar linear anomalies are present across GS015.2, at **4500 – 4503 (Fig. 53 and 55)**. The longest of these is at **4501** and is 175 m long north – south by 4 m wide. These correspond to former field boundaries on the OS Six Inch, 1888 – 1913 maps.
- 4.2.53 Three amorphous areas of increased magnetic response have been identified in GS015.2, at **4504 – 4506 (Fig. 53 and 55)**. These have been interpreted as disturbed ground, or a spread of magnetically enhanced material. This could be associated with vegetation clearance, as trees are noted on OS Six Inch, 1888 – 1913 maps and in the OS 1:10, 560 Air Photos, 1944 – 1950; the removal of former field boundaries; or a spread of magnetically enhanced material from the construction of the building complex immediately south-east of the survey extent.



- 4.2.54 Weak linear anomalies are present across much of GS015.2, at **4507 (Figure 53)**. These likely relate to modern ploughing.
Pipeline K: GS016.1 – GS016.5, GS017.1, GS017.2, GS018, GS030, and GS031 (Fig. 57 and 63)
- 4.2.55 Weak positive parallel linear anomalies are noted in the north-west of the area, across GS031, at **4600 (Figure 63)**. Given the relatively equal spacing and respect of the southern field boundary, it is likely that these relate to post-medieval ridge and furrow cultivation. However, modern ploughing or land drains are equally likely causes of these features.
- 4.2.56 Two areas of amorphous increased magnetic response have been noted along the eastern boundary of the north-western portion of the area in GS031, at **4601 (Figure 63)**. The largest of these, to the south, is 20 m by 20 m in area. It is likely these are ground disturbance caused by grazing animal movement or congregation, as a disturbed area is visible on satellite imagery at this point, where two animal track paths converge.
- 4.2.57 A collection of discrete positive anomalies is noted in the north-eastern portion of the area, in GS018, at **4602 (Figure 61)**. The anomalies cover an area 40 m by 30 m and have been interpreted as variation in geology. However, it is possible these are the product of extraction activity given medieval activity in the wider landscape. Further intrusive investigation would be required.
- 4.2.58 Weak dipolar linear anomalies arranged in a herringbone shape have been identified across the north-western portion of the area in GS031, at **4603 (Figure 63)**. These have been interpreted as land drains.
Pipeline L: GS019.1- GS019.5, GS020.1 – GS020.5, GS021.1 and GS021.2, GS022.1 and GS022.2, GS032.1, GS033.1 – GS033.3 (Fig. 65 – 69)
- 4.2.59 Strong linear anomalies have been identified in the southern portion of the area in GS033.1, at **4700 – 4701 (Figure 67)**. The anomalies at **4700** cover an area 27 m by 10 m with individual anomalies 1 m – 2 m wide. At **4701** are a set of three north – south oriented linear anomalies between 17 m and 9 m long, with widths of 1 m – 2 m. These have all been interpreted as possible archaeological ditch boundary or enclosure features of unknown date. The features in the southern portion of the area may in fact be related to drainage for the houses immediately south of the survey extent.
- 4.2.60 Weak positive linear anomalies are evident in the western portion of the area within GS022.2. The anomalies at **4702** cover an area 77 m east – west by 57 m north – south. At **4703** is a singular linear anomaly 23 m long east – west by 2 m wide. These have all been interpreted as possible archaeological ditch boundary or enclosure features of unknown date. The features may be older field boundaries given their alignment to current and known former field boundaries. However, they may instead be a product of land drains. Further intrusive investigation would be required to determine this.
- 4.2.61 A spread of discrete positive anomalies is evident in the western portion of the area within GS022.3, at **4704 (Figure 69)**. These range in diameter between 2 m and 10 m and have all been interpreted as possible archaeological pit features, used either for refuse or extraction. However, it is possible that they instead relate to variation in the local geology or tree throws or removal adjacent to Hill Copse immediately south. Further investigation would be required.
- 4.2.62 Several strong and weak positive linear anomalies have been noted in the north-western portion of the area within GS022.2, GS022.2, and GS032.1, at **4705 – 4709 (Figure 69)**.



The anomalies range in length and orientation but are between 2 m and 6 m wide. These all correspond to former field boundaries on the OS Six Inch, 1888 – 1913 map.

- 4.2.63 Several areas of weak positive, equidistant parallel linear anomalies are evident across the area in GS033.1, GS033.3, and GS022.2 at **4710 – 4713 (Fig. 65 – 69)**. It is likely that these correspond to post-medieval ridge and furrow cultivation as they conform to current field boundaries which are a result of the post-medieval landscape. The features at **4713** are also aligned with some of the possible boundary ditches noted at **4702**, presenting the possibility of a contemporary relationship. However, these features are often weak and may instead be a result of modern ploughing or land drains.
- 4.2.64 Numerous amorphous areas of increased magnetic response have been identified across the area within GS019.1, GS019.4, GS033.1, GS033.3, GS020.2, GS020.5, GS021.1, GS021.2, GS022.2, and GS032.1 at **4714 – 4722 (Fig. 65 – 69)**. These range in size and shape but have largely been interpreted as being associated with modern agricultural practices, such as fertilisation. The feature at **4718**, in GS020.2 and GS020.5, is 125 m by 25 m within an area of stored boats, possibly pertaining to a spread of modern magnetically enhanced material. The feature at **4719**, in GS021.1 and GS021.2, is in the position noted on OS Six Inch, 1888 – 1913 maps as ‘Site of Former Ponds’, however given the strong ferrous response it may be that this is a large metal object, possibly associated with a water pump or trough.
- 4.2.65 Areas of amorphous magnetic variation are evident in the eastern portion of the area within GS019.4 and GS033.3, at **4723** and **4724 (Fig. 65 and 67)**. These have been interpreted as variation in local geology.
- 4.2.66 Weak positive and negative linear anomalies have been noted across the area within GS019.4, GS022.3, GS022.1, and GS022.2, at **4725 to 4728 (Fig. 65 – 69)**. The anomalies are on a range of orientations and have been interpreted as drains.
- 4.2.67 Weak positive parallel linear anomalies have been identified in the north-western portion of the area within GS022.2 and GS032.1, at **4729** and **4730 (Figure 69)**. These have been interpreted as modern ploughing.
- 4.2.68 Strong dipolar linear anomalies are apparent across the north-western portion of the area within GS022.3 and GS032.1, at **4731 – 4733 (Figure 69)** and have been interpreted as modern services.

5 DISCUSSION

- 5.1.1 The gradiometer survey has identified anomalies of archaeological and possible archaeological origin across many of the pipeline sections, though predominantly in Pipeline E, F, and G. In addition to these, anomalies interpreted as former field boundaries, ridge and furrow cultivation, historical landscape features, areas of increased magnetic response, ploughing, drains, geology, and modern services have also been identified.
- 5.1.2 Perhaps the clearest evidence of archaeological activity is that of a ring ditch within Pipeline F, which is the product of prehistoric settlement or funerary activity, such as a ploughed-out barrow. The known archaeological evidence from the surrounding landscape indicates the presence of Bronze Age to Romano-British activity, of which this feature likely corresponds.
- 5.1.3 Linear features have been identified across the pipeline sections. These have been interpreted as possible archaeological ditch boundary features, likely associated with land



management enclosures for animals or possible settlement activity. Concentrations of the possible archaeology are seen in Pipeline E, F, and G. Many of the features do not follow the current field boundaries so suggest an earlier than post-medieval date. A crossroads of Roman Roads is noted in Pipeline G, although not identified within this survey data, providing a possible date for the field systems. Some of the features may correspond to partial enclosures, trackways, and some to later former field boundaries.

- 5.1.4 Numerous possible archaeological pit features, associated with extraction or refuse, have been identified across the site. Some of these are associated with linear features or enclosures providing possible further evidence for settlement activity, especially with regards to Pipeline G. However, many may instead be geological variation or modern disturbances due to the presence of medieval and post-medieval extraction activity across the wider landscape.
- 5.1.5 Numerous anomalies associated with former agricultural activity have been identified. These include former field boundaries noted on historical OS mapping and areas of ridge and furrow cultivation. The form of these features is suggestive of post-medieval cultivation practices, rather than earlier activity. Many of the features also respect noted former field boundaries, as well as contemporary ones, further supporting the interpretation of post-medieval cultivation. However, many of these features are weak and may be associated with modern ploughing, drains, or variation in local geology.
- 5.1.6 Areas of increased magnetic response have been identified across the site. Many of these are associated with historical landscape features such as former sand pits, chalk pits, and a rabbit dell identified on historical OS mapping.
- 5.1.7 Further areas of increased magnetic response are evident across the site. These have been interpreted as areas of modern disturbance, possible further historical extraction activity, modern fertilisation, spreads of enhanced magnetic material caused by construction of buildings or made ground.
- 5.1.8 Evidence for extensive geological variation has been identified across the site. Although mostly weak and amorphous, some areas have been noted as geological trends due to their multiple linear characteristics. These trends likely relate to colluvial action within wider drainage basins across the landscape visible in online accessible LiDAR terrain models.
- 5.1.9 Weak linear features are noted but marked as trends as they are too weak to interpret further. They may pertain to archaeological activity, but further investigation would be required.
- 5.1.10 The remaining features noted across the site pertain to drainage, modern ploughing, and modern services.



REFERENCES

Schmidt, A, Linford, P, Linford, N, David, A, Gaffney, C, Sarris, A and Fassbinder, J. 2015 Guidelines for the use of geophysics in archaeology: questions to ask and points to consider. EAC Guidelines 2, Belgium: European Archaeological Council.

Chartered Institute for Archaeologists [CIfA] 2014 Standards and guidance for archaeological geophysical survey. Reading, CIfA

Royal Haskoning DHV, 2022, *Hampshire Water Transfer and Water Recycling Project: Written Scheme of Investigation for Archaeological Geophysical Survey*. Unpublished report document ref: PC3194-RHD-ZZ-XX-RP-Z-0001

Cartographic and documentary sources

Ordnance Survey 1983 Soil Survey of England and Wales SE Sheet 5 and Sheet 6, Soils of Midland and Western England. Southampton.

Online resources

British Geological Survey Geology of Britain Viewer (accessed October 2023)
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

Google Earth website <http://earth.google.com> (accessed October 2023)

Hampshire Historic Environment Record (accessed October 2023)
<https://maps.hants.gov.uk/historicenvironment/>

Historic England (HE) website <https://historicengland.org.uk/listing/the-list/map-search> accessed October 2023)

Historic England Aerial Photography Maps <https://historicengland.maps.arcgis.com/> (accessed October 2023)

Heritage Gateway website <https://www.heritagegateway.org.uk/gateway> (accessed October 2023)

National Library of Scotland (NLS) <https://maps.nls.uk/geo/explore/> (accessed October 2023)

APPENDICES

Appendix 1: Gradiometer Survey Equipment and Data Processing (Sensys)

The magnetic data for this project were acquired using a non-magnetic cart fitted with four SenSys FGM650/3 magnetic gradiometers. The instrument has four sensor assemblies fixed horizontally 1 m apart allowing four traverses to be recorded simultaneously. Each sensor contains two fluxgate magnetometers arranged vertically with a 0.6 m separation and measures the difference between the vertical components of the total magnetic field within each sensor array. This arrangement of magnetometers suppresses any diurnal or low frequency effects.

The gradiometers have an effective resolution of $\pm 8 \mu\text{T}$ over $\pm 1000 \text{ nT}$ range. All of the data are then relayed to a CS35 tablet, running the MONMX program, which is used to record the survey data from the array of FGM650/3 probes at a rate of 20 Hz. The program also receives measurements from a GPS system, which is fixed to the cart at a measured distance from the sensors, providing real time locational data for each data point.

The cart-based system relies upon accurate GPS location data which is collected using a Leica Captivate system with rover and base station. This receives corrections from a network of reference stations operated by the Ordnance Survey and Leica Geosystems, allowing positions to be determined with a precision of 0.02 m in real-time and therefore exceed the level of accuracy recommended by European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015) for geophysical surveys.

Data may be collected with a higher sample density where complex archaeological anomalies are encountered, to aid the detection and characterisation of small and ephemeral features. Data may be collected at up to 0.01 m intervals along traverses spaced up to 0.25 m apart.

Post-processing

The magnetic data collected during the survey is downloaded from the system for processing and analysis using both commercial and in-house software. This software allows for both the data and the images to be processed in order to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

Typical data and image processing steps may include:

- GPS DeStripe – Determines the median of each transect and then subtracts that value from each datapoint in the transect within the defined window. May be used to remove the striping effect seen within a survey caused by directional effects, drift, etc.
- Discard Overlaps - Intended to eliminate a track(s) that have been collected too close to one another. Without this, the results of the interpolation process can be distorted as it tries to accommodate very close points with potentially differing values.
- GPS Base Interpolation – Sets the X & Y interval of the interpolated data and the track radius (area around each datapoint that is included in the interpolated result).

Typical displays of the data used during processing and analysis:



- Greyscale – Presents the data in plan view using a greyscale to indicate the relative strength of the signal at each measurement point. These plots can be produced in colour to highlight certain features but generally greyscale plots are used during analysis of the data.



Appendix 2 Geophysical interpretation

The interpretation methodology used by Wessex Archaeology separates the anomalies into four main categories: archaeological, modern, agricultural, and uncertain origin/geological.

The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further sub-divided into three groups, implying a decreasing level of confidence:

- Archaeology – used when there is a clear geophysical response and anthropogenic pattern.
- Possible archaeology – used for features which give a response, but which form no discernible pattern or trend.

The modern category is used for anomalies that are presumed to be relatively modern in date:

- Ferrous – used for responses caused by ferrous material. These anomalies are likely to be of modern origin.
- Modern service – used for responses considered relating to cables and pipes; most are composed of ferrous/ceramic material although services made from non-magnetic material can sometimes be observed.

The agricultural category is used for the following:

- Former field boundaries – used for ditch sections that correspond to the position of boundaries marked on earlier mapping.
- Ridge and furrow – used for broad and diffuse linear anomalies that are considered to indicate areas of former ridge and furrow.
- Ploughing – used for well-defined narrow linear responses, usually aligned parallel to existing field boundaries.
- Drainage – used to define the course of ceramic field drains that are visible in the data as a series of repeating bipolar (black and white) responses.

The uncertain origin/geological category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

- Increased magnetic response – used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend – used for low amplitude or indistinct linear anomalies.
- Superficial geology – used for diffuse edged spreads considered to relate to shallow geological deposits. They can be distinguished as areas of positive, negative, or broad bipolar (positive and negative) anomalies.



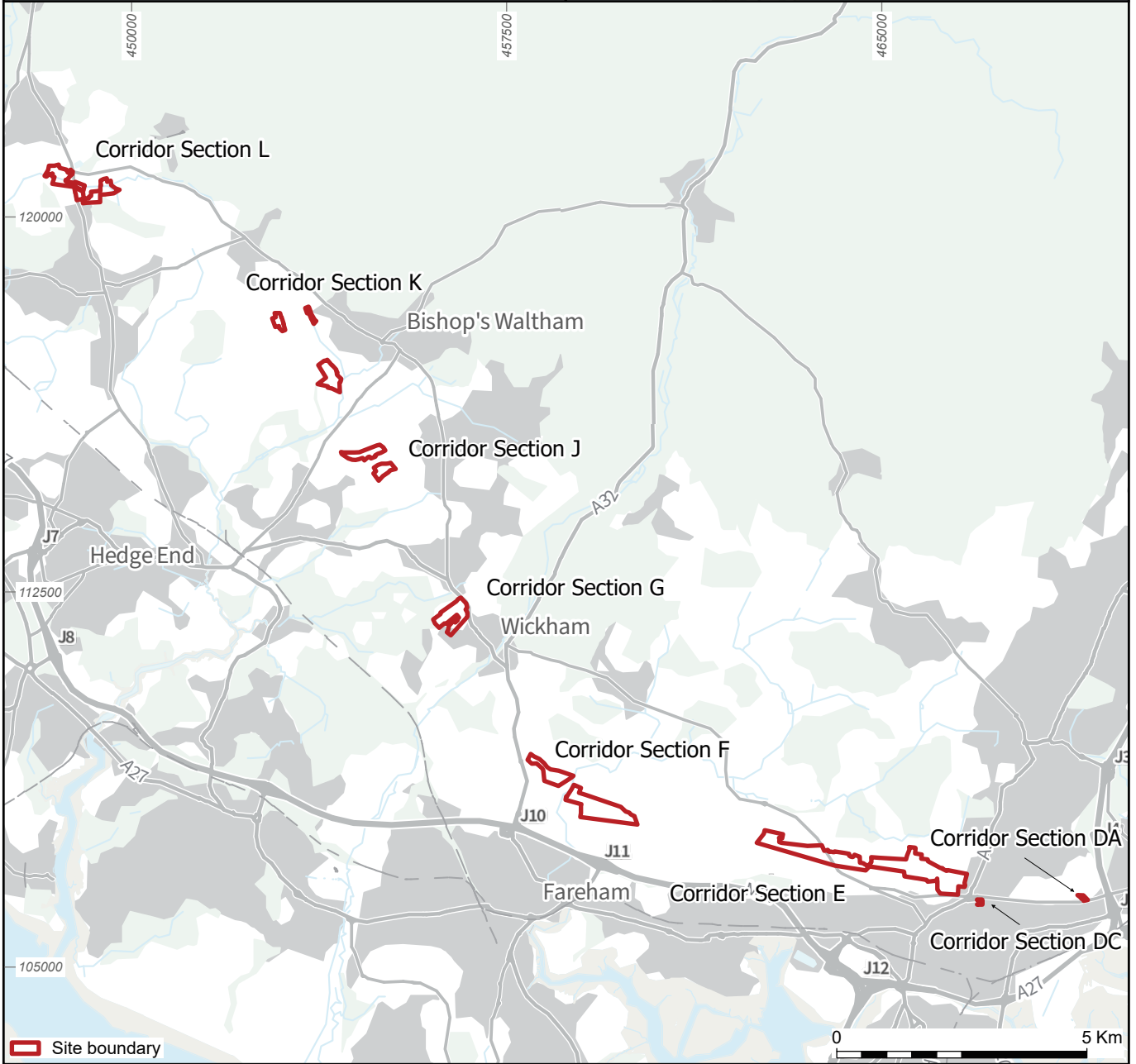
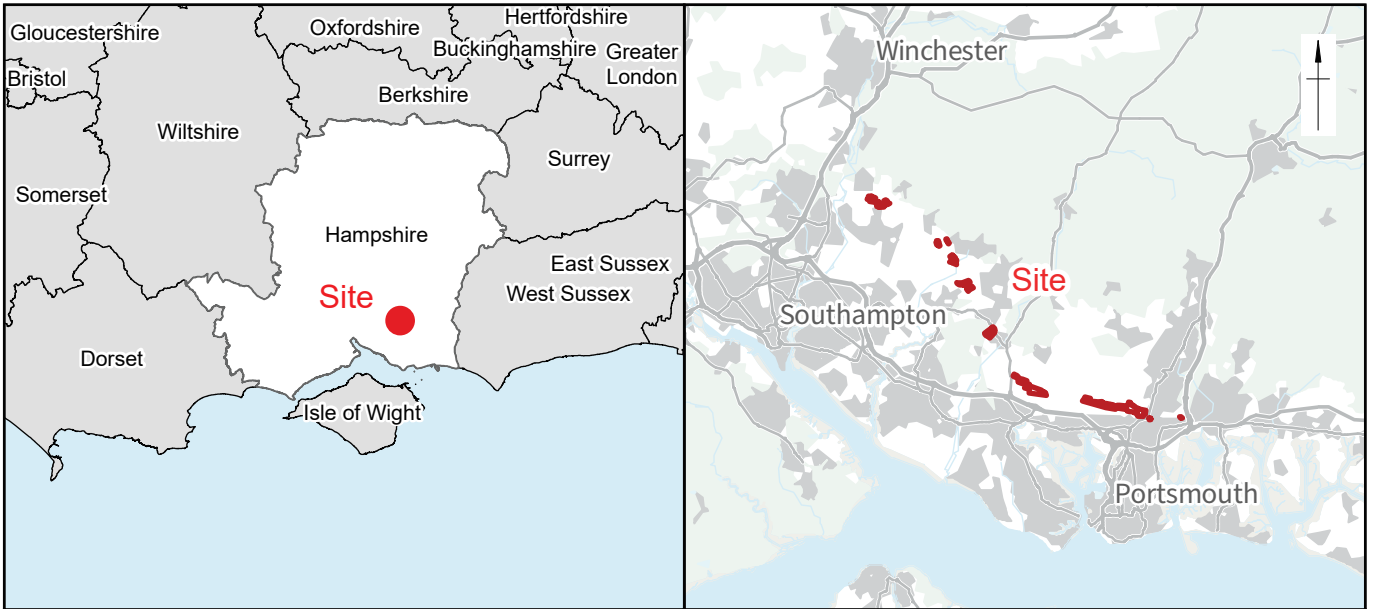
Appendix 3 OASIS form

OASIS Summary for wessexar1-519756

OASIS ID (UID)	wessexar1-519756
Project Name	Hampshire Water Transfer and Water Recycling Project
Sitename	Hampshire Water Transfer and Water Recycling Project
Sitecode	275080
Project Identifier(s)	Hampshire Water Transfer and Water Recycling Project, Hampshire
Activity type	Geophysical Survey, MAGNETOMETRY SURVEY
Planning Id	
Reason For Investigation	Planning: Pre application
Organisation Responsible for work	Wessex Archaeology
Project Dates	06-Mar-2023 - 13-Sep-2023
Location	Hampshire Water Transfer and Water Recycling Project NGR : SU 69113 06346 LL : 50.85251102567908, -1.019555293387561 12 Fig : 469113,106346
Administrative Areas	Country : England County/Local Authority : Hampshire Local Authority District : Havant Parish : Havant, unparished area
Project Methodology	<p>The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 6 March and 13 September 2023. Field conditions were variable throughout the survey period. An overall coverage of 222.42 ha was achieved. Reductions are attributable to ground conditions being non-conductive to survey and inaccessible areas due to permissions issues.</p> <p>The methods and standards employed throughout the geophysical survey conform to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2014) and European Archaeologiae Consilium (Schmidt et al. 2015).</p>

Project Results	<p>The survey area comprises 275.2 ha of agricultural land, currently utilised as pasture, arable, and scrub. The geophysical survey was undertaken over several mobilisations between 6 March 2023 and 13 September 2023.</p> <p>The gradiometer survey has identified anomalies of archaeological and possible archaeological origin across many of the different pipeline sections, though predominantly in Pipeline E, F, and G. In addition to these, anomalies interpreted as former field boundaries, ridge and furrow cultivation, historic landscape features, area of increased magnetic response, ploughing, drains, geology, and modern services were also identified.</p> <p>Perhaps the clearest evidence of archaeological activity is that of a ring ditch within Pipeline F, which is the product of prehistoric settlement or funerary activity, such as a ploughed-out barrow. The known archaeological evidence from the surrounding landscape indicates the presence of Bronze Age to Romano-British activity.</p> <p>Possible archaeological ditch boundary features, likely associated with land management enclosures for animals or possible settlement activity, have been identified across the site. Concentrations of the possible archaeology are seen in Pipeline E, F, and G ext. Many of the features do not follow the current field boundaries so suggest an earlier than post-medieval date.</p> <p>Numerous possible archaeological pit features, associated with extraction or refuse, have been identified across the site. Some of these are associated with linear features or enclosures providing possible further evidence for settlement activity.</p> <p>Numerous anomalies associated with former agricultural activity have been identified. These include former field boundaries noted on historical OS mapping and areas of ridge and furrow cultivation. The form of these features is suggestive of post-medieval cultivation practices.</p> <p>Areas of increased magnetic response have been identified across the site. Many of these are associated with historical landscape features such as former sand pits, chalk pits, and a rabbit dell identified on historical OS mapping.</p> <p>The remaining anomalies are thought to be modern or natural. The modern anomalies pertain to drainage, ploughing, made ground, and services.</p>
Keywords	
Funder	Private individual
HER	Hampshire Archaeology and Historic Buildings Record (AHBR) - unRev - STANDARD
Person Responsible for work	██████████
HER Identifiers	
Archives	

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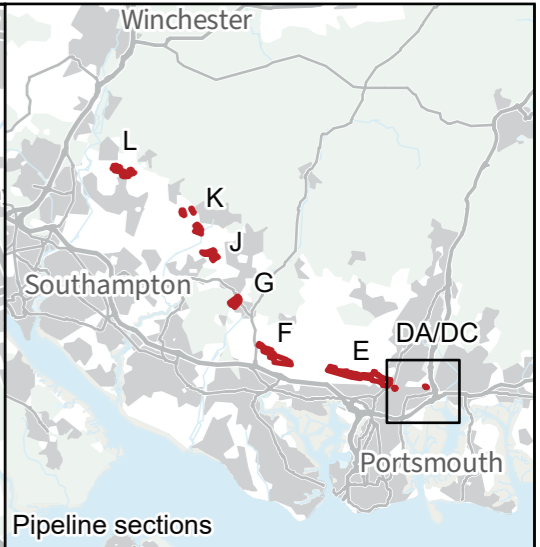
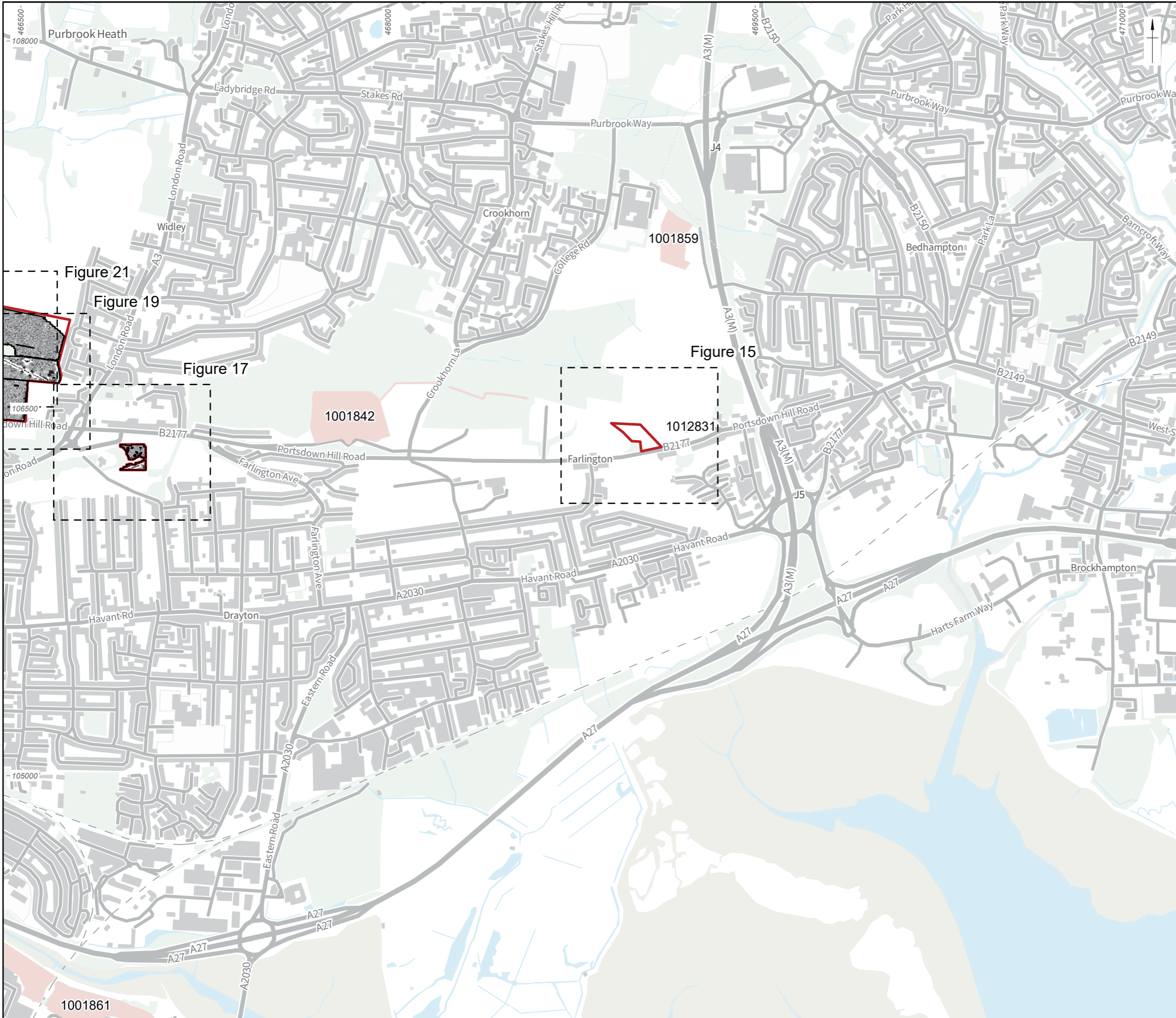
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Figure 1: Site location and survey extent



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-  Site boundary
-  Detailed survey extent
-  Scheduled monuments

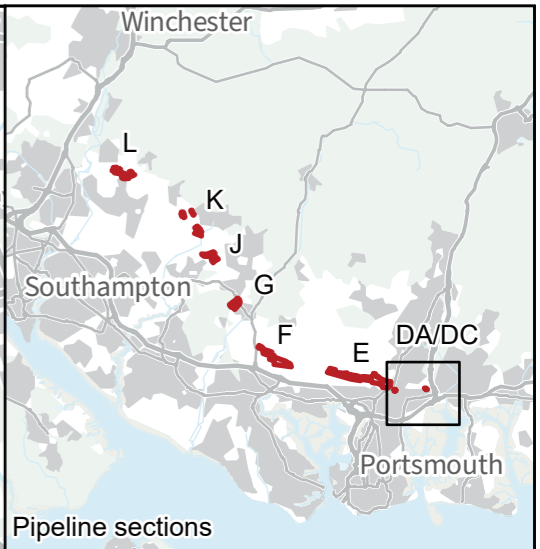
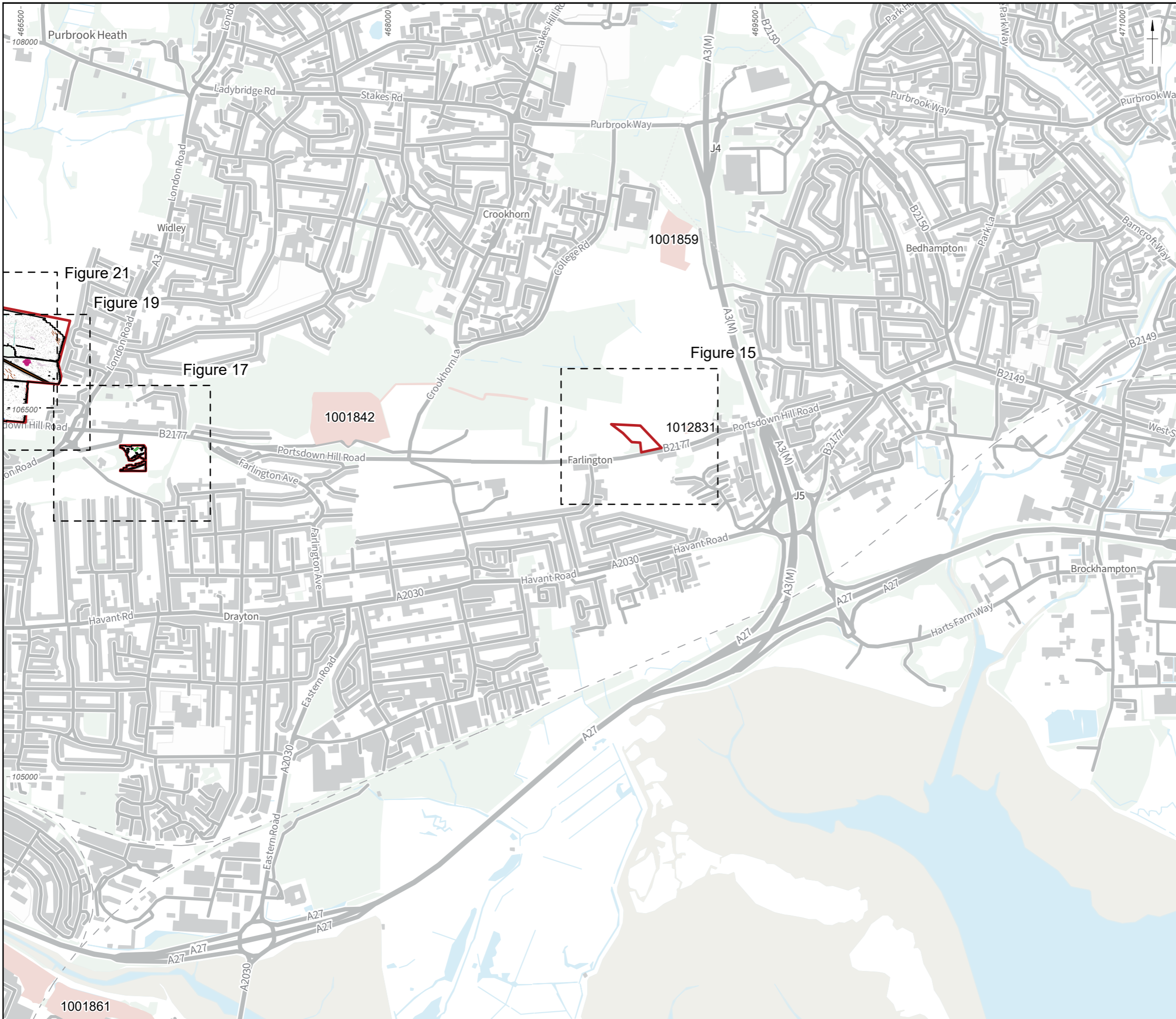


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Figure 2: Detailed gradiometer survey results: Corridor Section DC, DA, and E greyscale plot overview

Detailed gradiometer survey results: Corridor Section DC, DA, and E greyscale plot overview



Pipeline sections

- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

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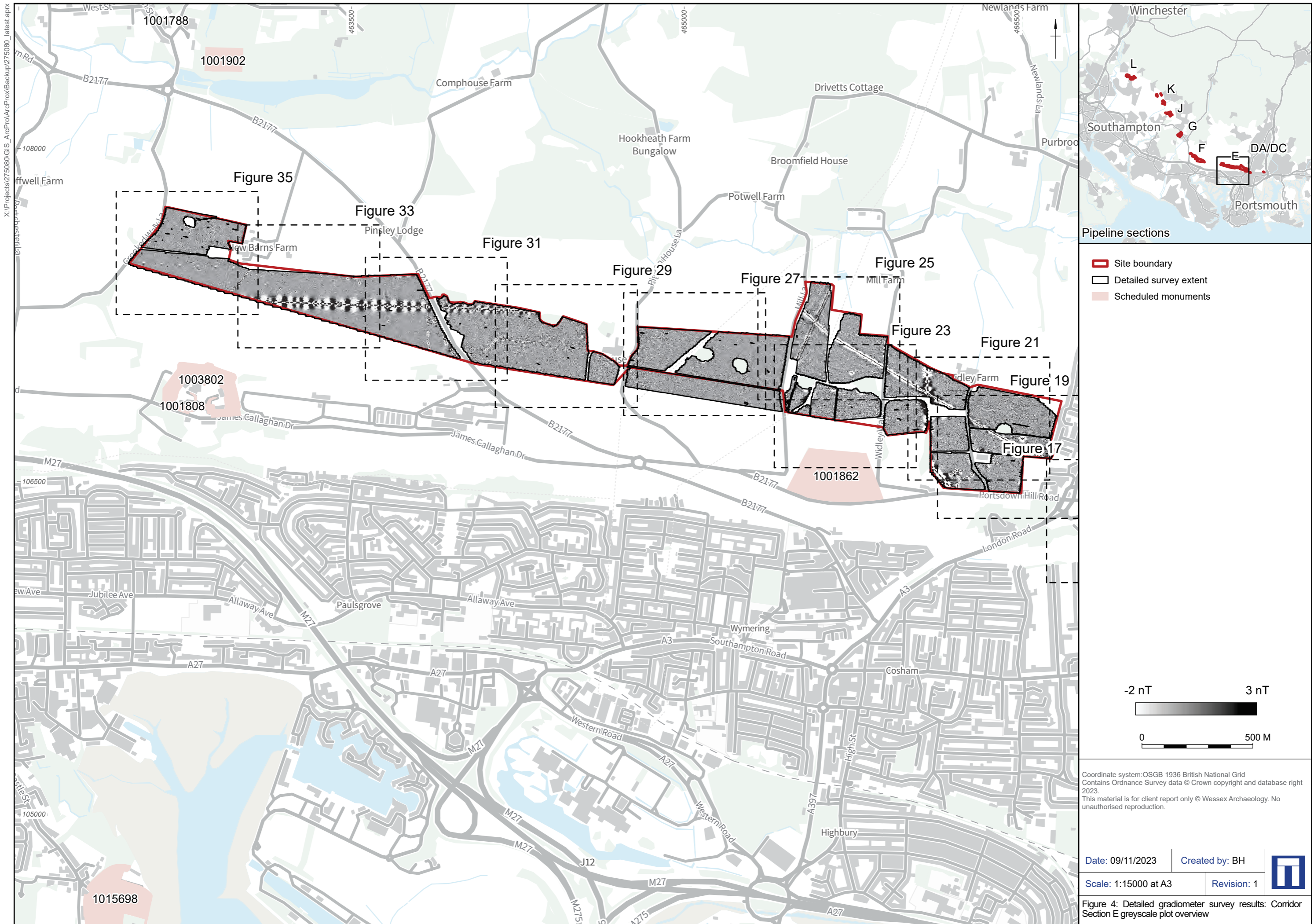
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Figure 3: Detailed gradiometer survey results: Corridor Section DC, DA, and E interpretation overview

Detailed gradiometer survey results: Corridor Section DC, DA, and E interpretation overview



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Pipeline sections

- Site boundary
- Detailed survey extent
- Scheduled monuments

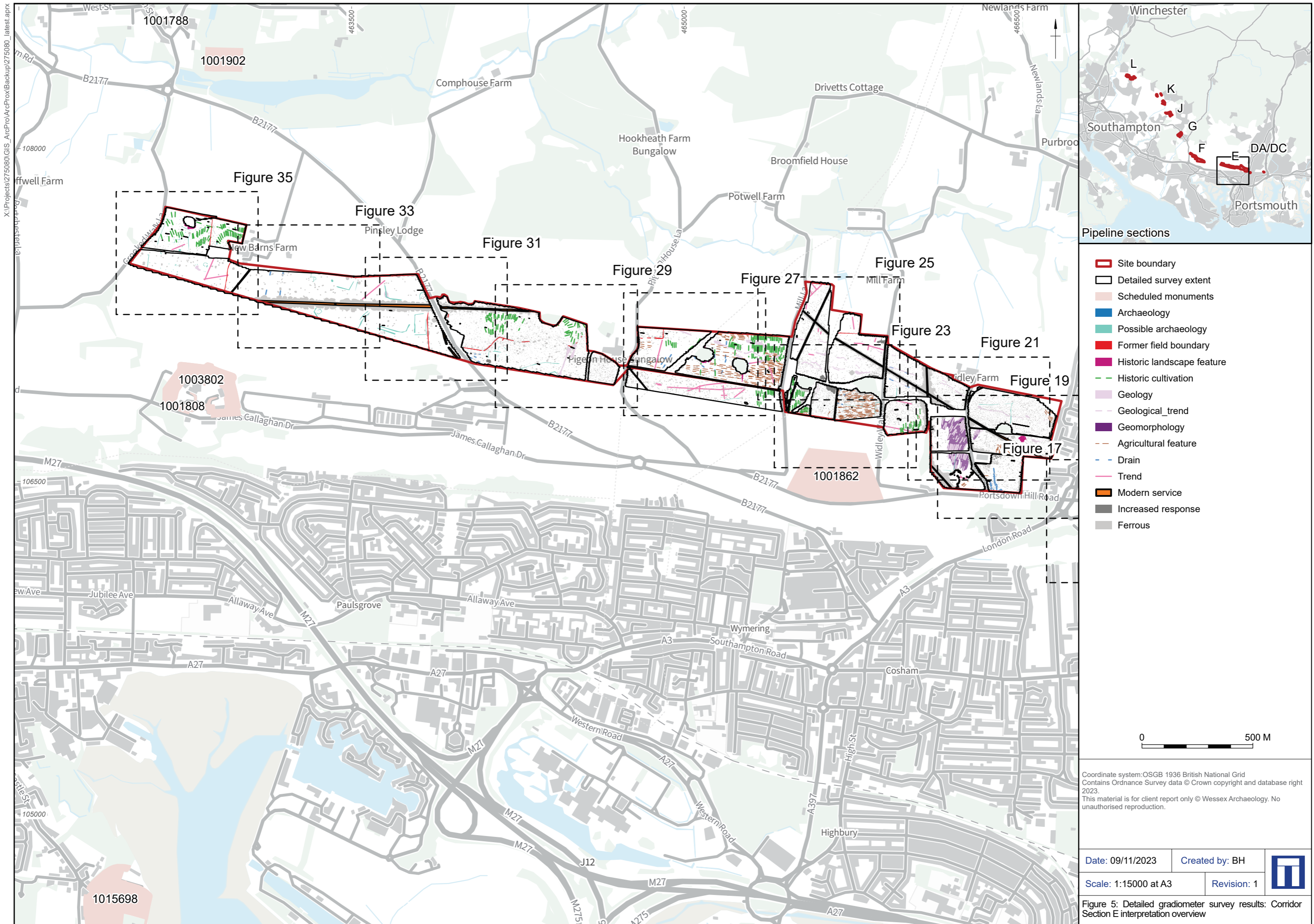


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Figure 4: Detailed gradiometer survey results: Corridor Section E greyscale plot overview

Detailed gradiometer survey results: Corridor Section E greyscale plot overview

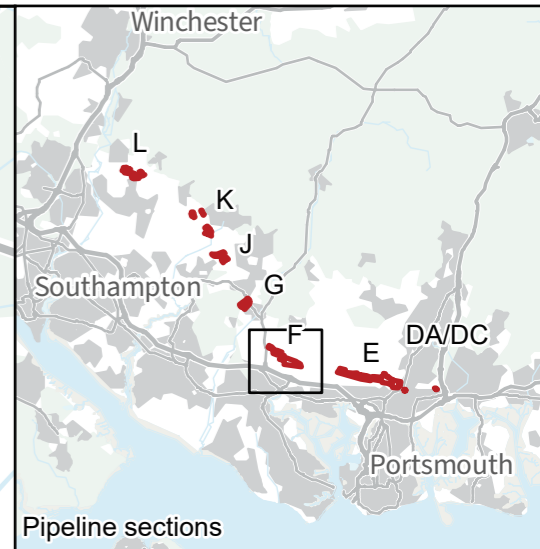
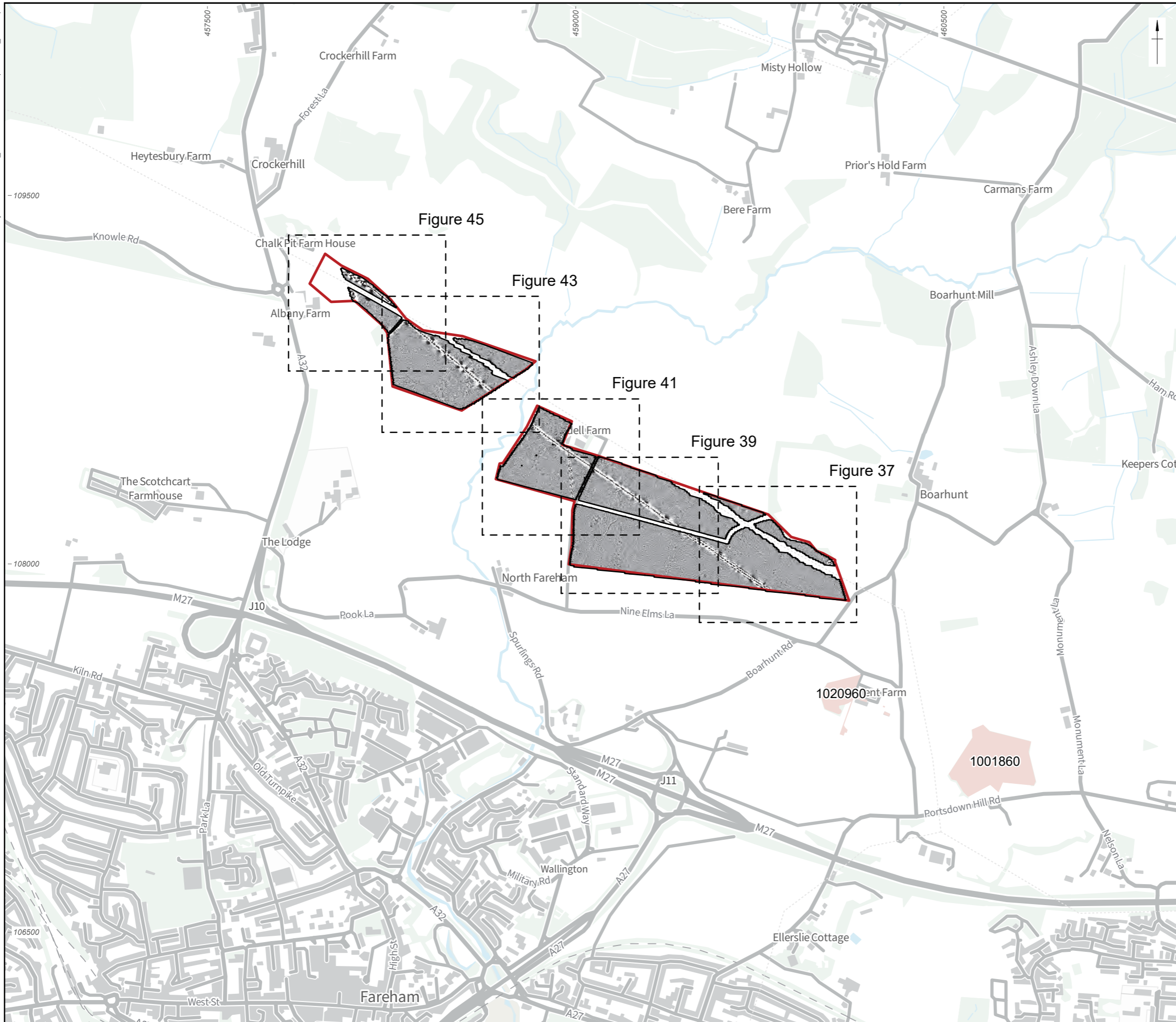


Detailed gradiometer survey results: Corridor Section E interpretation overview

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Figure 5: Detailed gradiometer survey results: Corridor Section E interpretation overview

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- Site boundary
- Detailed survey extent
- Scheduled monuments



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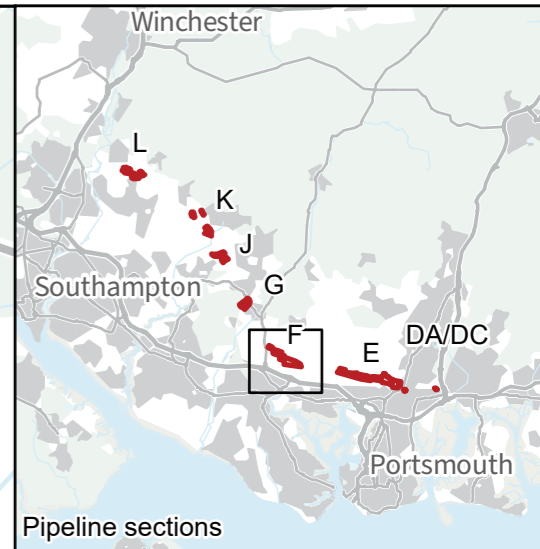
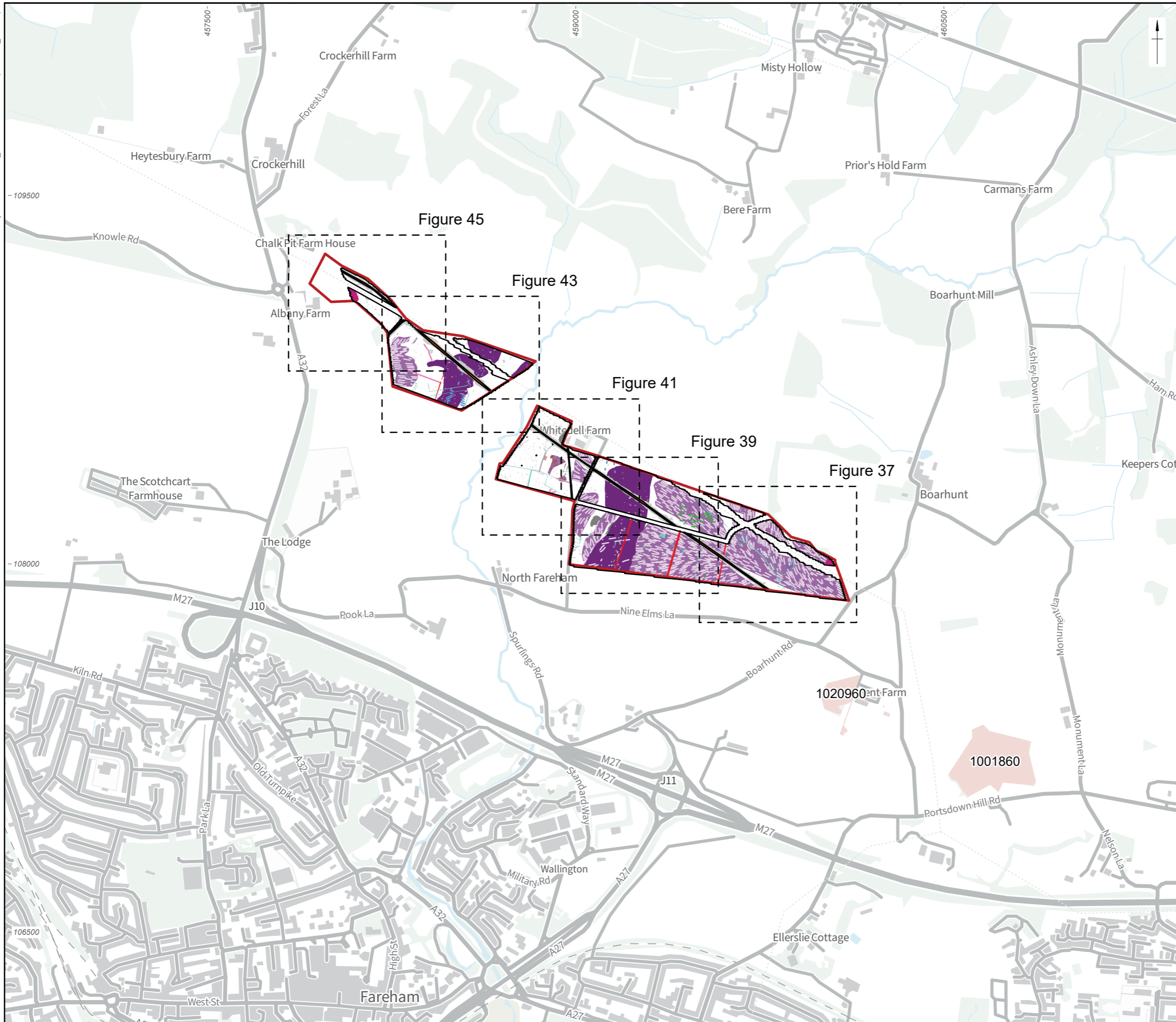
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Figure 6: Detailed gradiometer survey results: Corridor Section F greyscale plot overview

Detailed gradiometer survey results: Corridor Section F greyscale plot overview

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- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



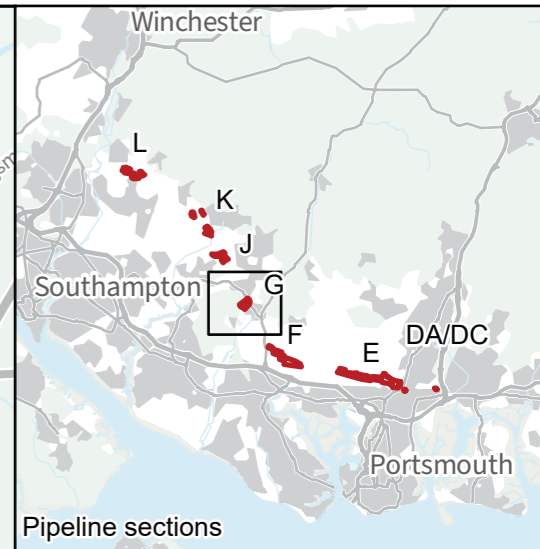
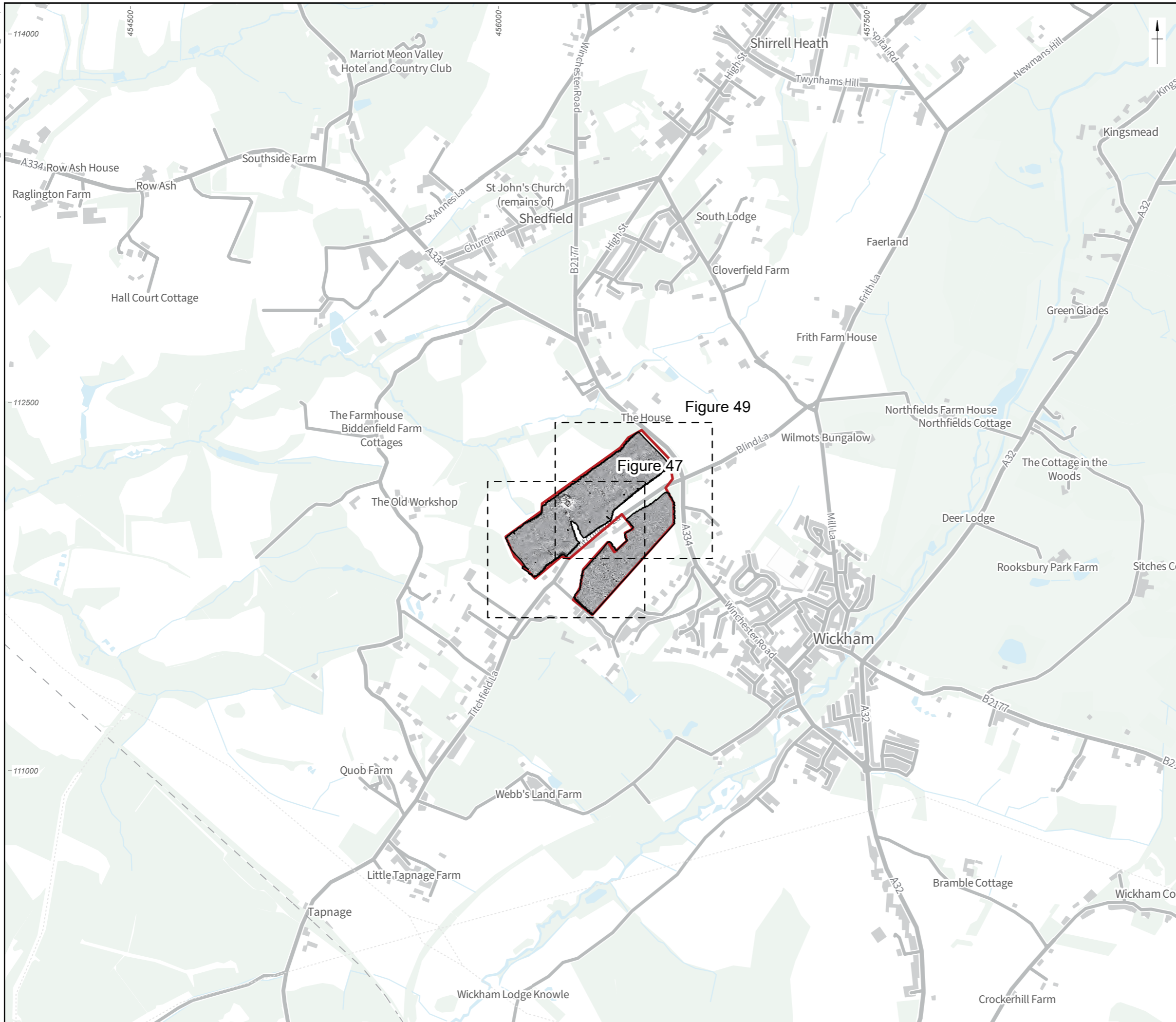
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Figure 7: Detailed gradiometer survey results: Corridor Section F interpretation overview

Detailed gradiometer survey results: Corridor Section F interpretation overview

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- Site boundary
- Detailed survey extent



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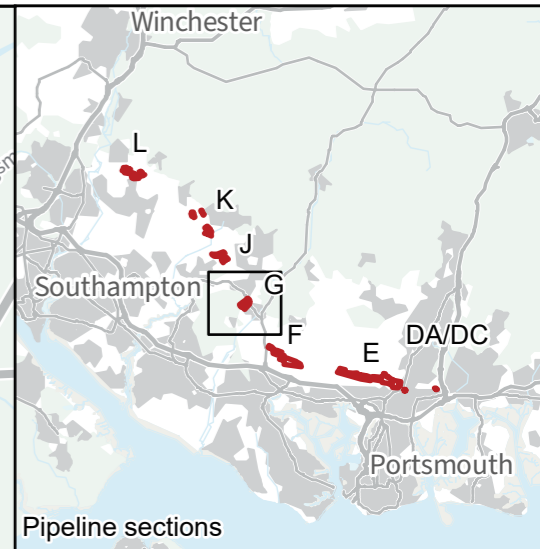
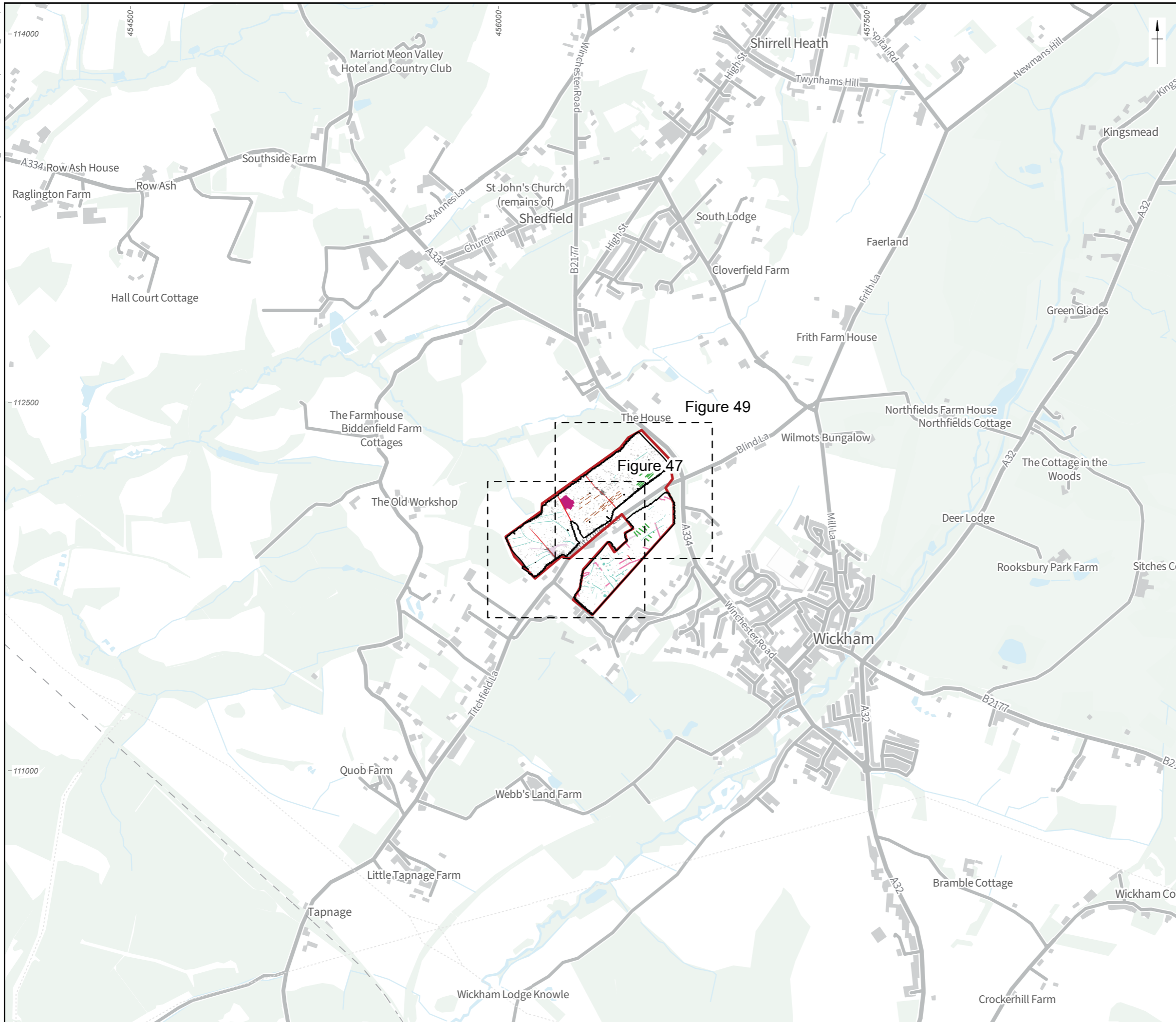
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Figure 8: Detailed gradiometer survey results: Corridor Section G greyscale plot overview

Detailed gradiometer survey results: Corridor Section G greyscale plot overview

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- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



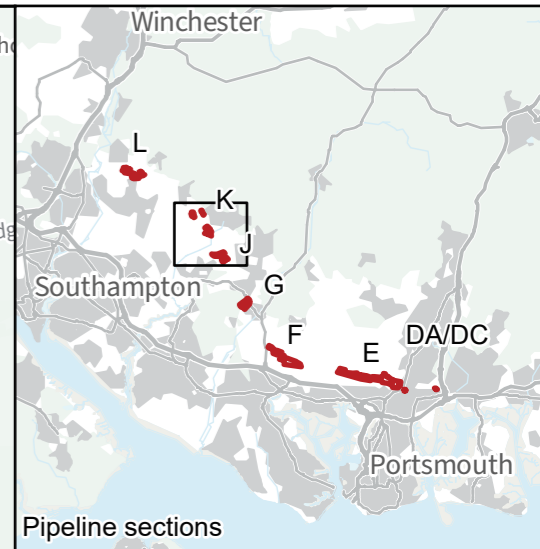
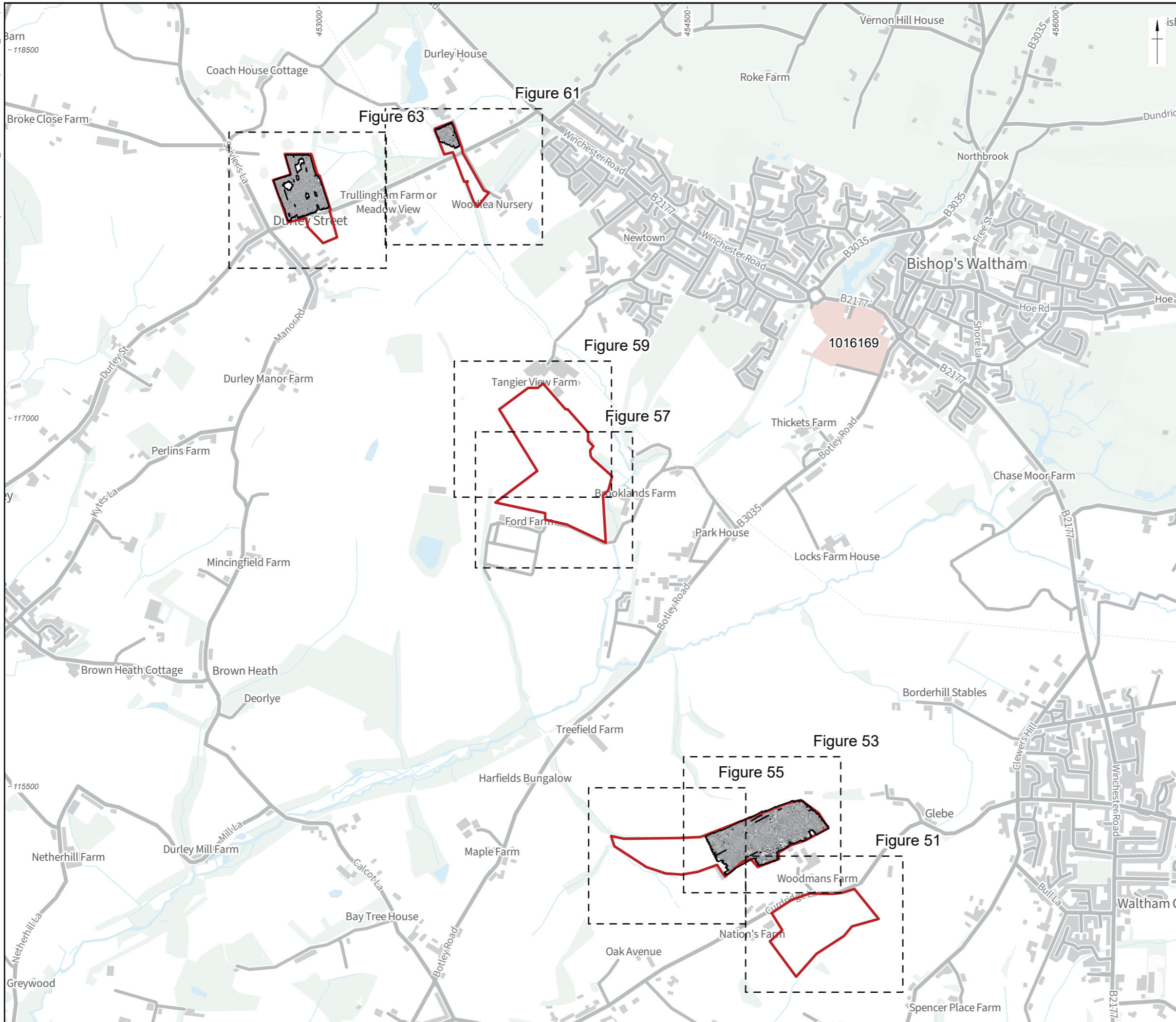
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Figure 9: Detailed gradiometer survey results: Corridor Section G Ext. interpretation overview

Detailed gradiometer survey results: Corridor Section G Ext. interpretation overview


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- Pipeline sections
- ▬ Site boundary
 - Detailed survey extent
 - Scheduled monuments

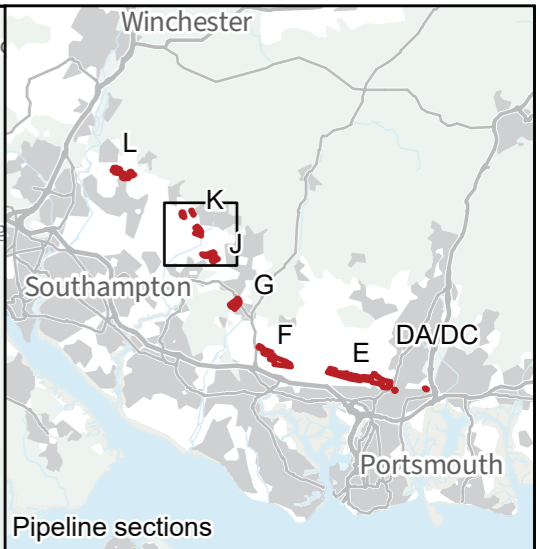
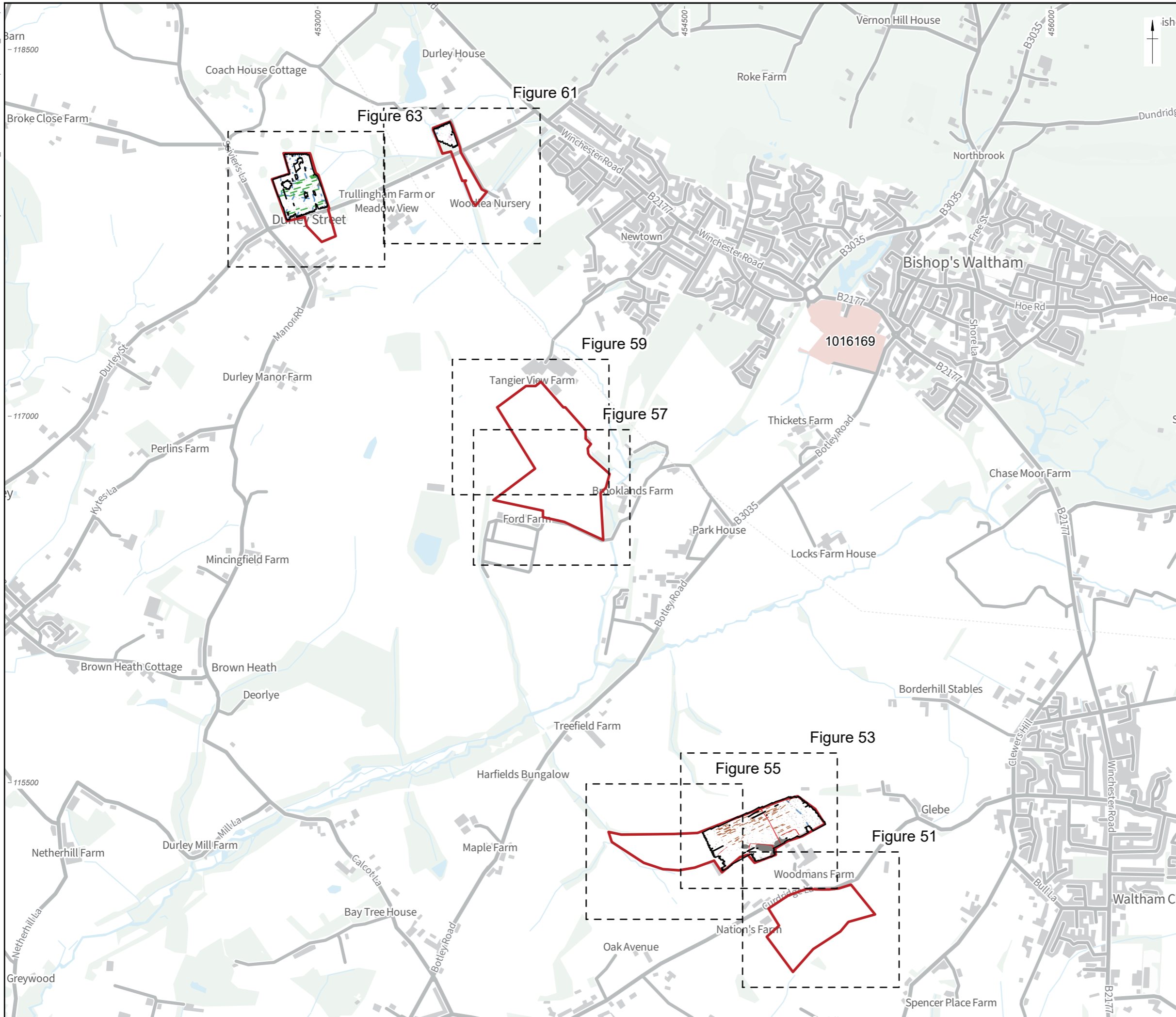


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Detailed gradiometer survey results: Corridor Section J and K greyscale plot overview

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- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 500 M

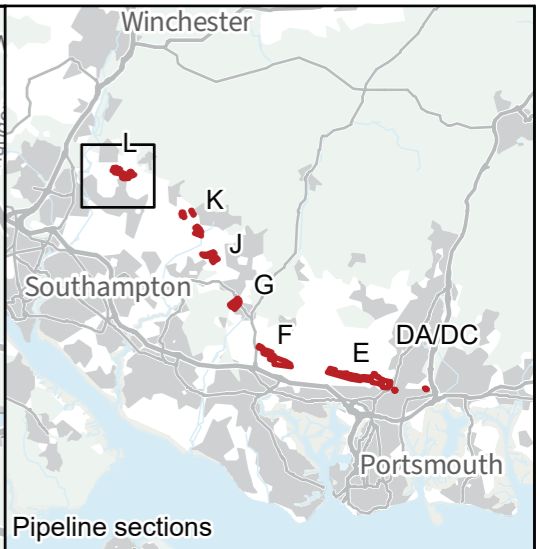
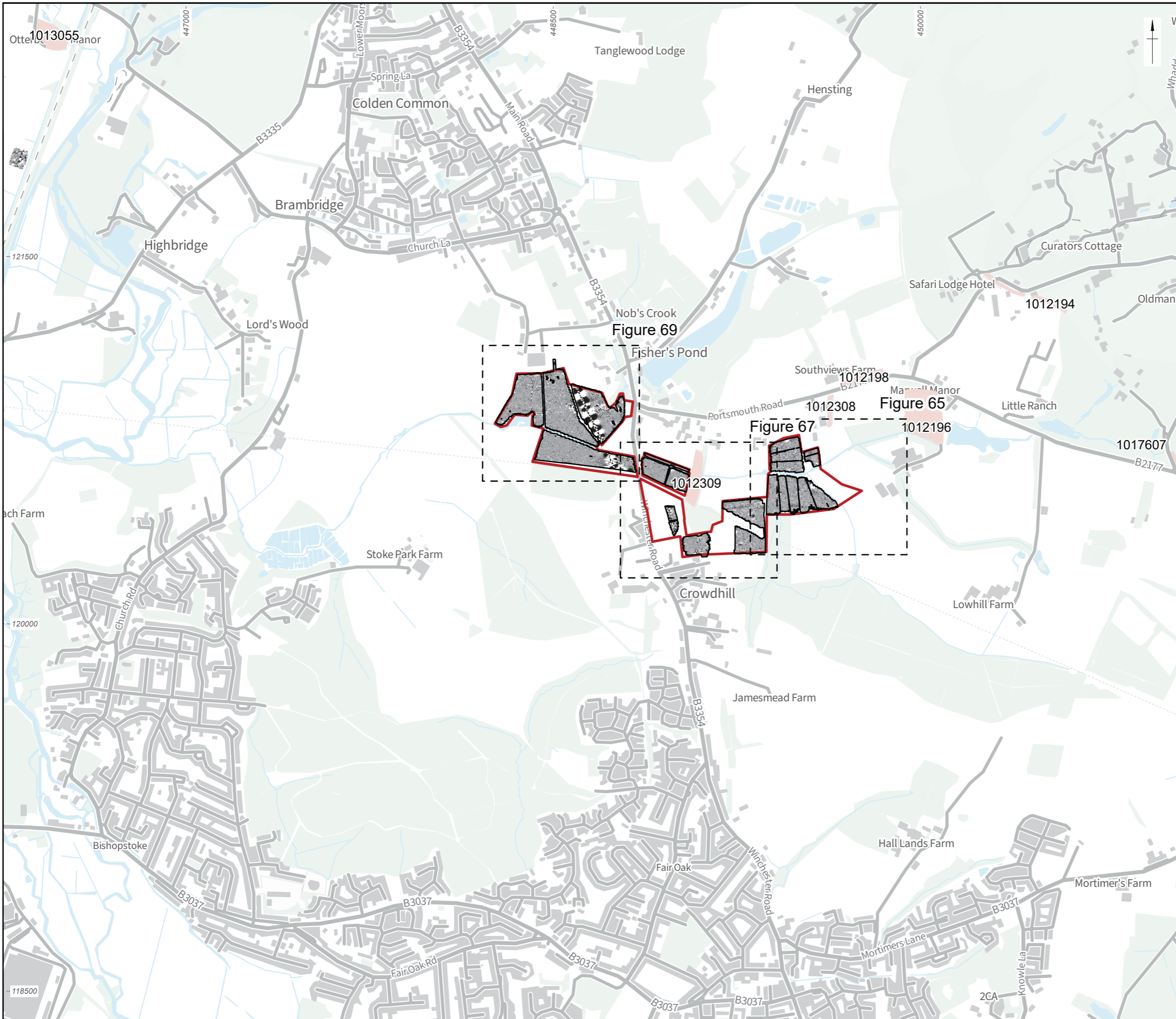
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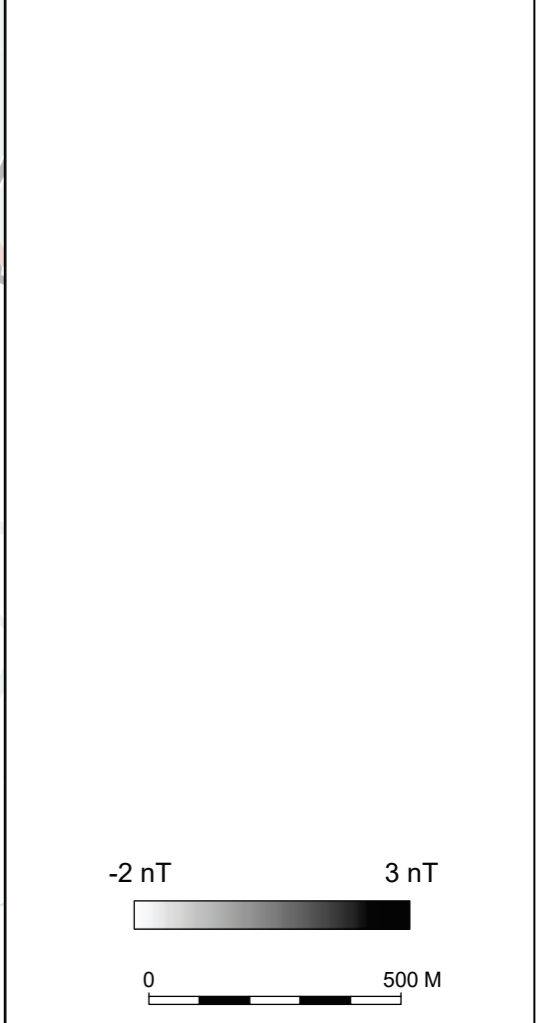
Figure 11: Detailed gradiometer survey results: Corridor Section J and K interpretation overview

Detailed gradiometer survey results: Corridor Section J and K interpretation overview

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- Site boundary
- Detailed survey extent
- Scheduled monuments



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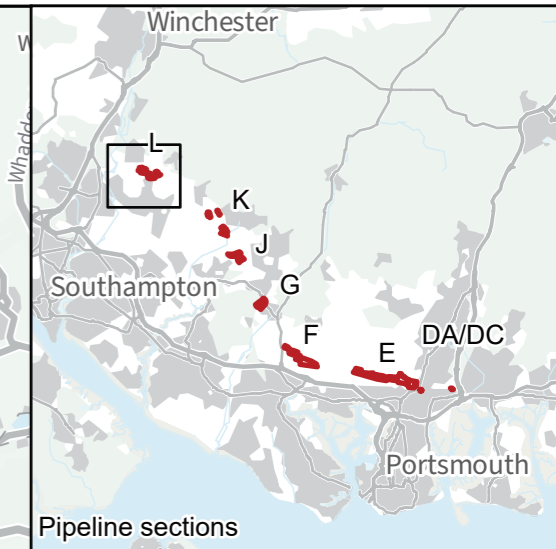
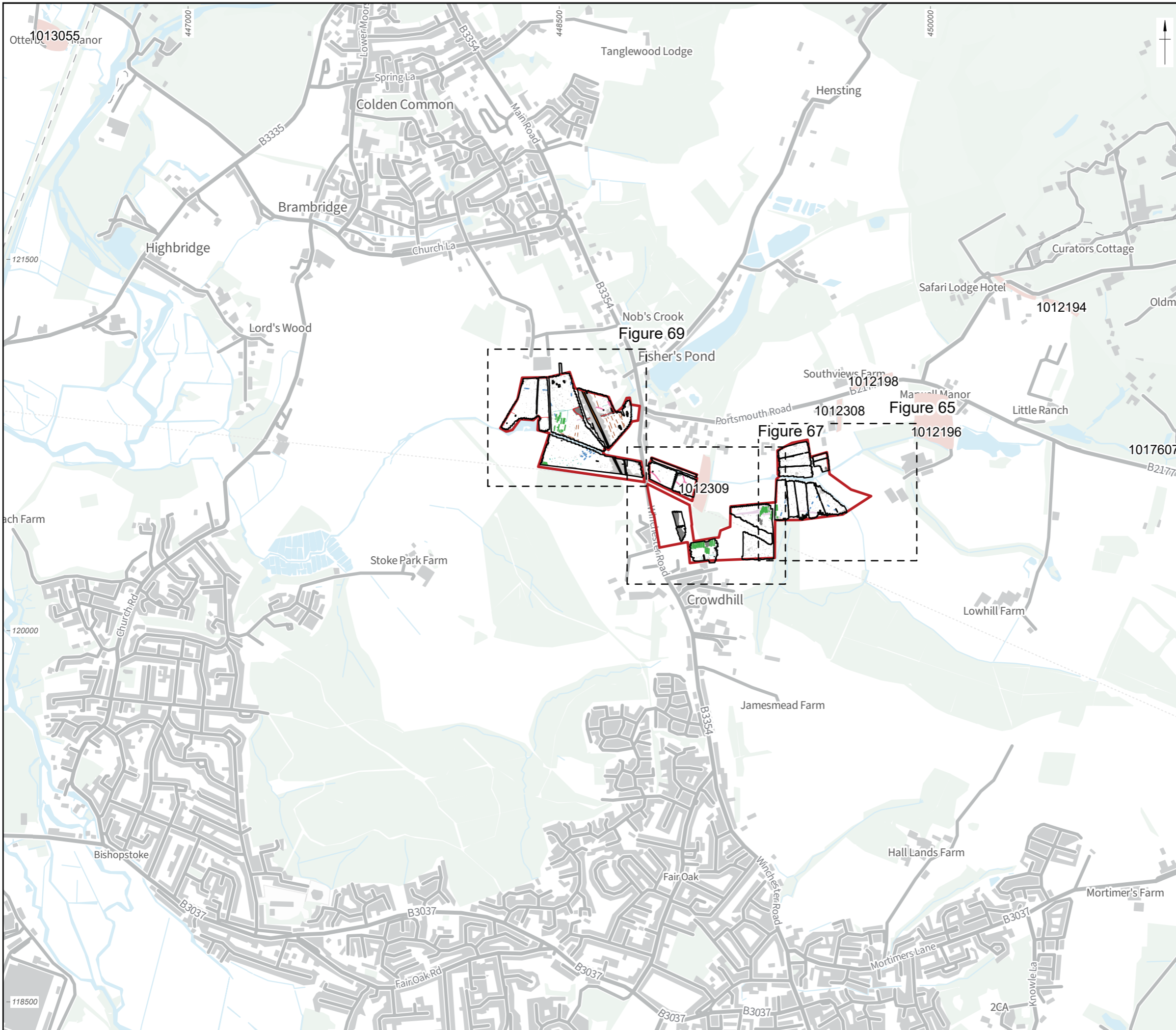
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Figure 12: Detailed gradiometer survey results: Corridor Section L greyscale plot overview

Detailed gradiometer survey results: Corridor Section L greyscale plot overview

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Legend

- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

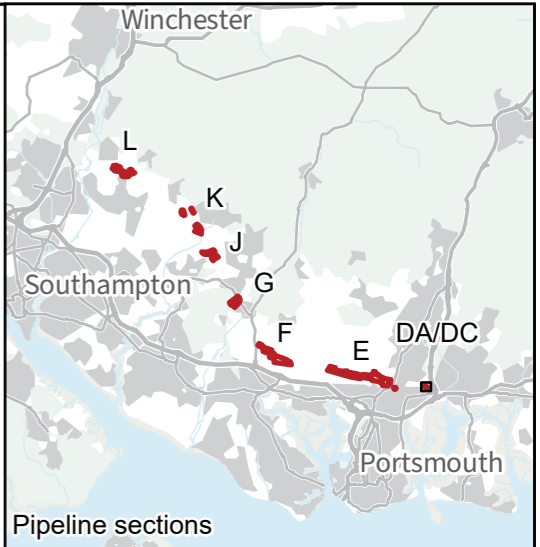
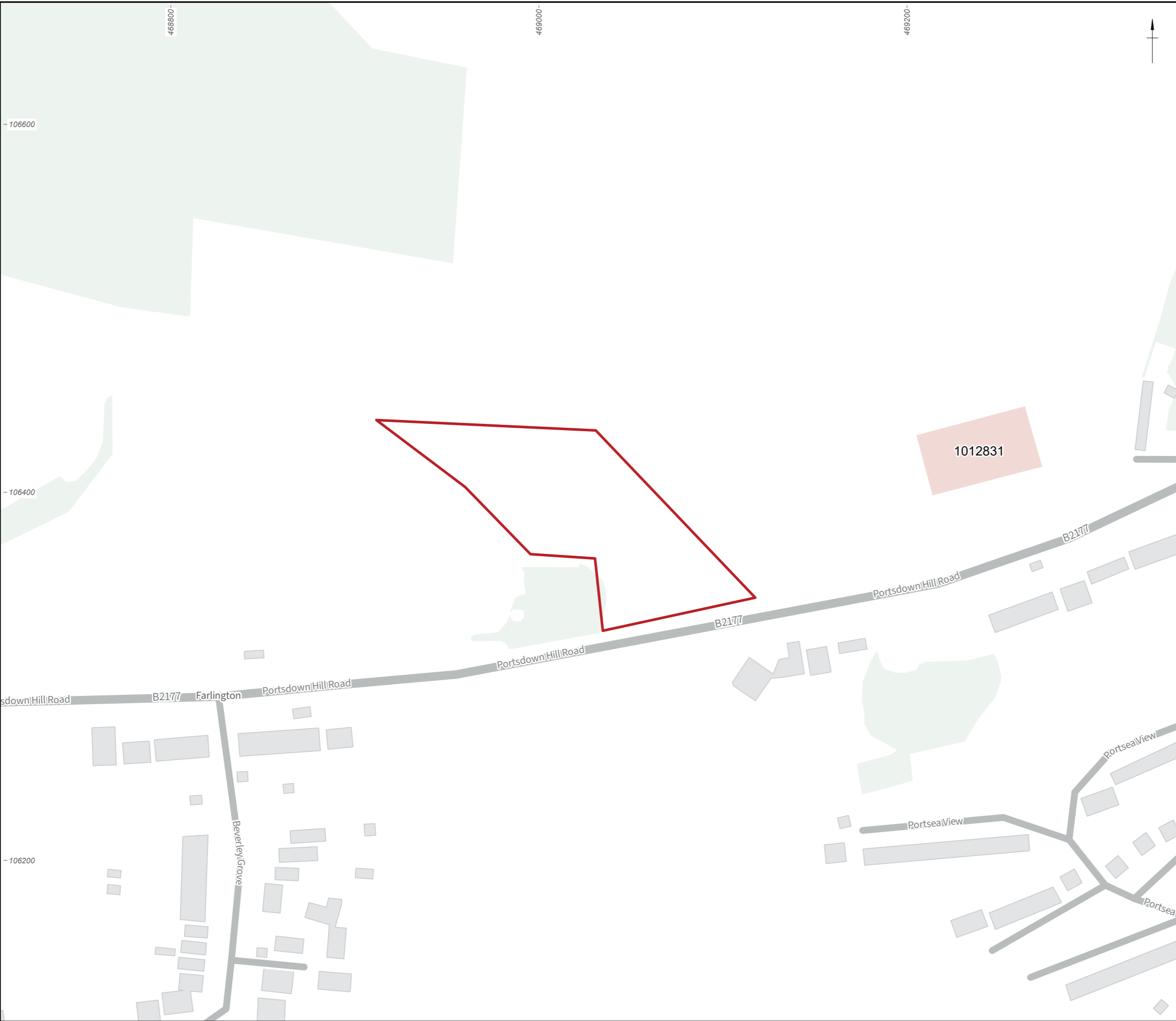
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Detailed gradiometer survey results: Corridor Section L interpretation overview

Figure 13: Detailed gradiometer survey results: Corridor Section L interpretation overview



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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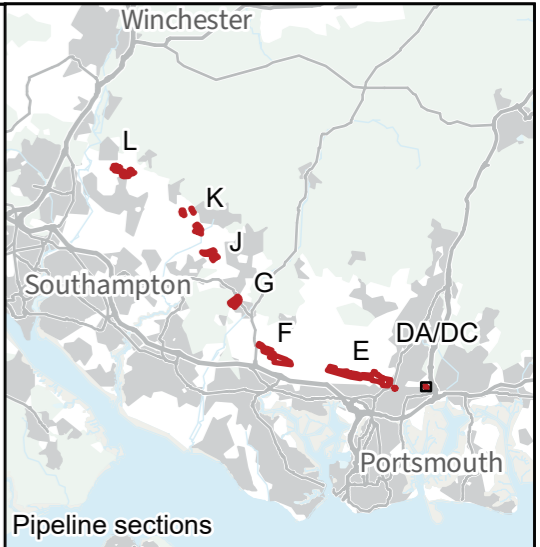
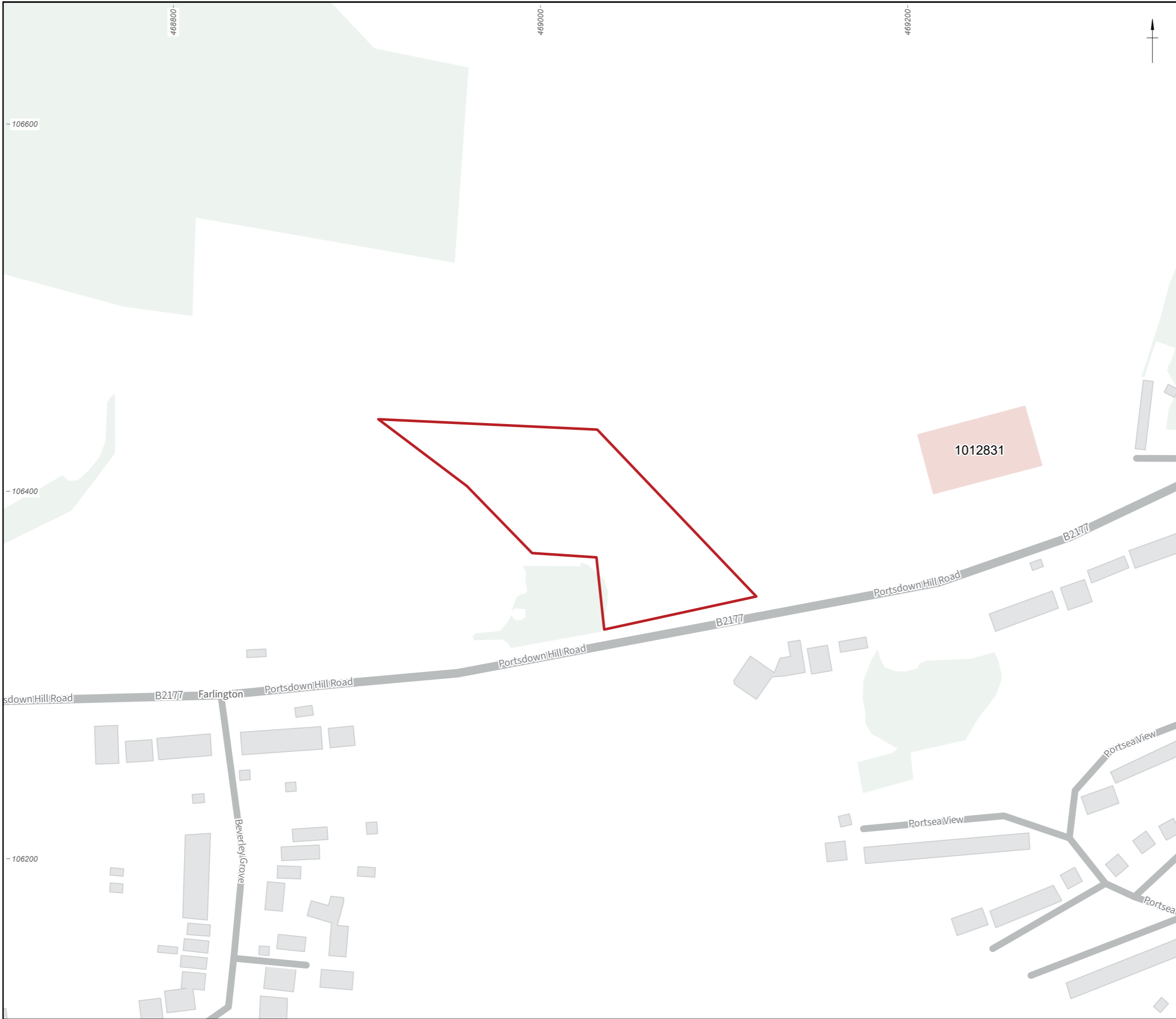
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Figure 14: Detailed gradiometer survey results: greyscale plot GS001



Pipeline sections

- ▭ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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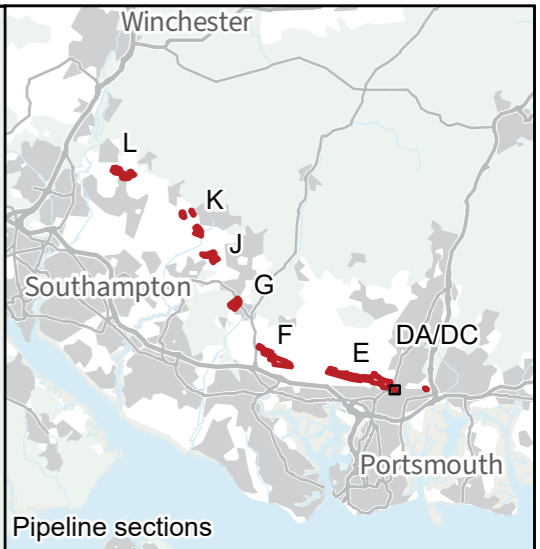
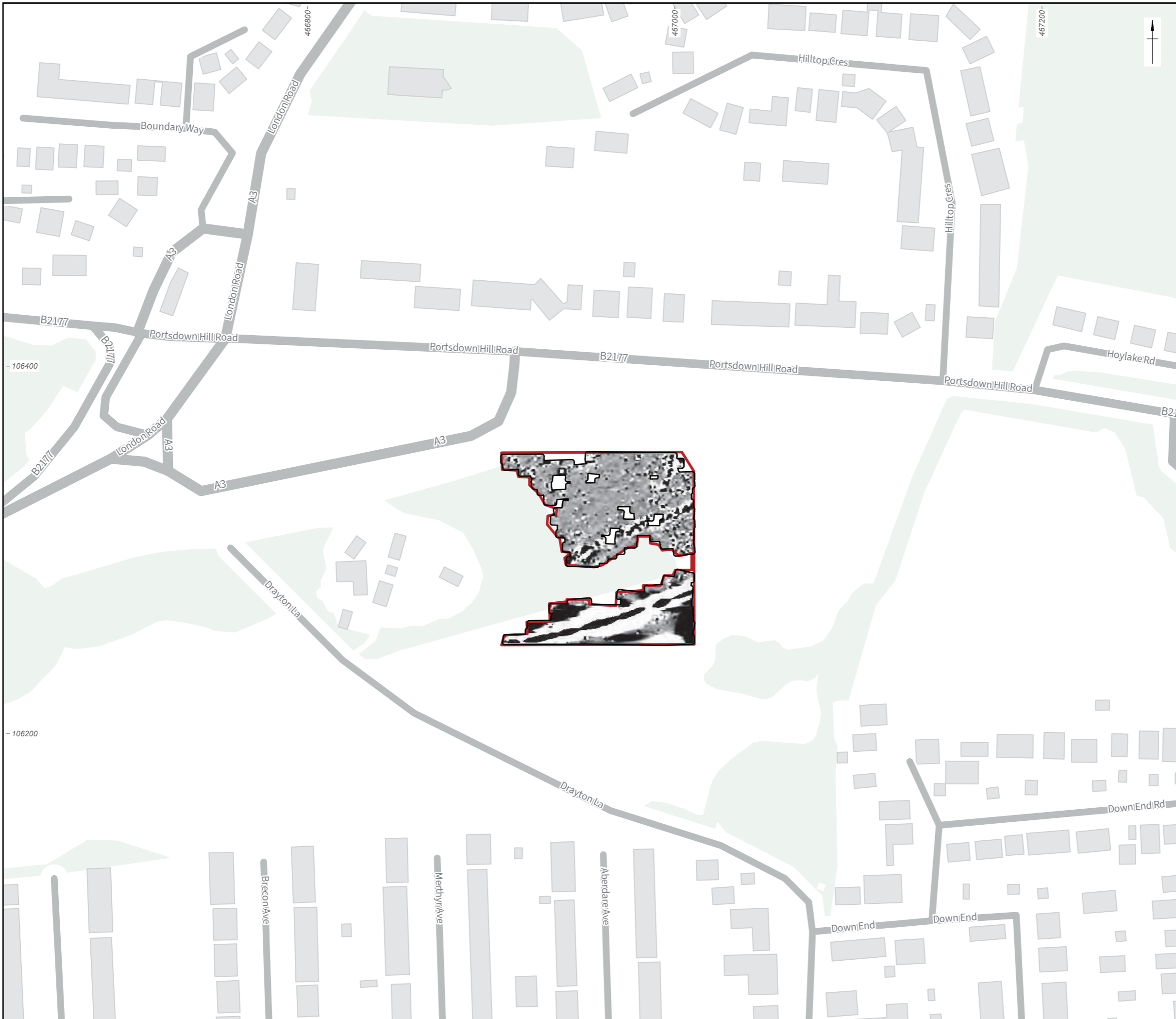
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Figure 15: Detailed gradiometer survey results: interpretation GS001



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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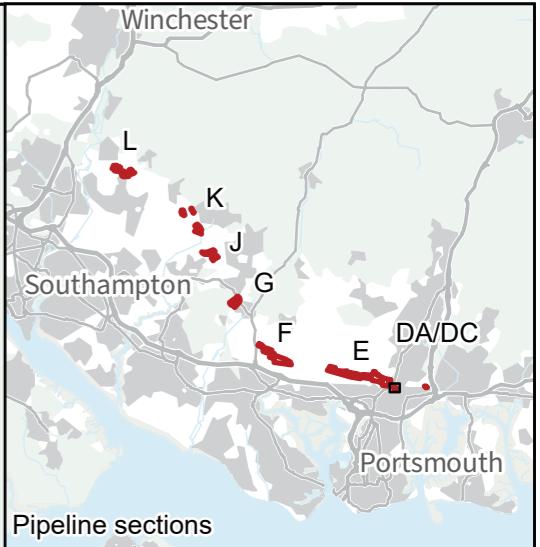
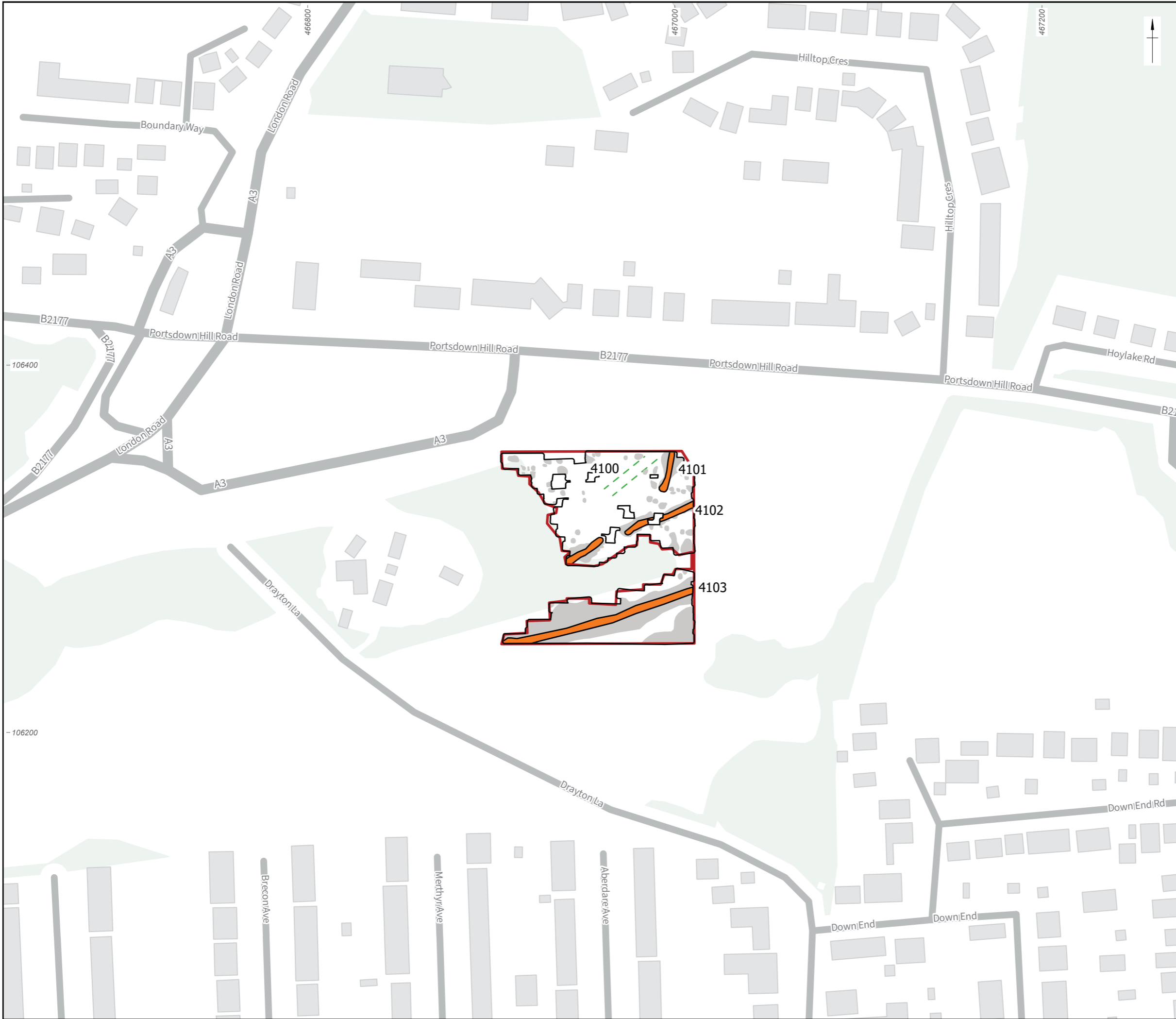
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Figure 16: Detailed gradiometer survey results: greyscale plot GS002



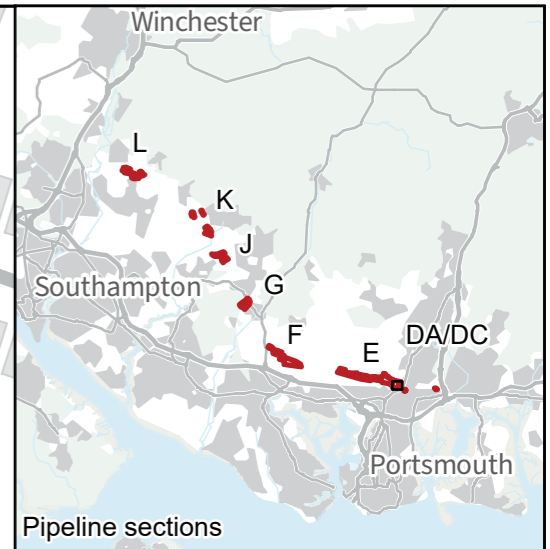
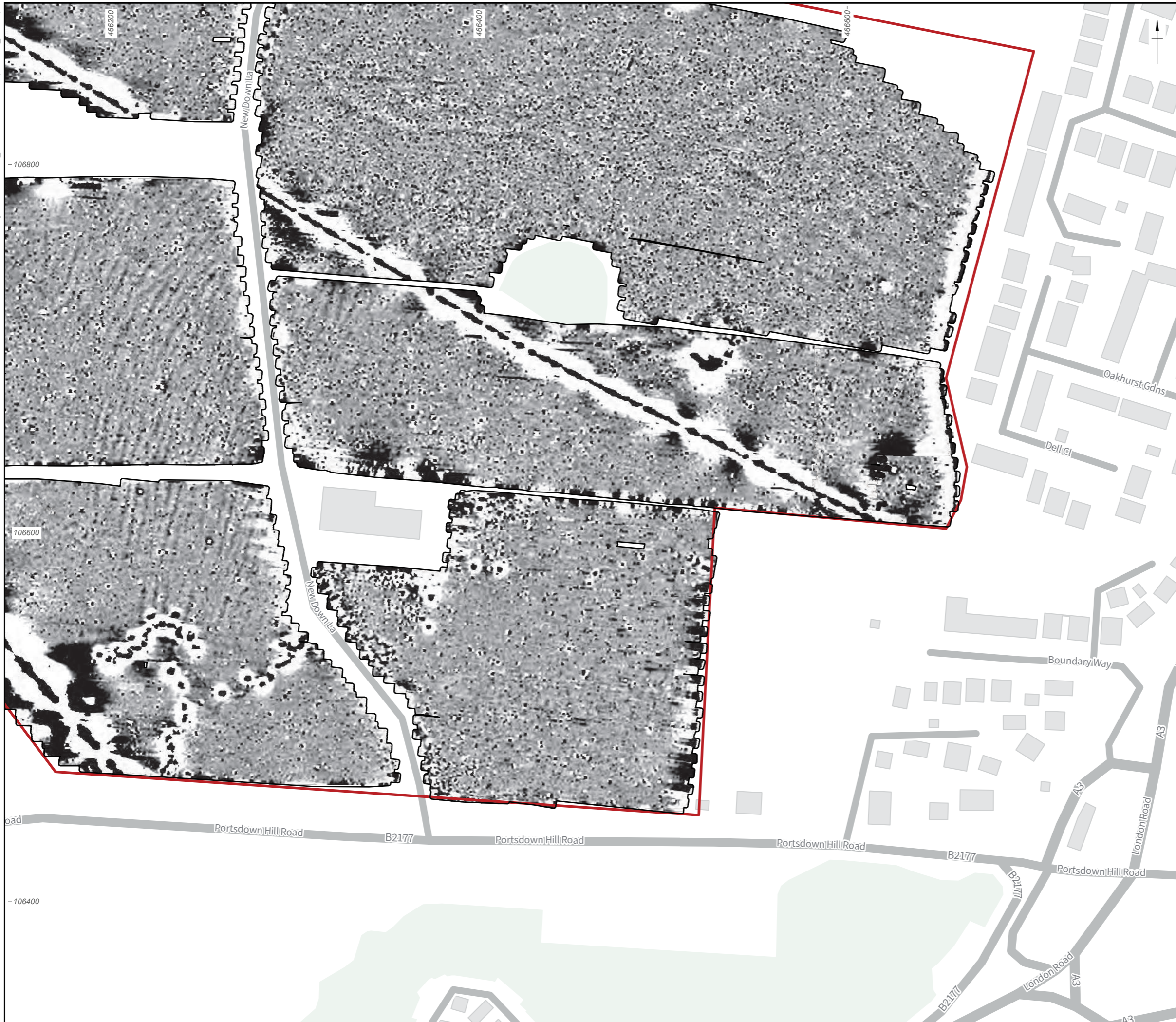
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



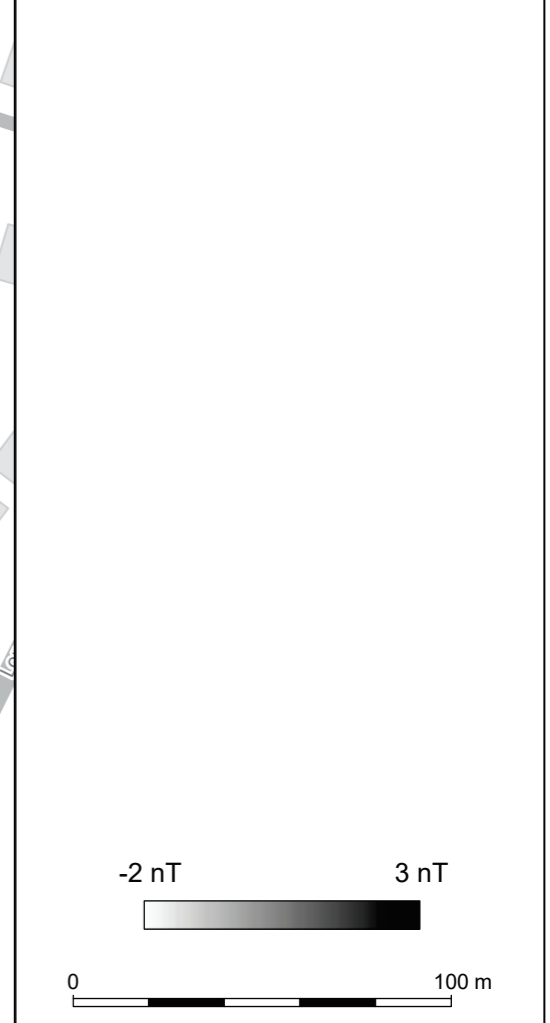
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Figure 17: Detailed gradiometer survey results: interpretation GS002



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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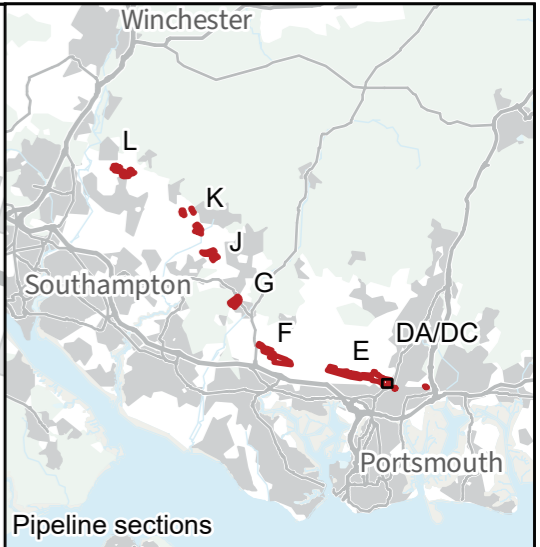
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Figure 18: Detailed gradiometer survey results: greyscale plot GS003, GS004, GS005, GS023 and GS024

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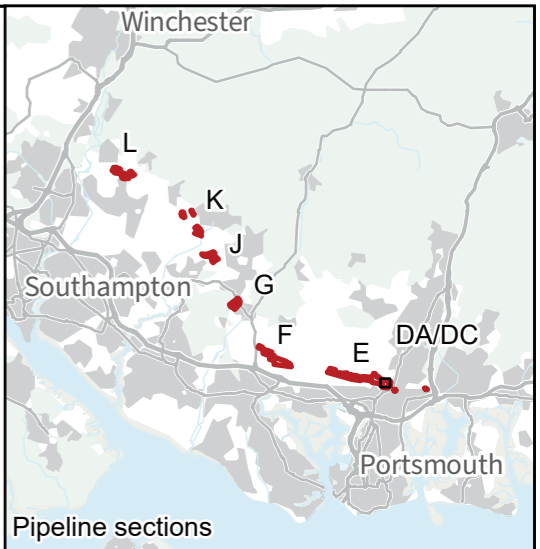
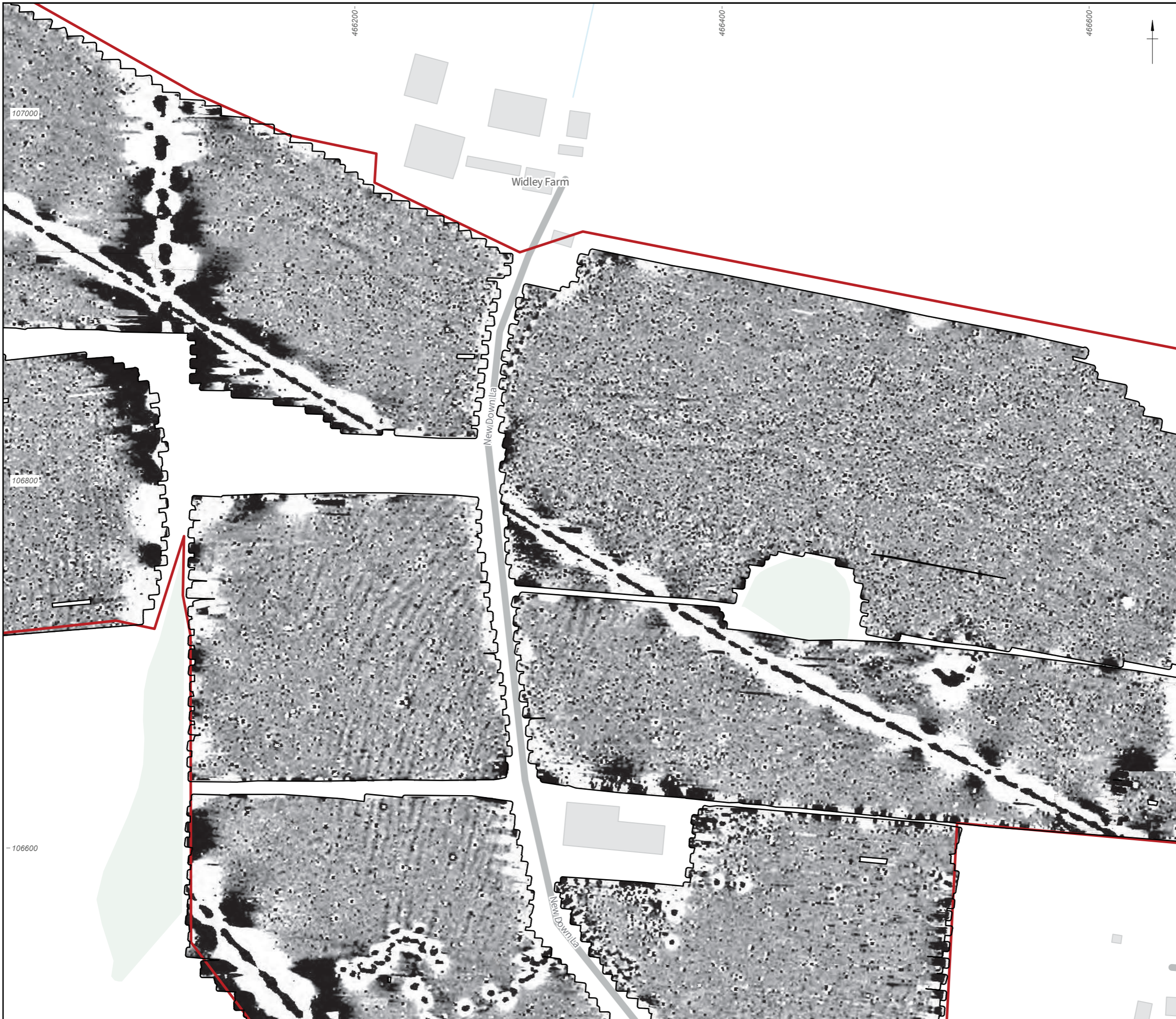
- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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Figure 19: Detailed gradiometer survey results: interpretation GS003, GS004, GS005, GS023 and GS024



Pipeline sections

- Site boundary
- Detailed survey extent
- Scheduled monuments

-2 nT 3 nT



0 100 m

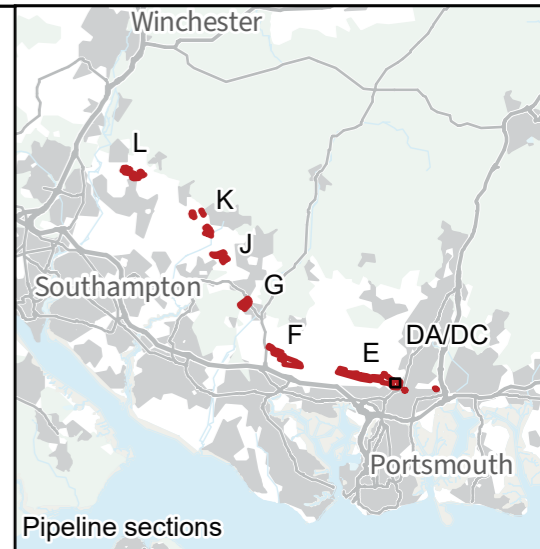


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Figure 20: Detailed gradiometer survey results: greyscale plot GS003, GS004, GS005, GS023 and GS024

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- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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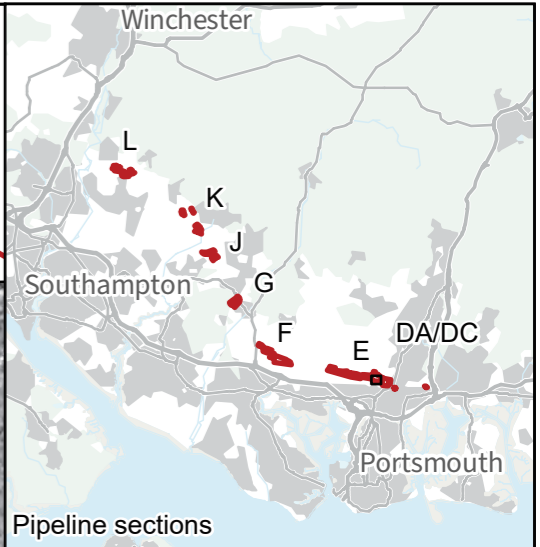
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Figure 21: Detailed gradiometer survey results: interpretation GS003, GS004, GS005, GS023 and GS024



- Pipeline sections
- ▬ Site boundary
 - Detailed survey extent
 - Scheduled monuments



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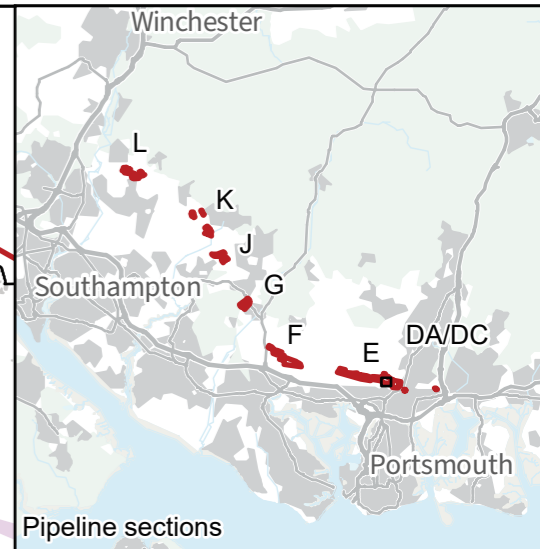
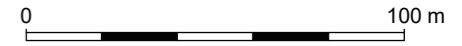
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Figure 22: Detailed gradiometer survey results: greyscale plot GS004, GS005, GS006 and GS024

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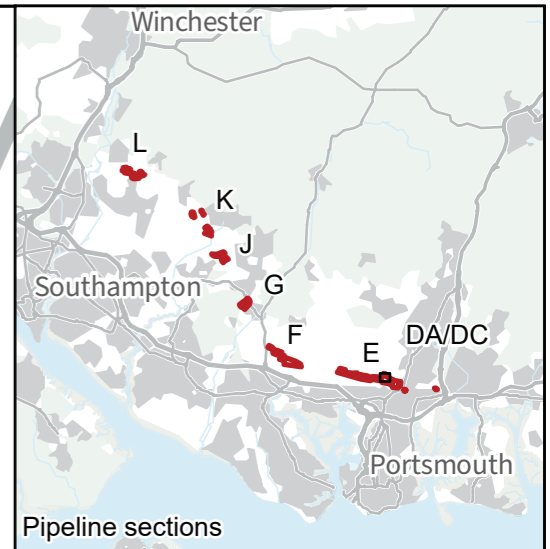
- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



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Figure 23: Detailed gradiometer survey results: interpretation GS004, GS005, GS006 and GS024



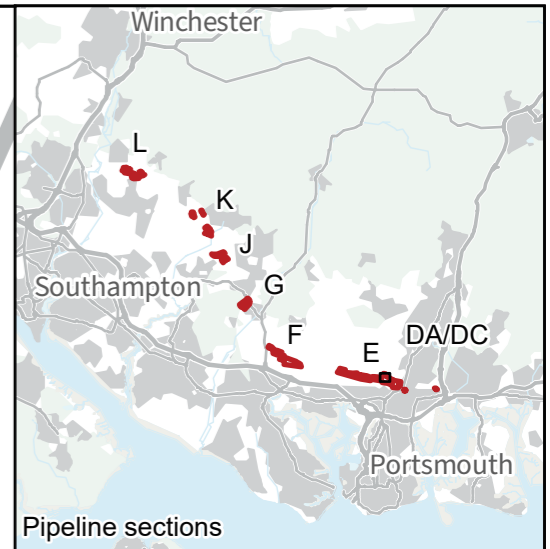
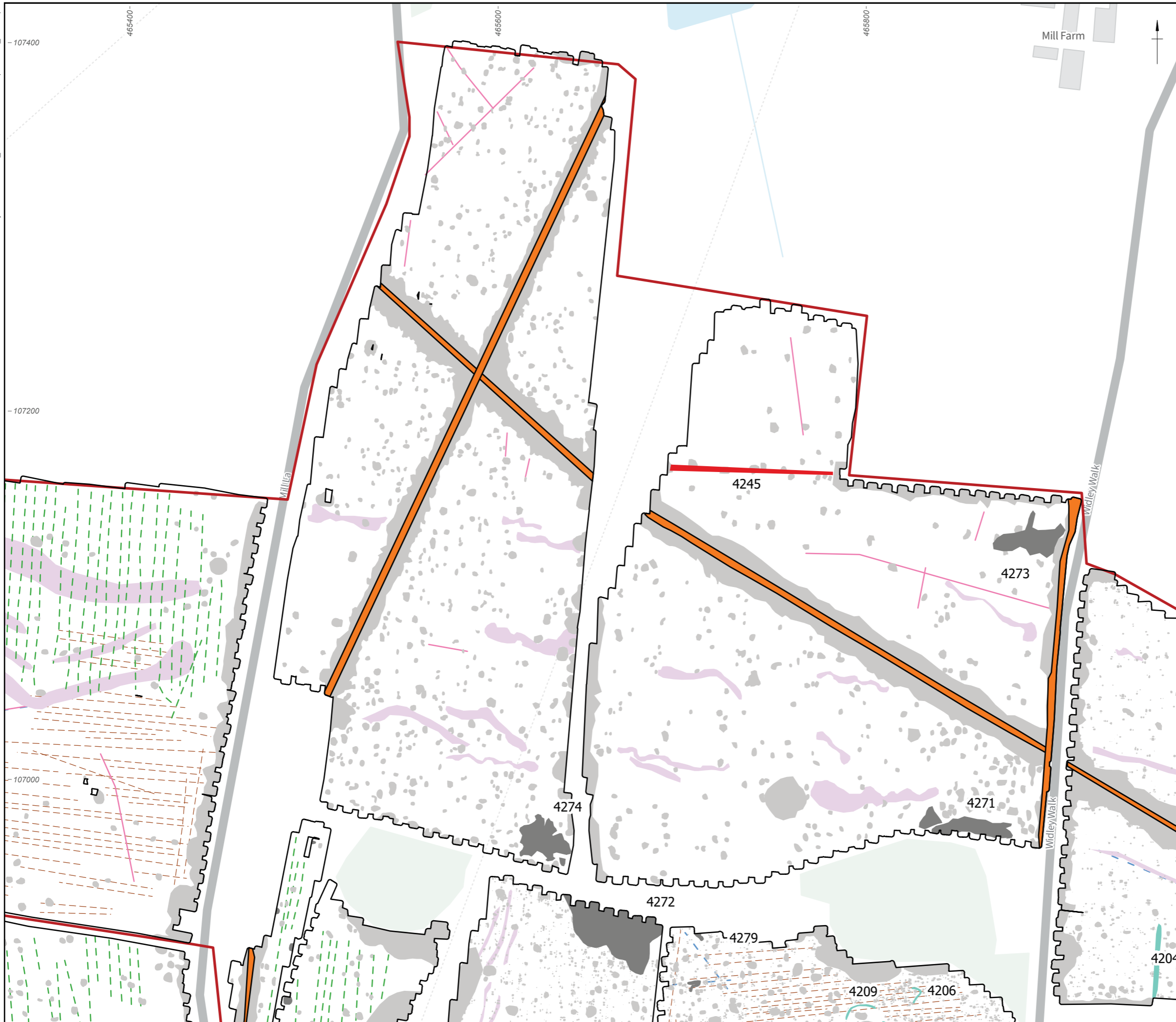
- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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Figure 24: Detailed gradiometer survey results: greyscale plot GS004, GS006, GS025 and GS026



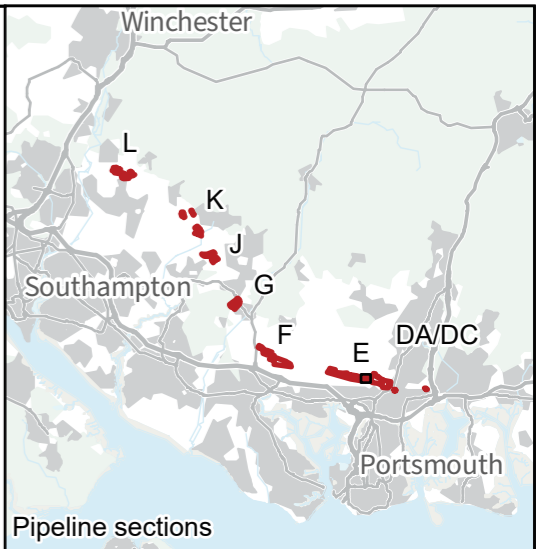
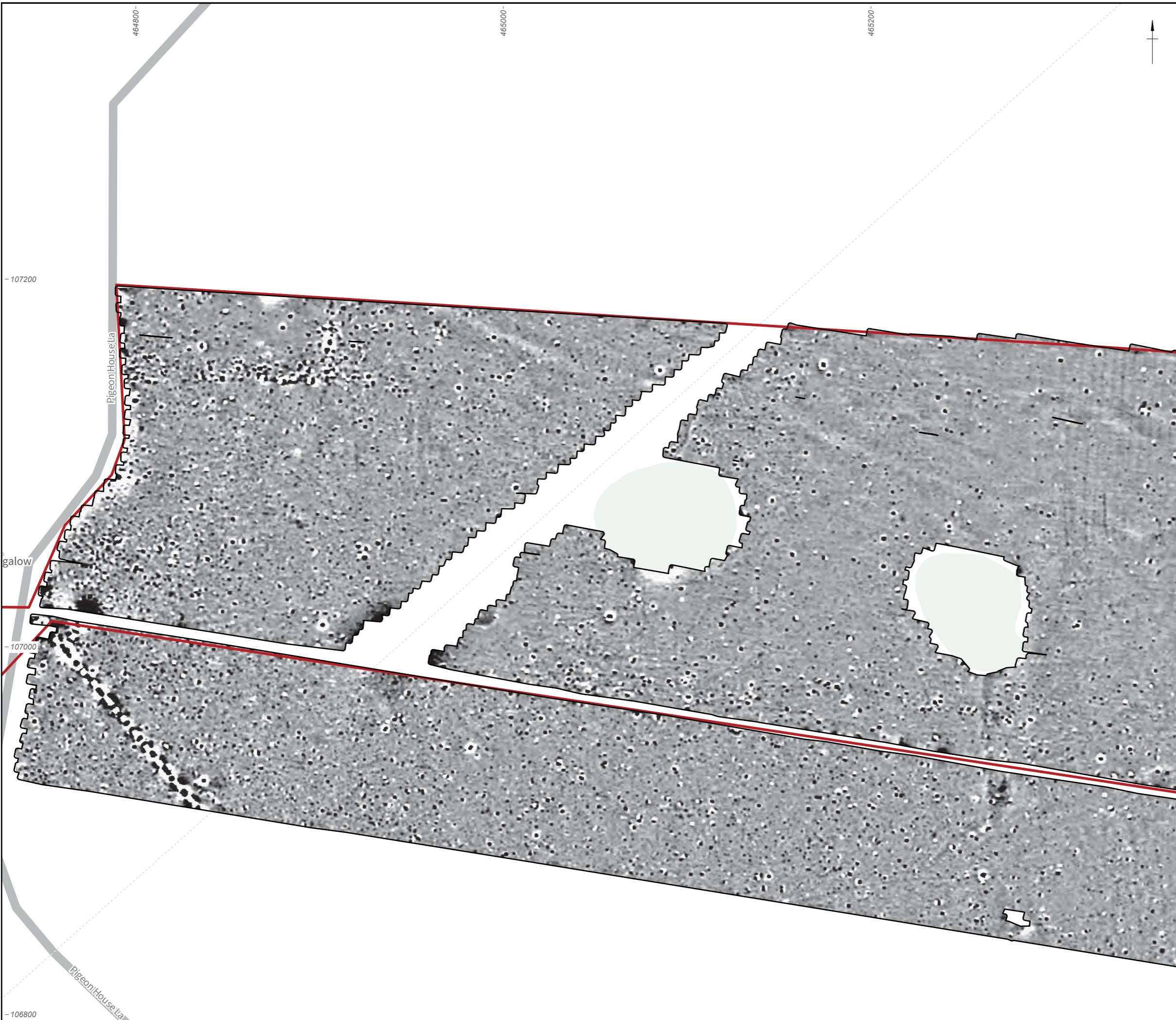
- ▭ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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Figure 25: Detailed gradiometer survey results: interpretation GS004, GS006, GS025 and GS026



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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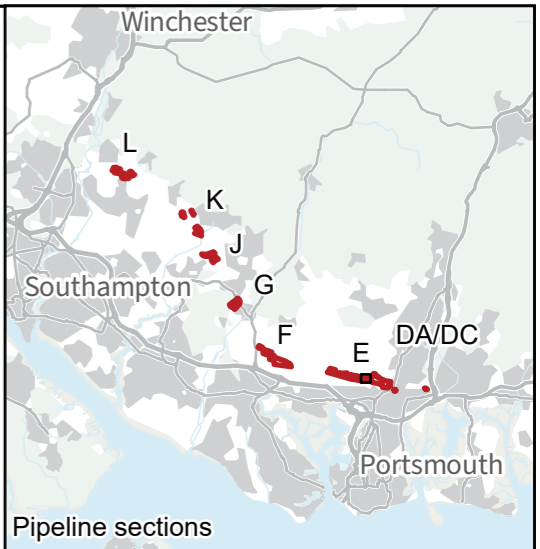
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Figure 26: Detailed gradiometer survey results: greyscale plot GS007 and GS027



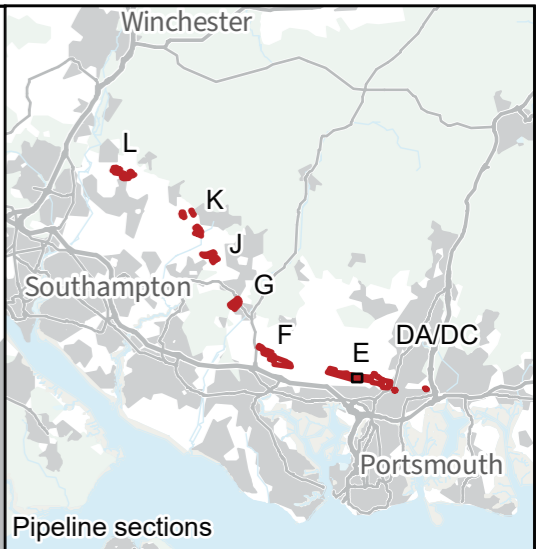
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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Figure 27: Detailed gradiometer survey results: interpretation GS007 and GS027



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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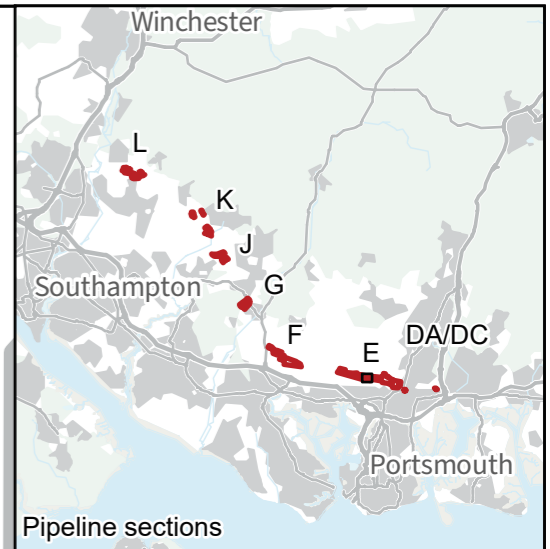
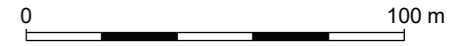
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Figure 28: Detailed gradiometer survey results: greyscale plot GS008



- ▭ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



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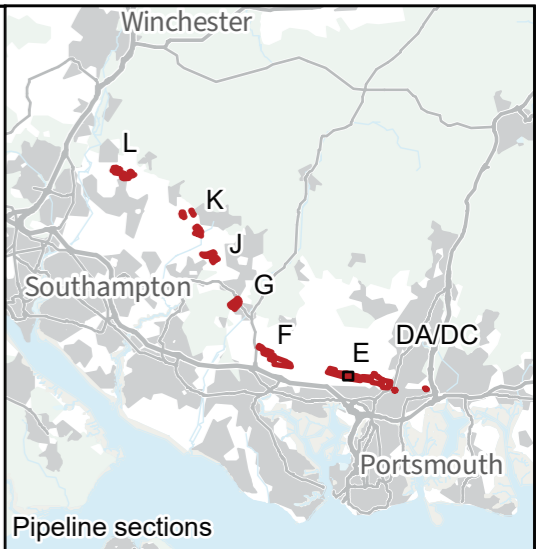
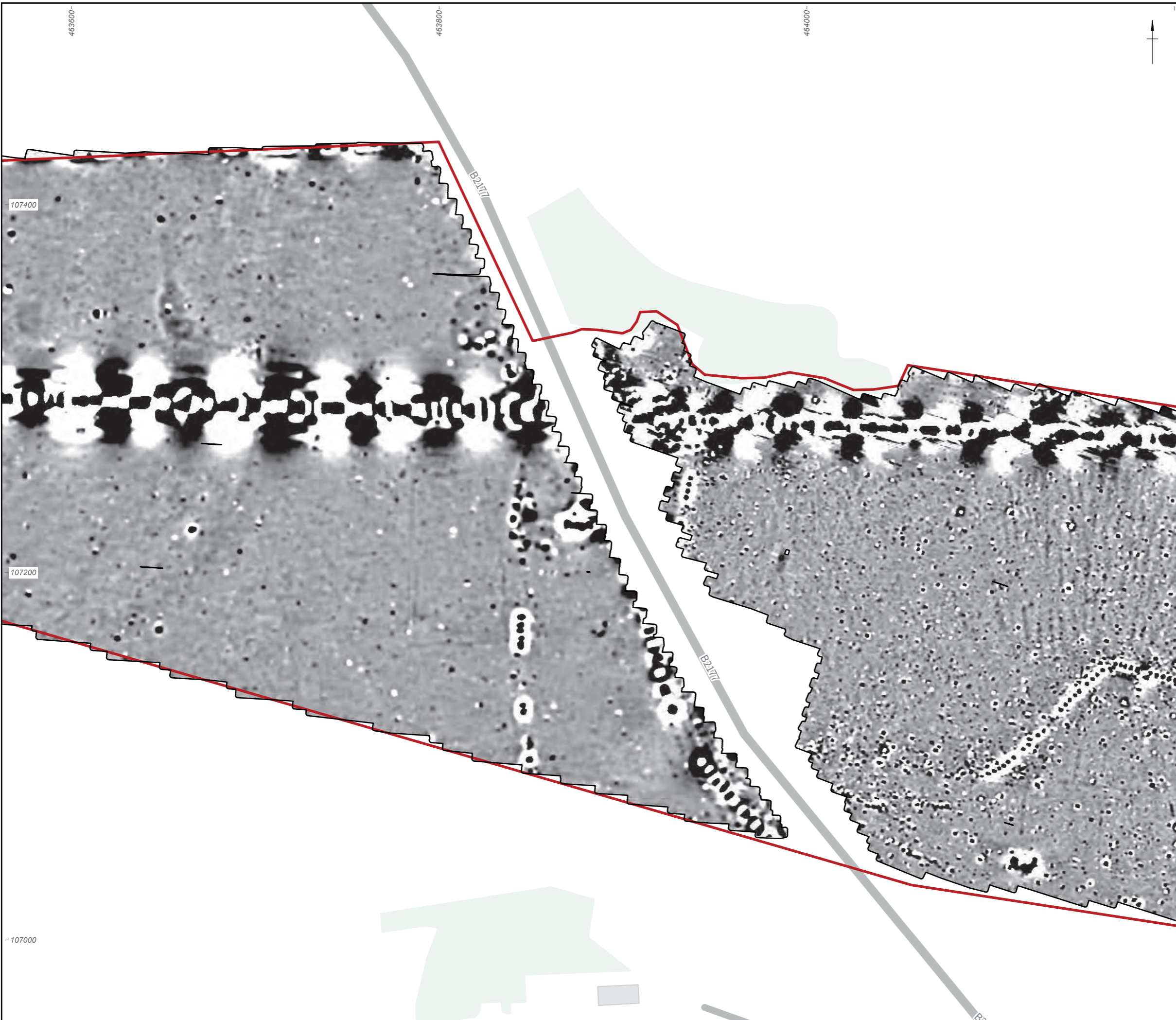
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Scale: 1:2000 at A3	Revision: 1	

Figure 29: Detailed gradiometer survey results: interpretation GS008



- Pipeline sections
- ▭ Site boundary
 - Detailed survey extent
 - Scheduled monuments



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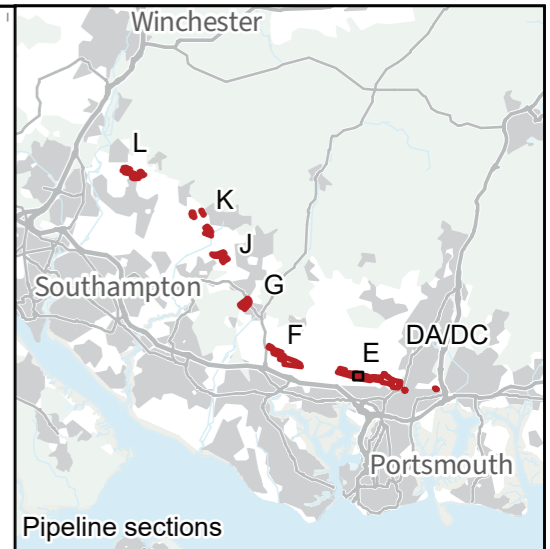
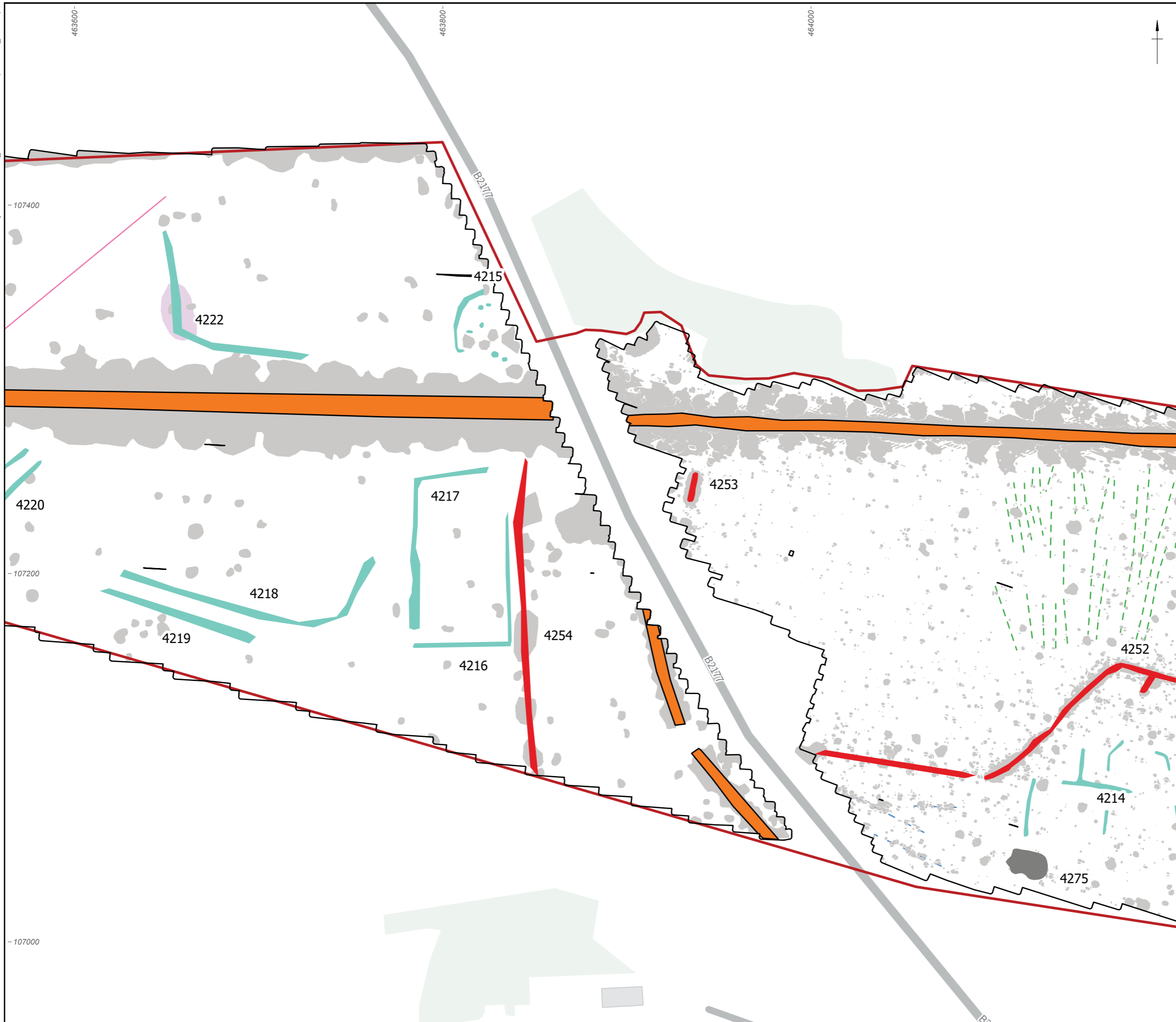
Date: 09/11/2023	Created by: BH	
Scale: 1:2000 at A3	Revision: 1	

Figure 30: Detailed gradiometer survey results: greyscale plot GS008 and GS009

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Pipeline sections

- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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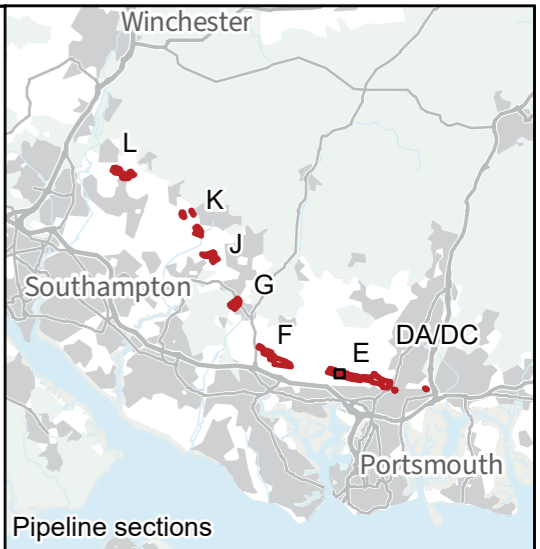
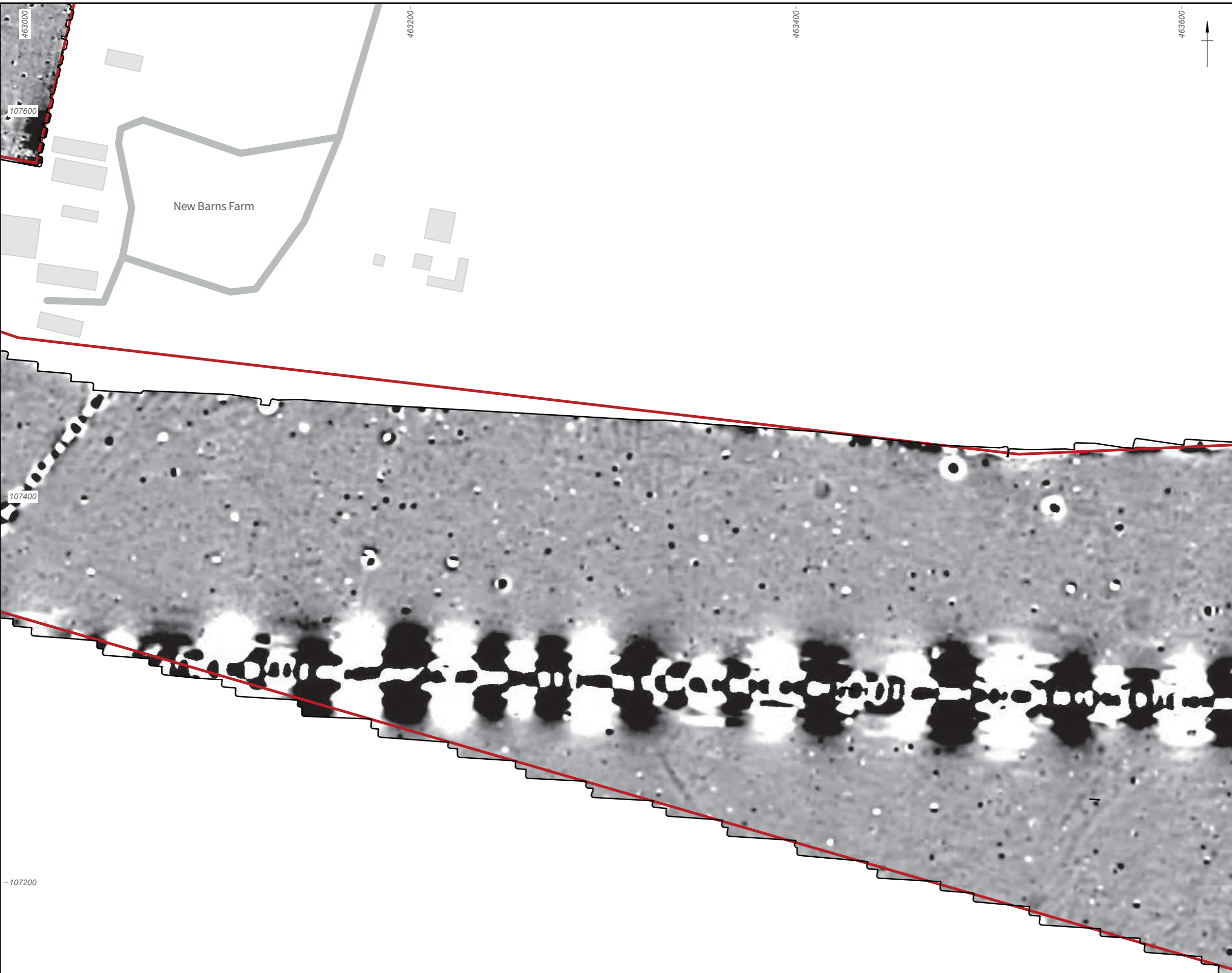
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Scale: 1:2000 at A3	Revision: 1	

Figure 31: Detailed gradiometer survey results: interpretation GS008 and GS009

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- Pipeline sections
- ▬ Site boundary
 - Detailed survey extent
 - Scheduled monuments



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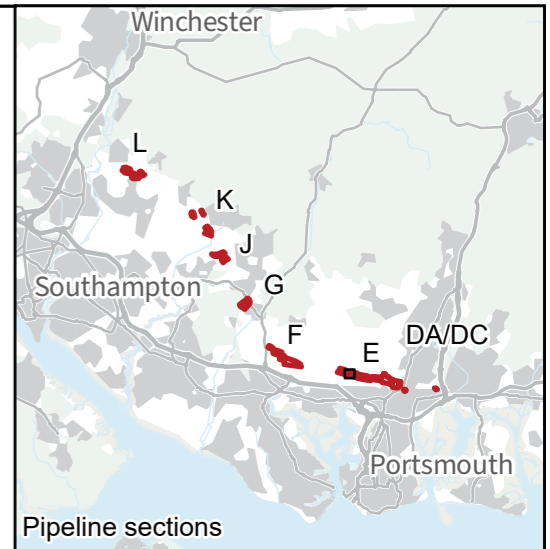
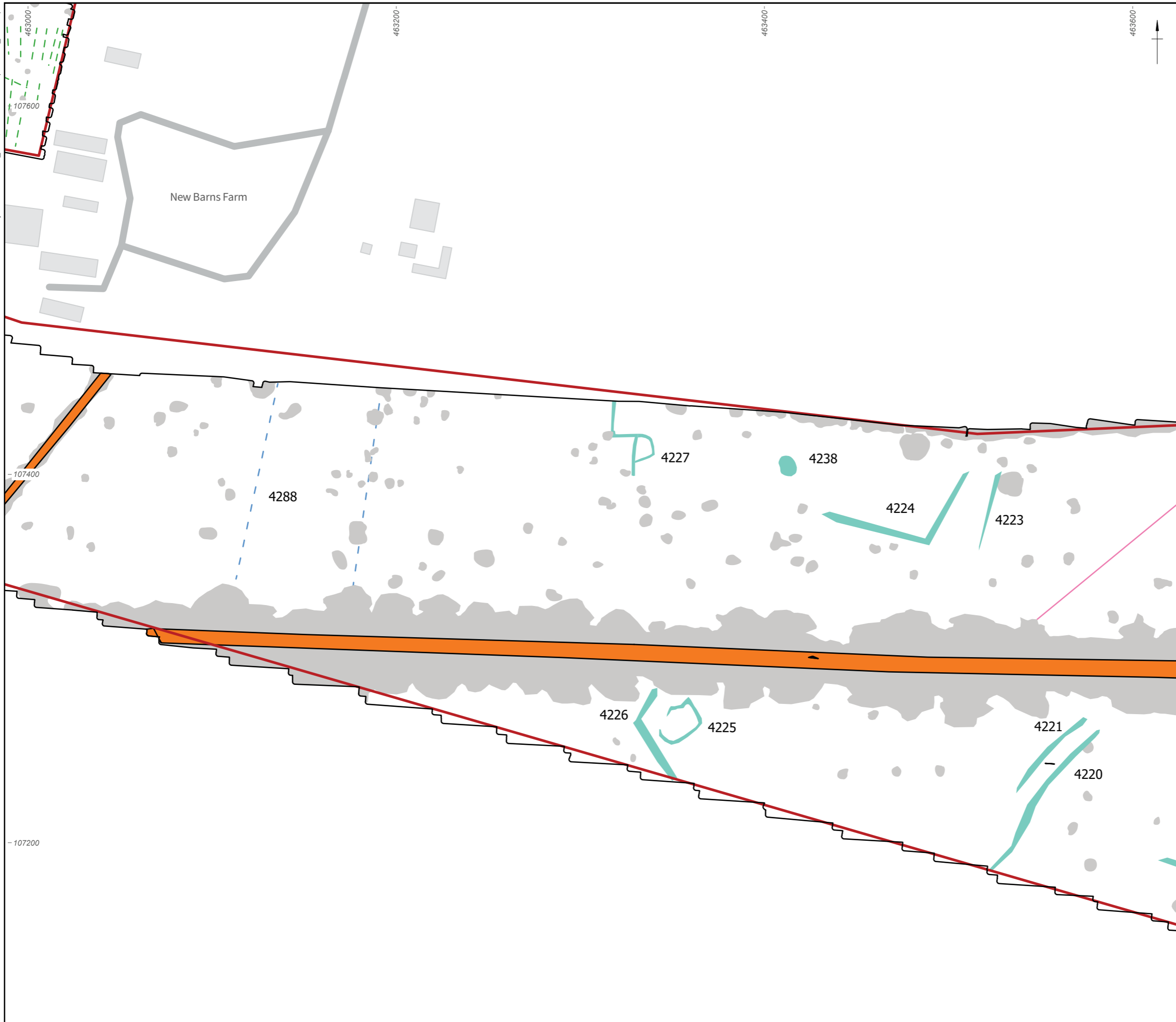
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Figure 32: Detailed gradiometer survey results: greyscale plot GS009

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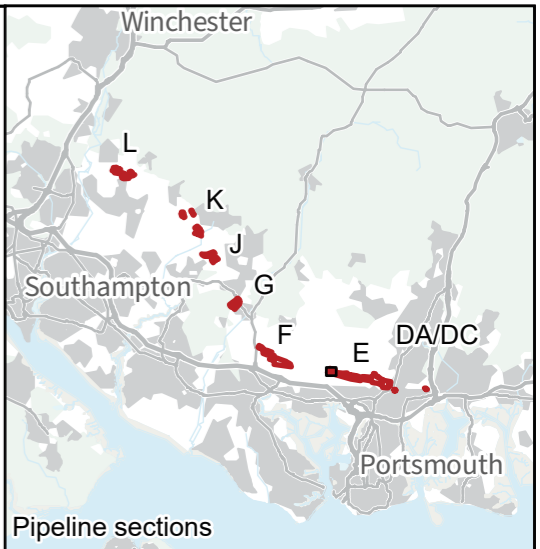
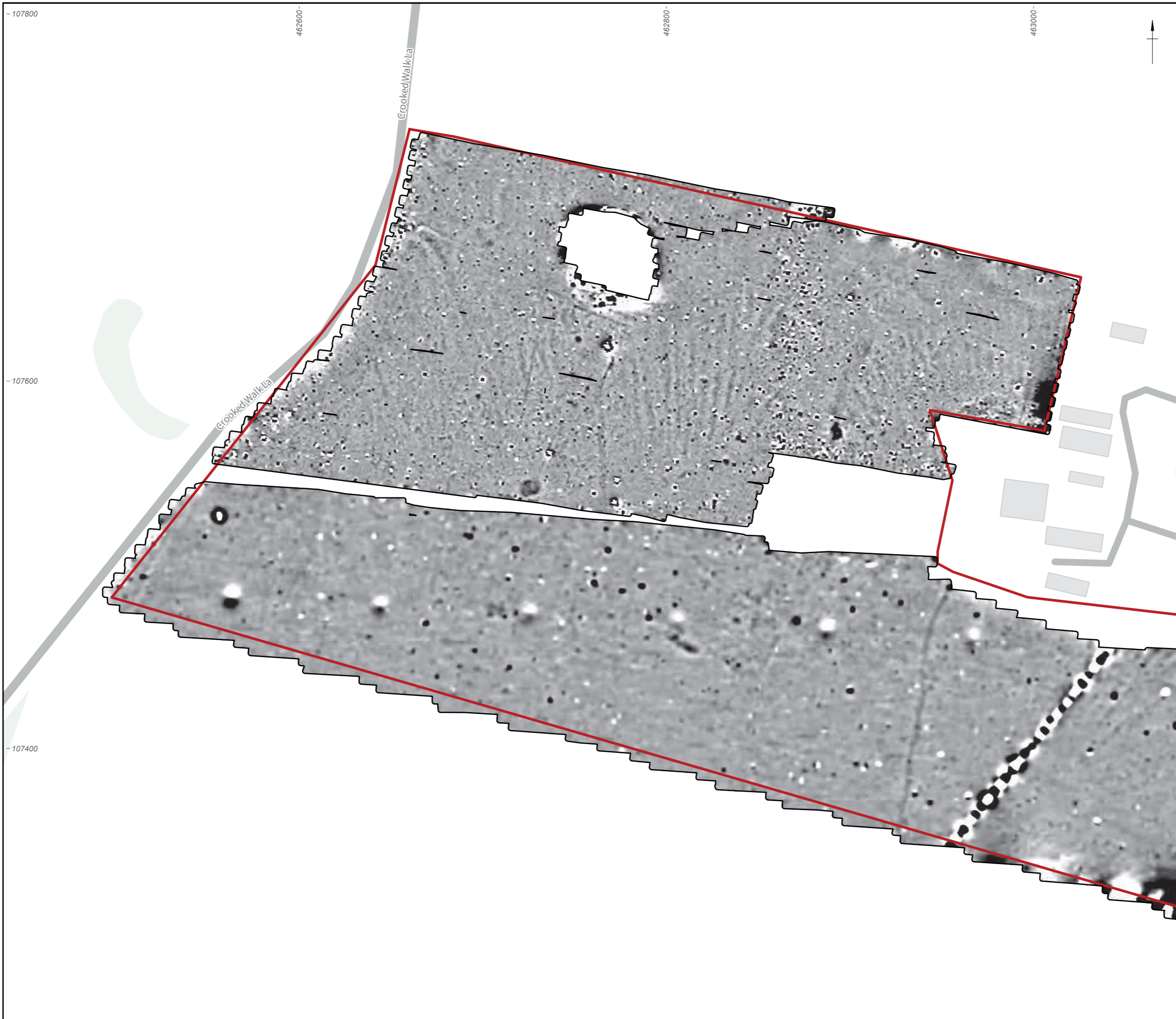


- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

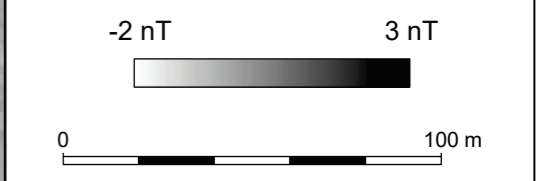
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Figure 33: Detailed gradiometer survey results: interpretation GS009		



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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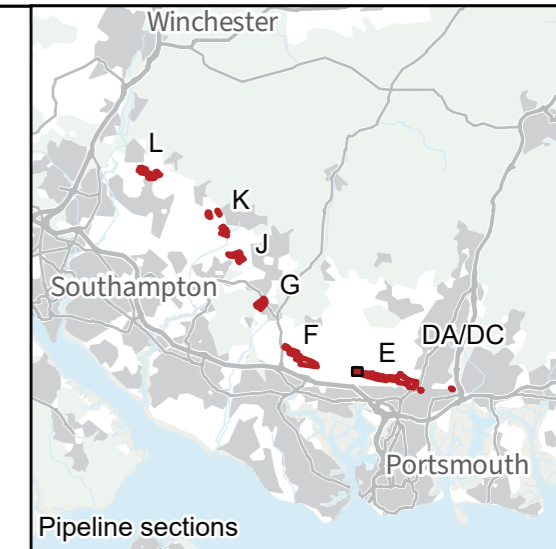
Date: 09/11/2023	Created by: BH	
Scale: 1:2000 at A3	Revision: 1	

Figure 34: Detailed gradiometer survey results: greyscale plot GS010



Pipeline sections

- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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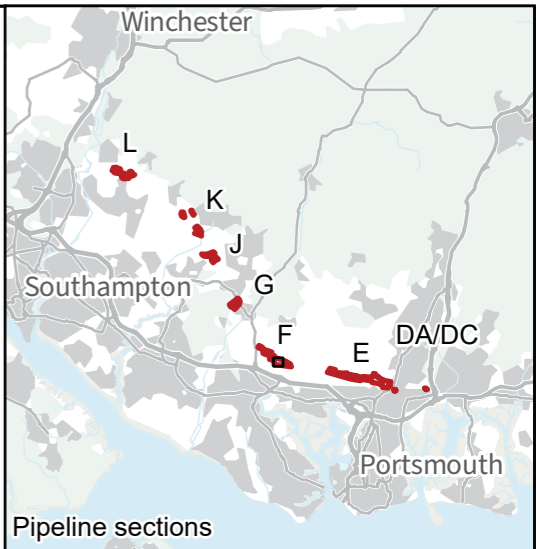
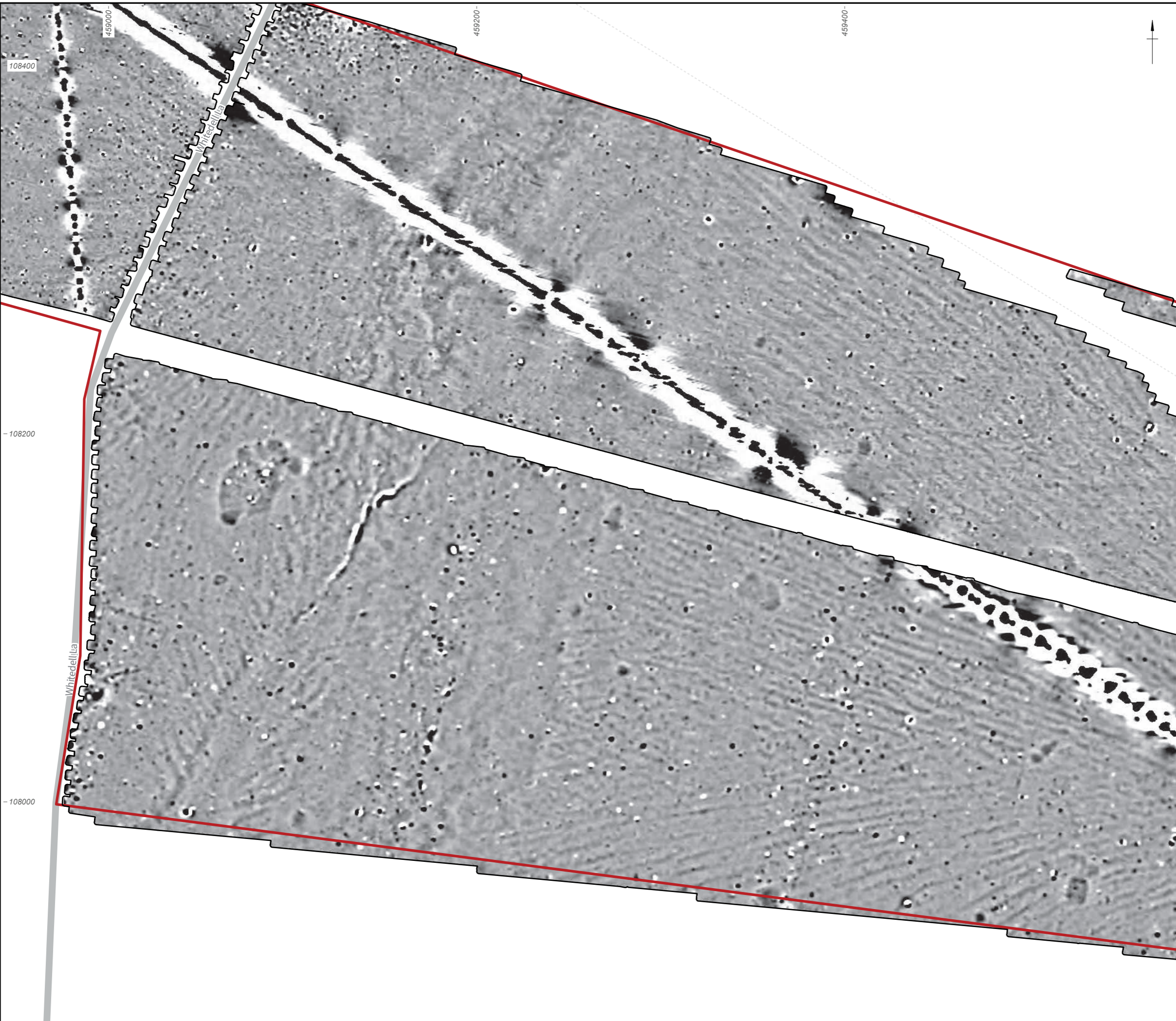
Date: 09/11/2023	Created by: BH	
Scale: 1:2000 at A3	Revision: 1	

Figure 35: Detailed gradiometer survey results: interpretation GS010



- Pipeline sections
- ▭ Site boundary
 - Detailed survey extent
 - Scheduled monuments



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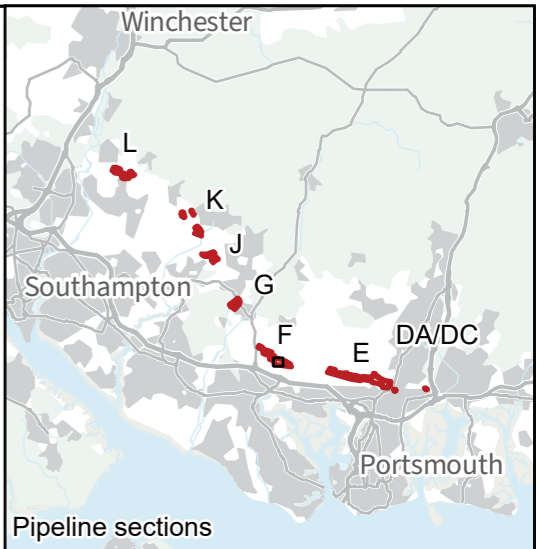
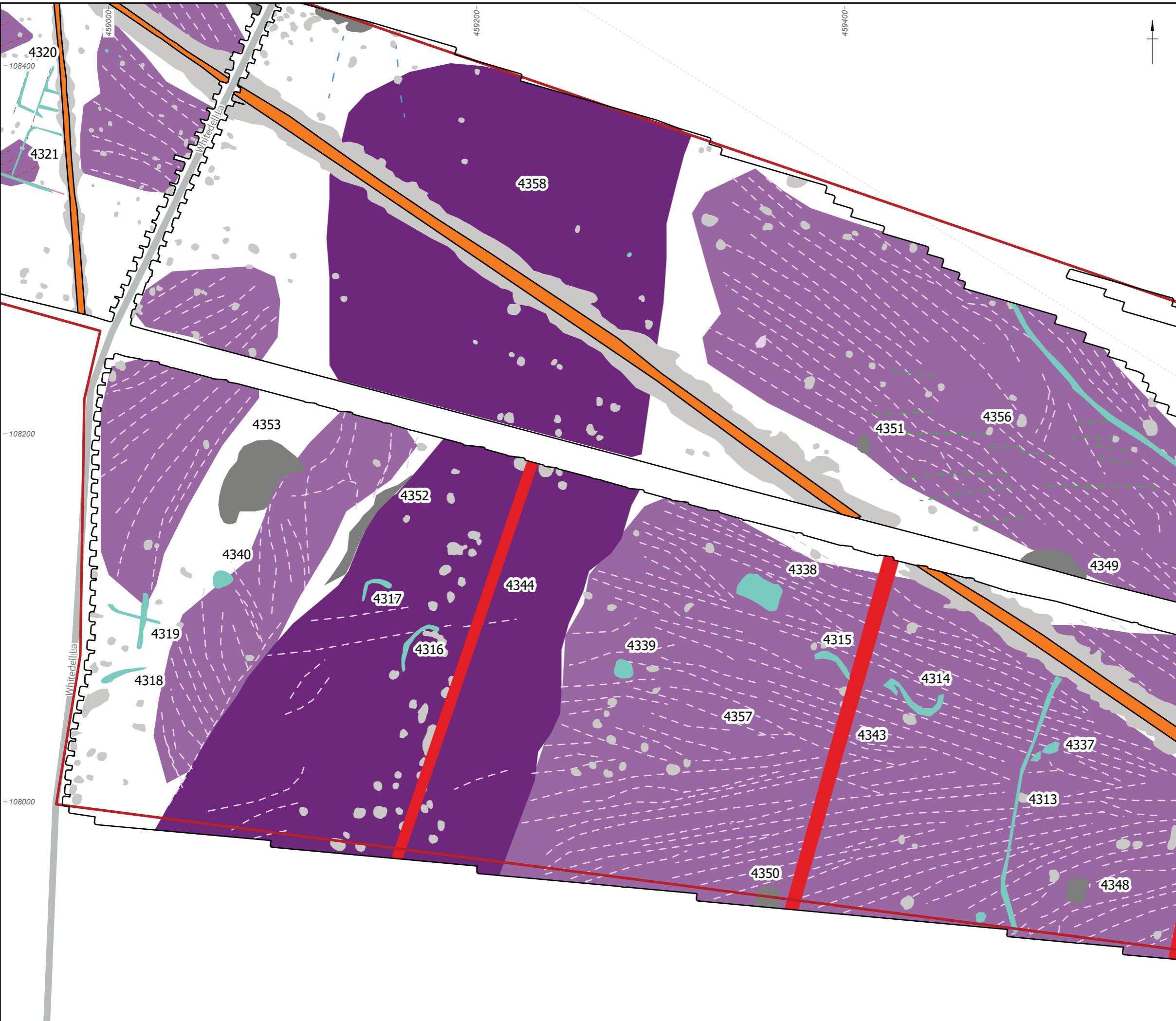
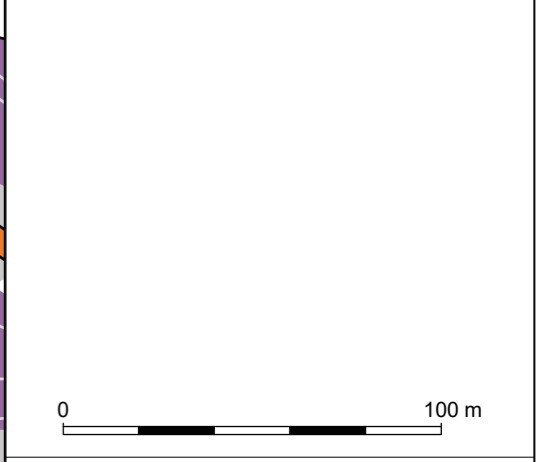
Date: 09/11/2023	Created by: BH	
Scale: 1:2000 at A3	Revision: 1	

Figure 38: Detailed gradiometer survey results: greyscale plot GS010



- ▬ Site boundary
- ▬ Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- ▬ Historic cultivation
- Geology
- ▬ Geological trend
- Geomorphology
- ▬ Agricultural feature
- ▬ Drain
- ▬ Trend
- Modern service
- Increased response
- Ferrous



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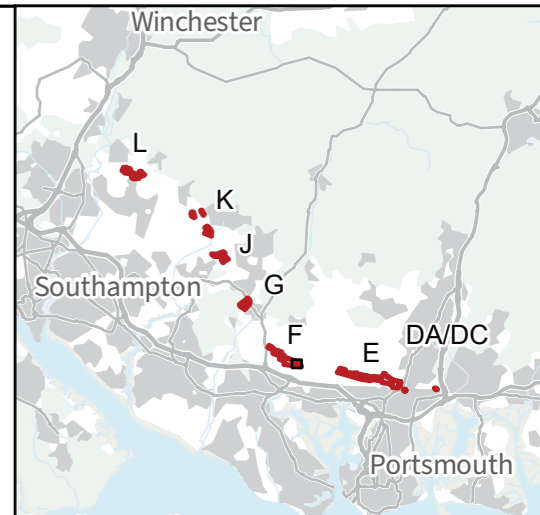
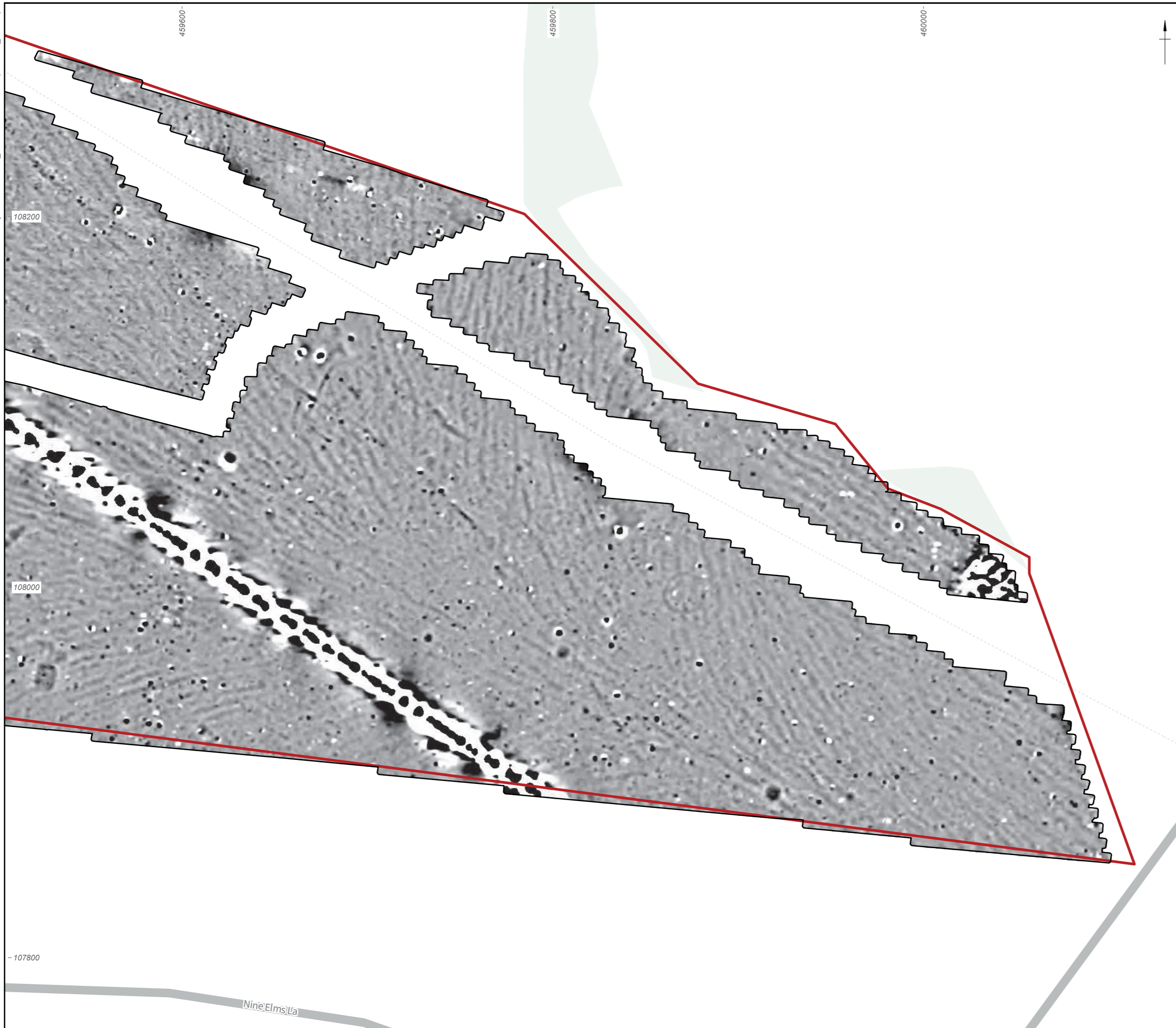
Date: 09/11/2023	Created by: BH	
Scale: 1:2000 at A3	Revision: 1	

Figure 39: Detailed gradiometer survey results: interpretation GS010

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- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments

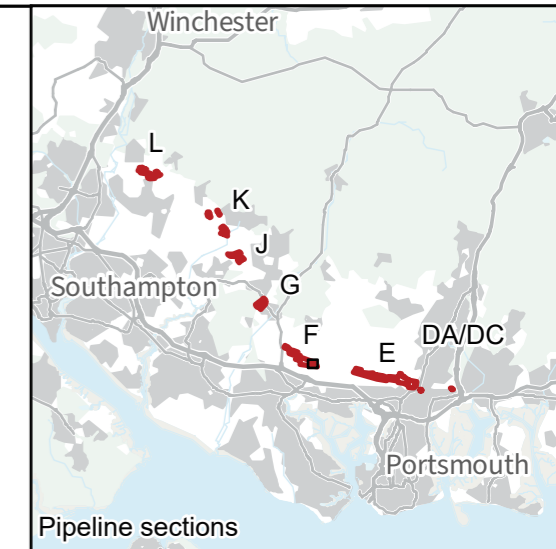
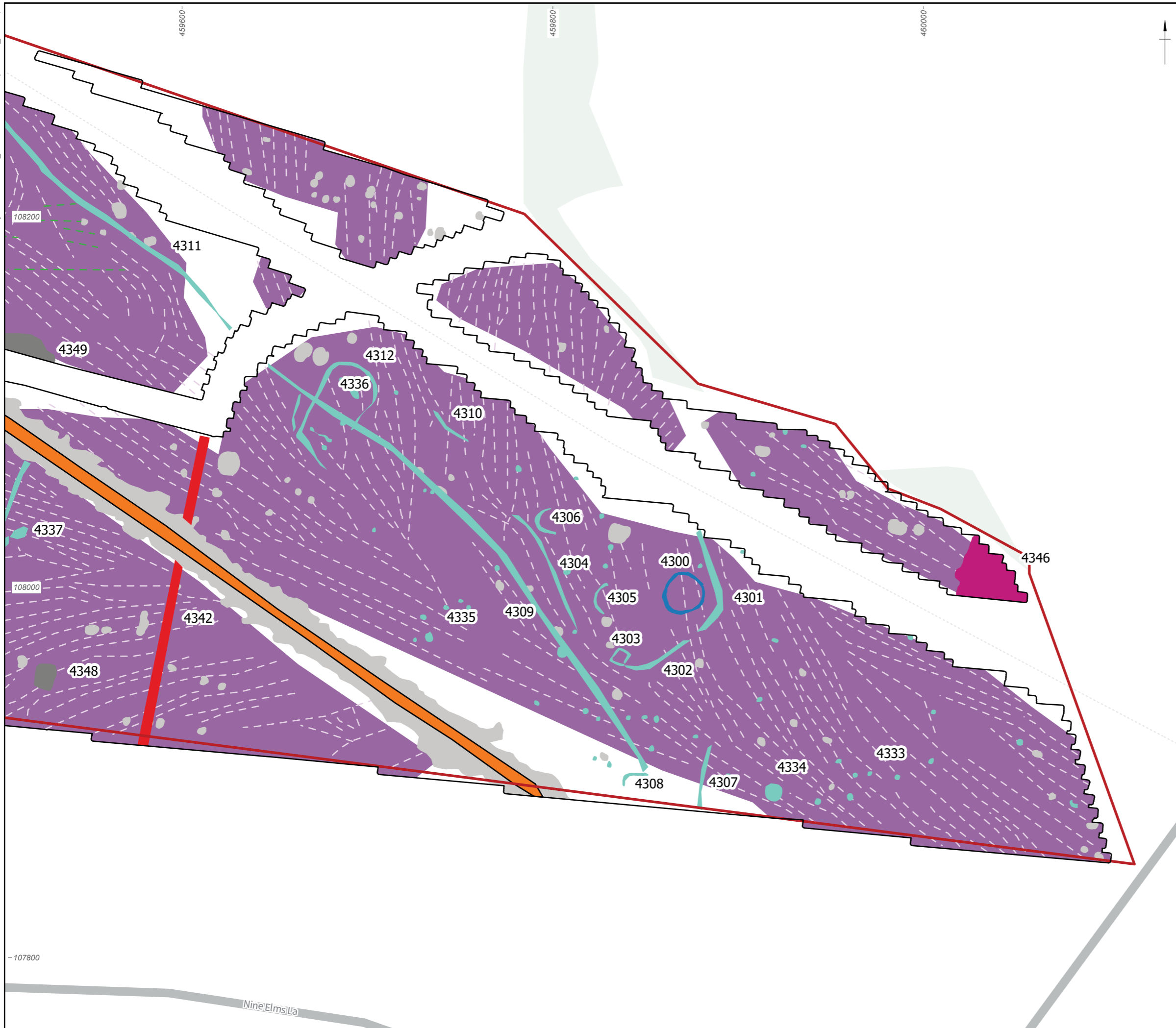


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Figure 36: Detailed gradiometer survey results: greyscale plot GS010

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Legend

- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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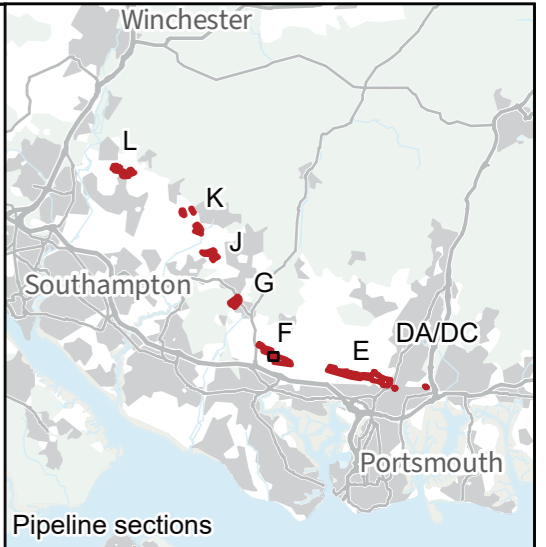
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Scale: 1:2000 at A3	Revision: 1	

Figure 37: Detailed gradiometer survey results: interpretation GS010



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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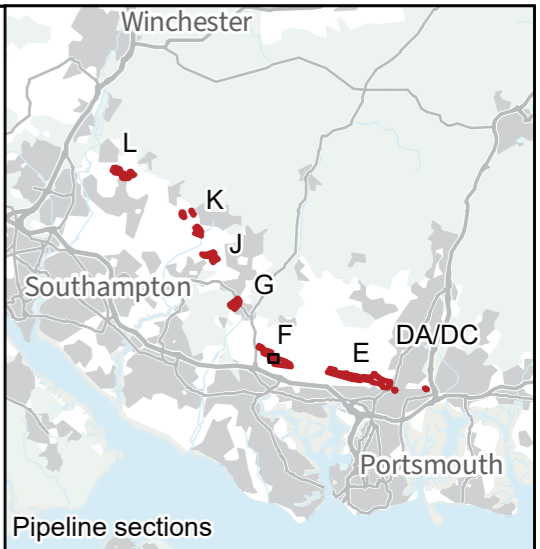
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Scale: 1:2000 at A3	Revision: 1	

Figure 40: Detailed gradiometer survey results: greyscale plot GS012



- ▭ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

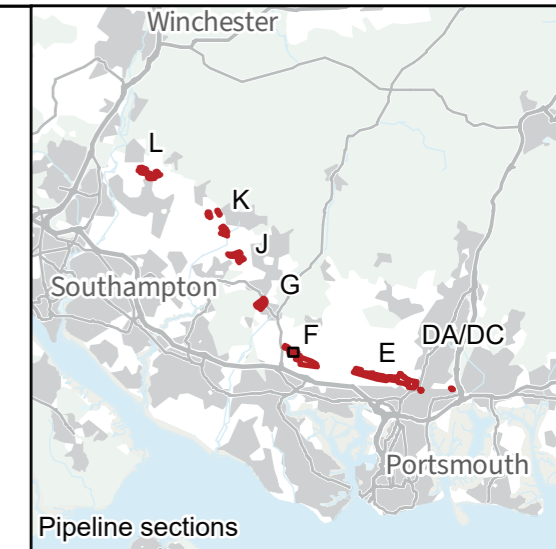
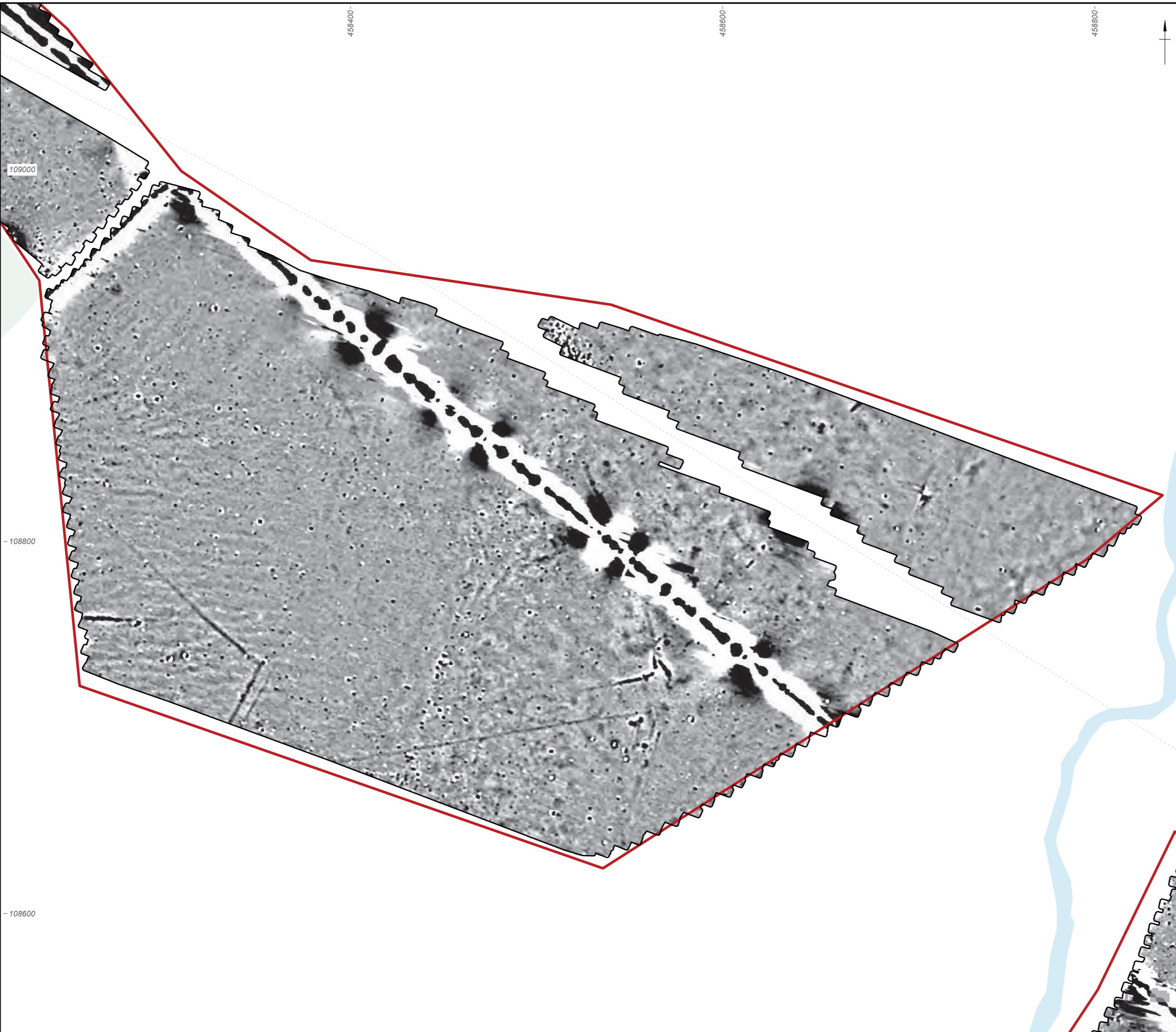
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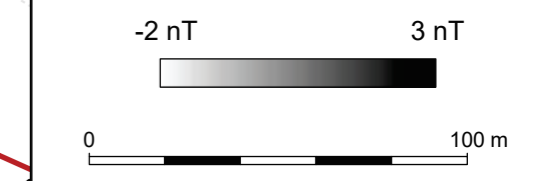
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Scale: 1:2000 at A3	Revision: 1	

Figure 41: Detailed gradiometer survey results: interpretation GS012

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- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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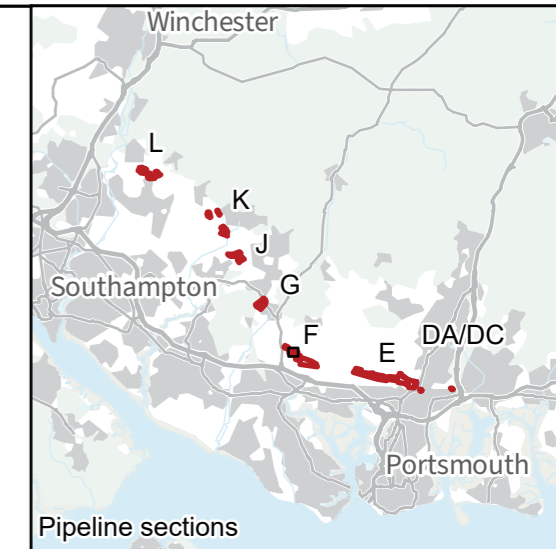
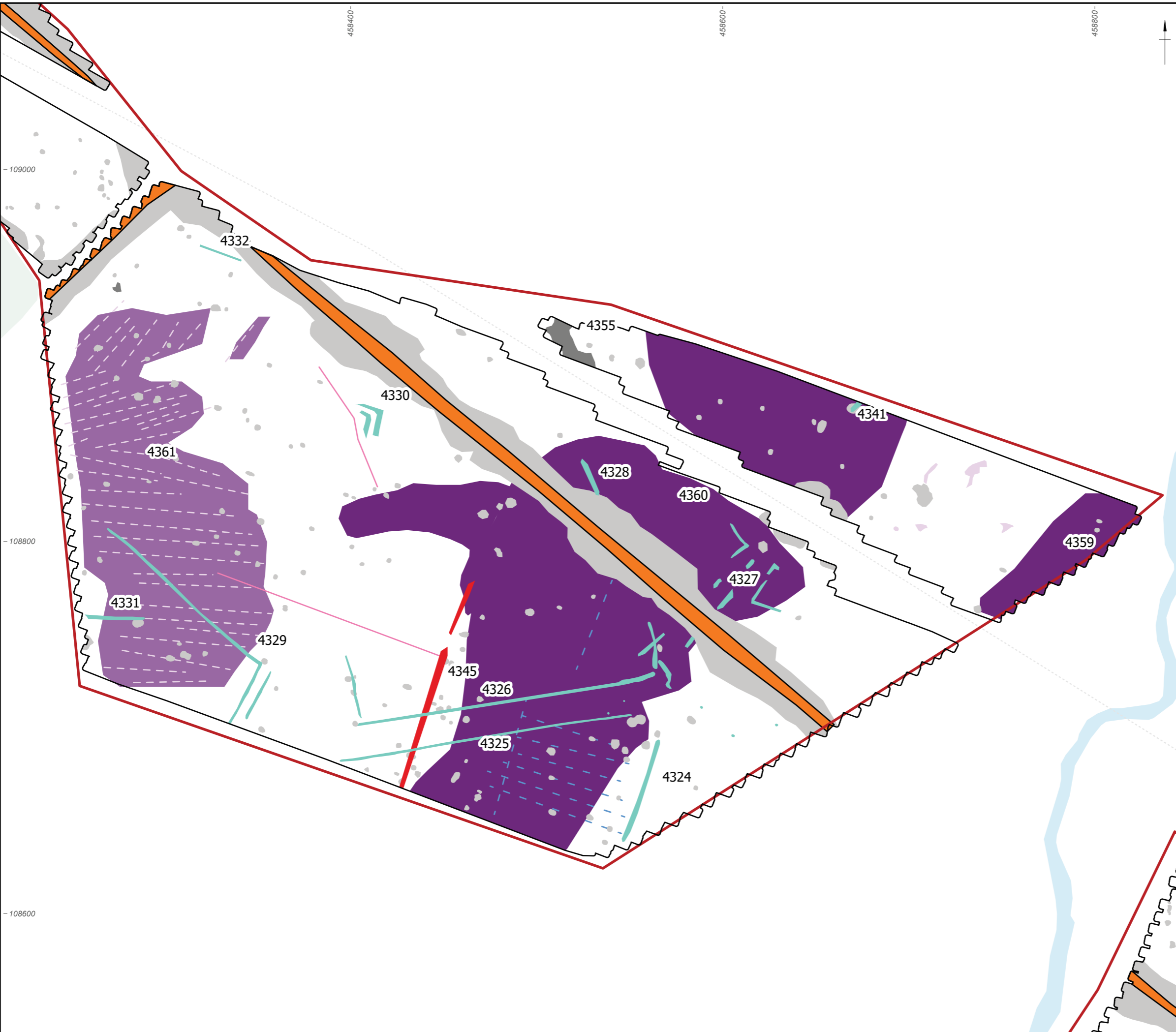
Date: 09/11/2023	Created by: BH	
Scale: 1:2000 at A3	Revision: 1	

Figure 42: Detailed gradiometer survey results: greyscale plot GS012

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Pipeline sections

- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- ▬ Former field boundary
- Historic landscape feature
- - - Historic cultivation
- Geology
- - - Geological trend
- Geomorphology
- - - Agricultural feature
- - - Drain
- ▬ Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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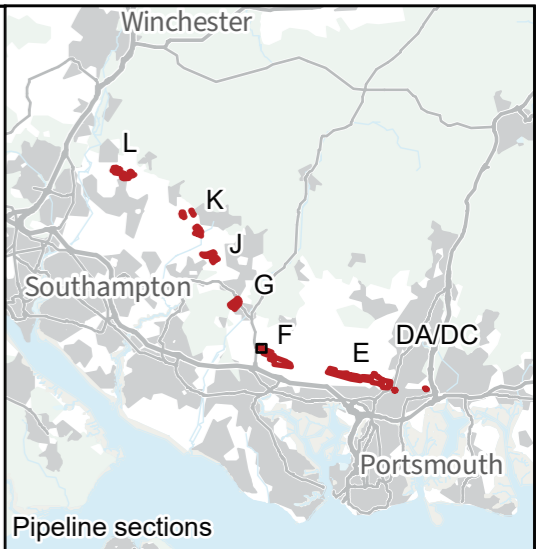
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Scale: 1:2000 at A3	Revision: 1	

Figure 43: Detailed gradiometer survey results: interpretation GS012

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- Site boundary
- Detailed survey extent
- Scheduled monuments

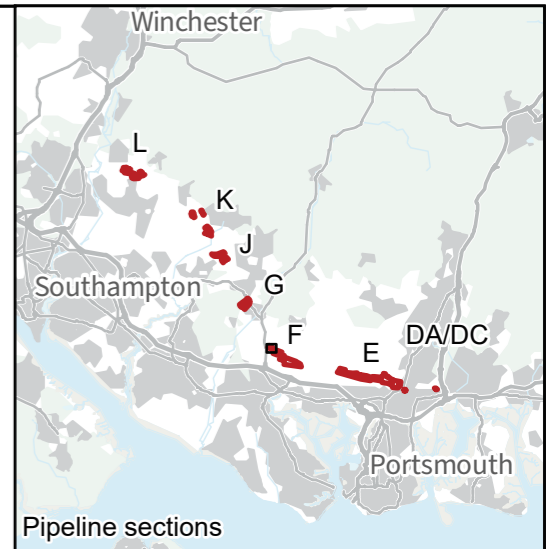
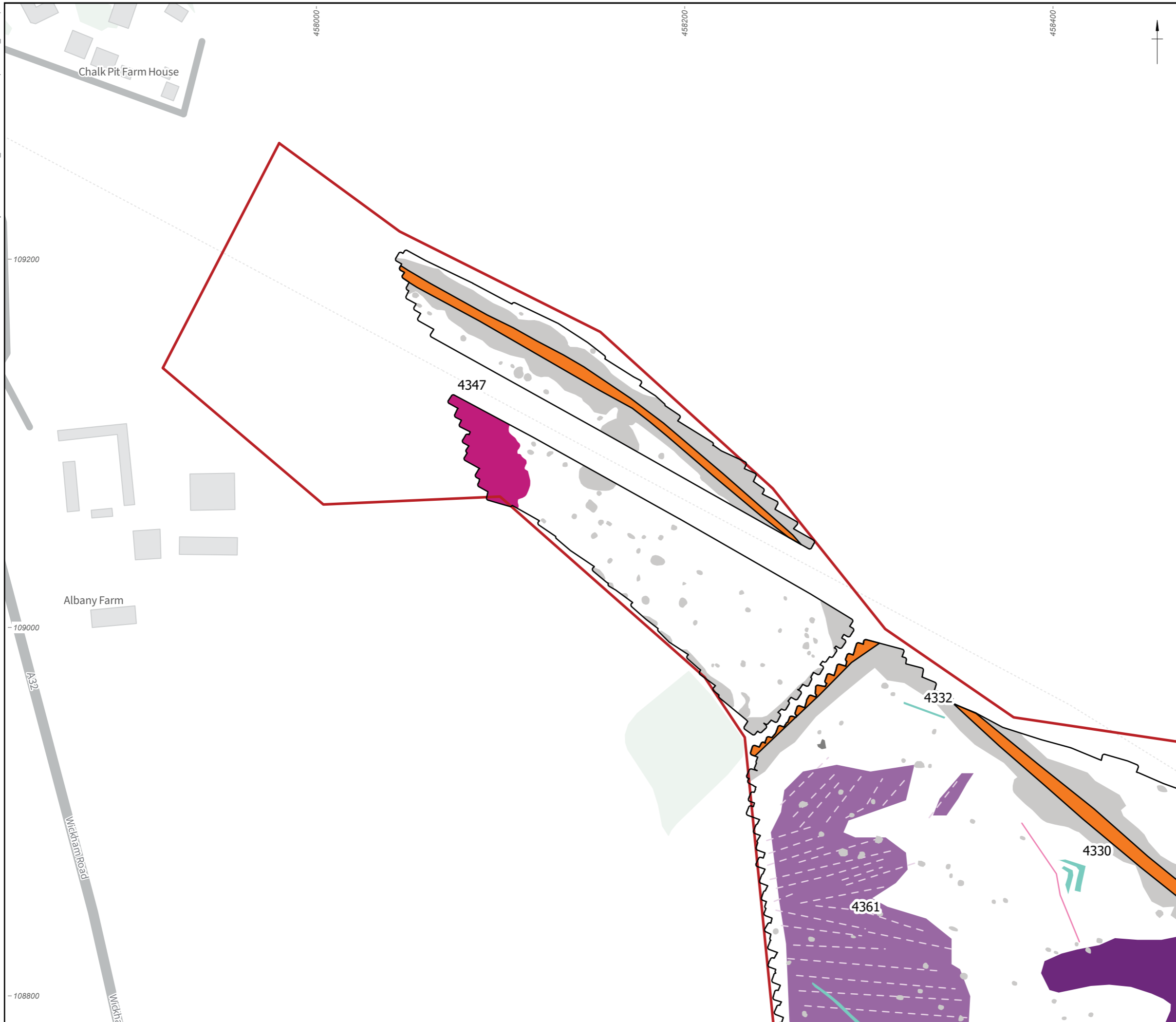


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Figure 44: Detailed gradiometer survey results: greyscale plot GS013 and GS029

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- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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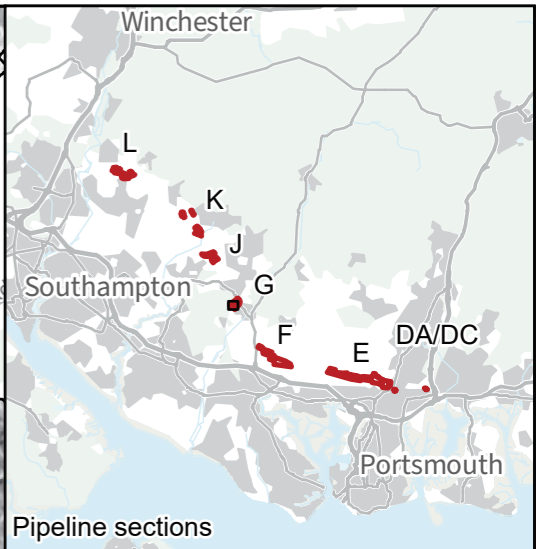
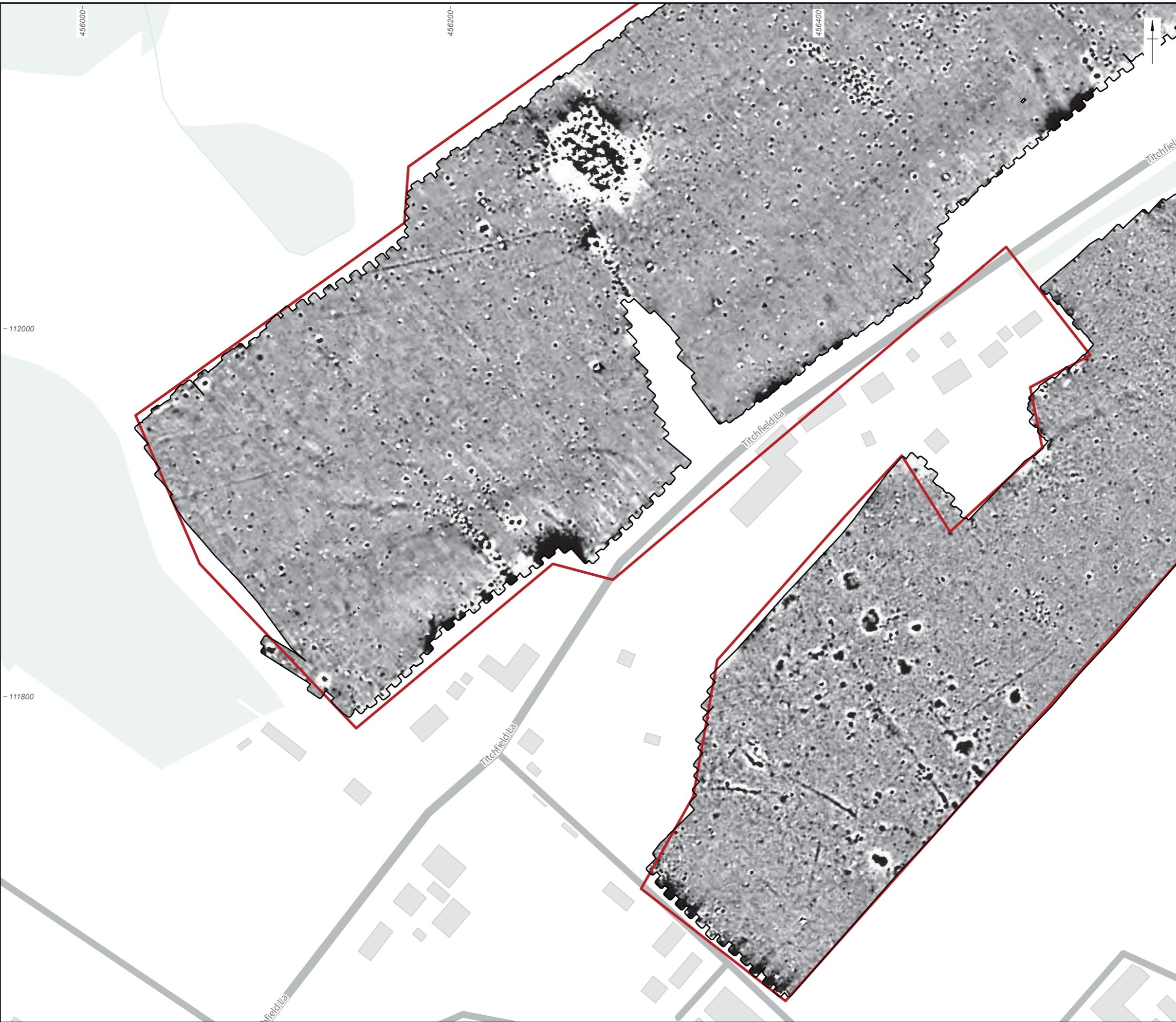
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Figure 45: Detailed gradiometer survey results: interpretation GSO13 and GSO29

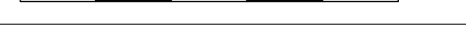


- Pipeline sections
- ▬ Site boundary
 - Detailed survey extent
 - Scheduled monuments

-2 nT 3 nT



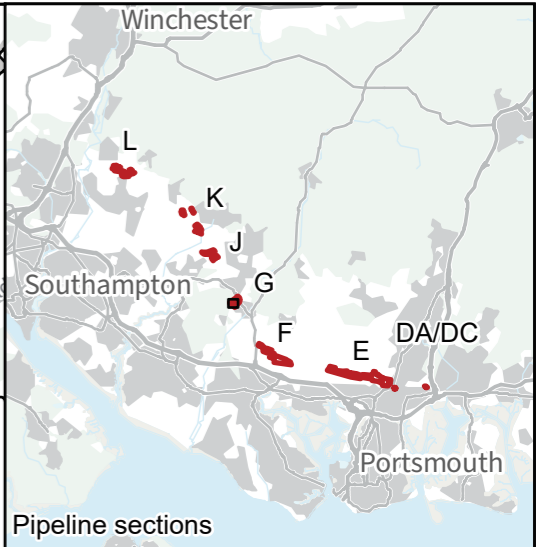
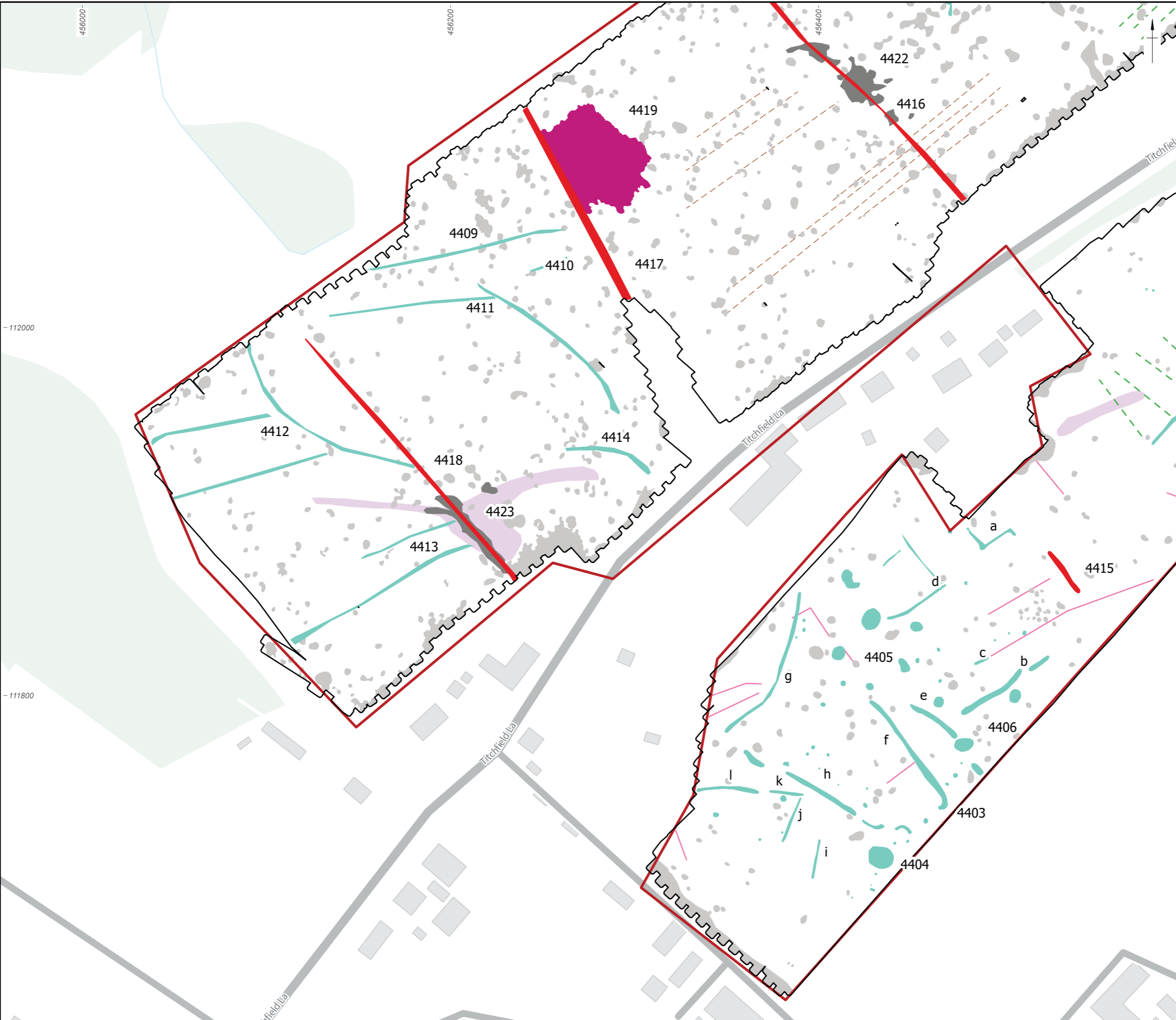
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Figure 46: Detailed gradiometer survey results: greyscale plot GS013 and GS029



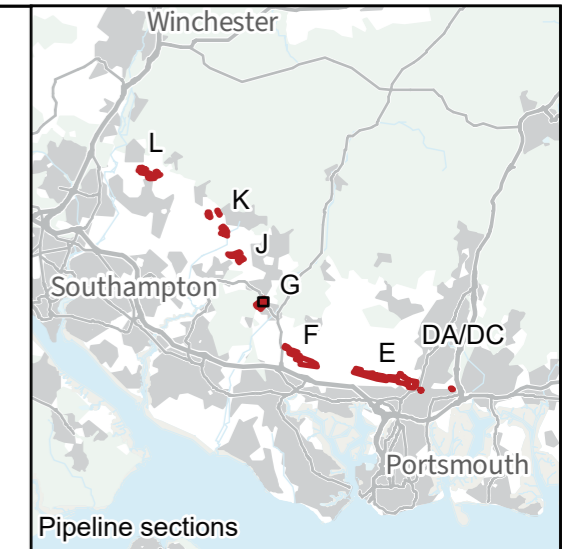
- ▬ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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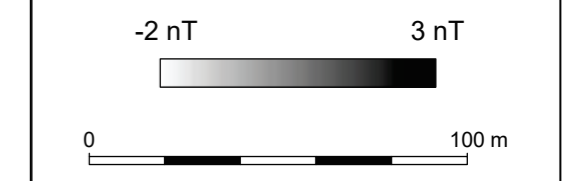
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Figure 47: Detailed gradiometer survey results: interpretation GSO13 and GSO29



Pipeline sections

- Site boundary
- Detailed survey extent
- Scheduled monuments



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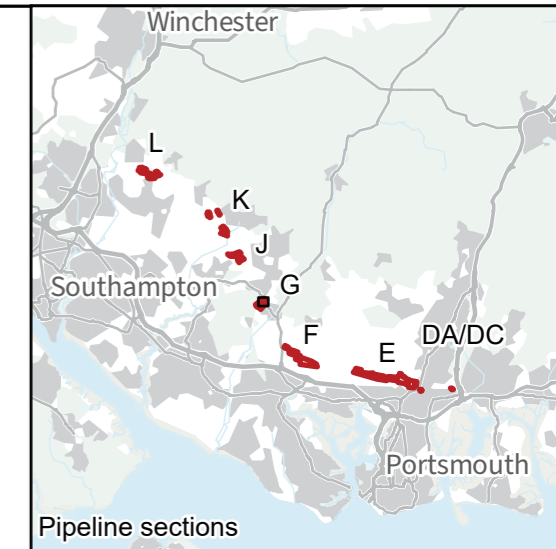
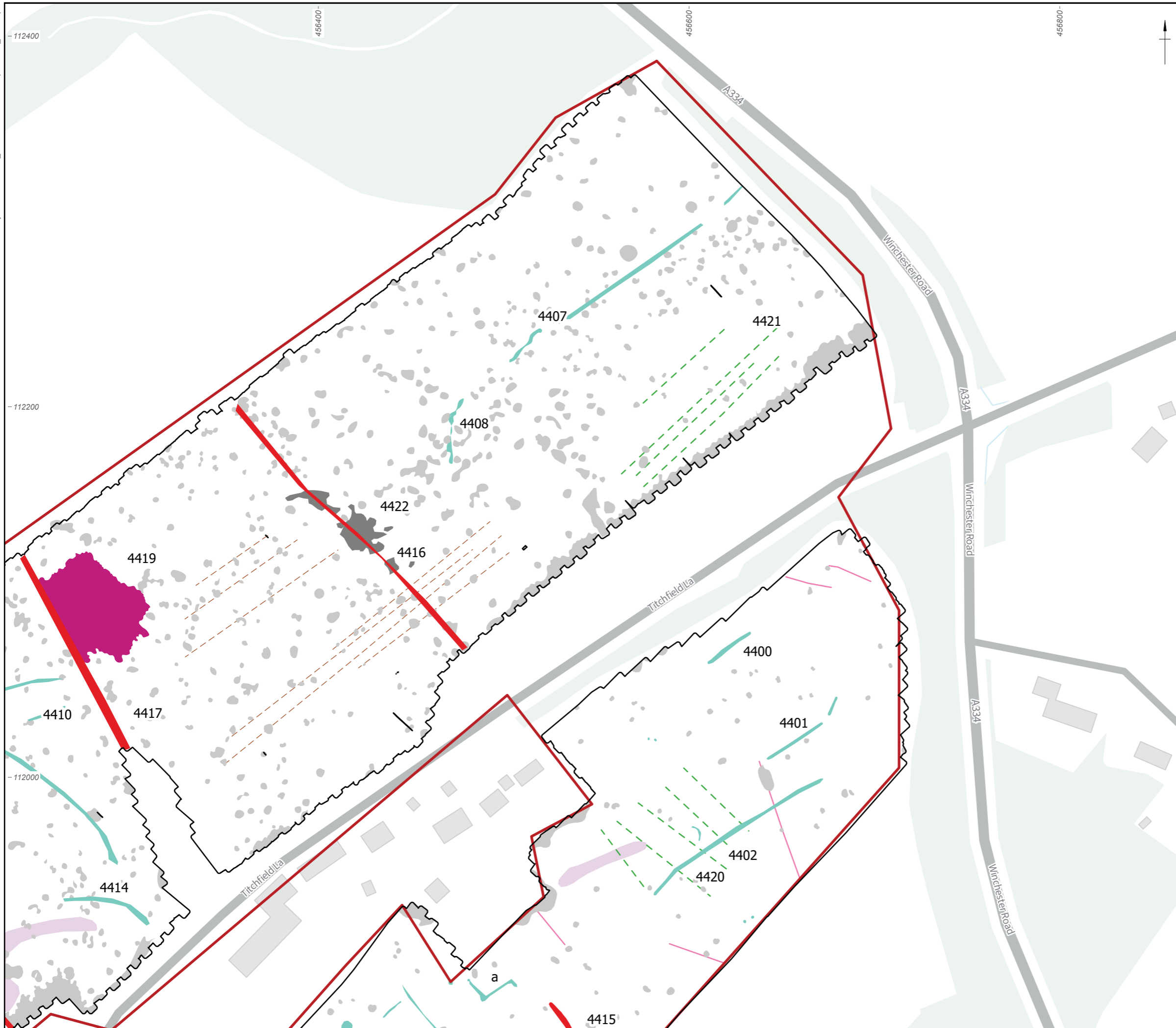
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Figure 48: Detailed gradiometer survey results: greyscale plot GS014



Legend

- ▭ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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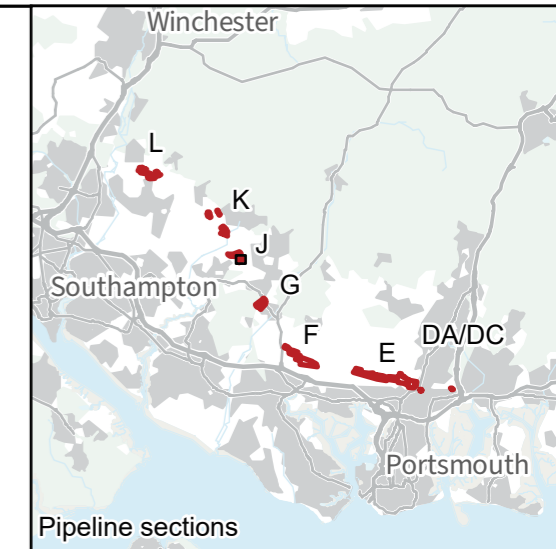
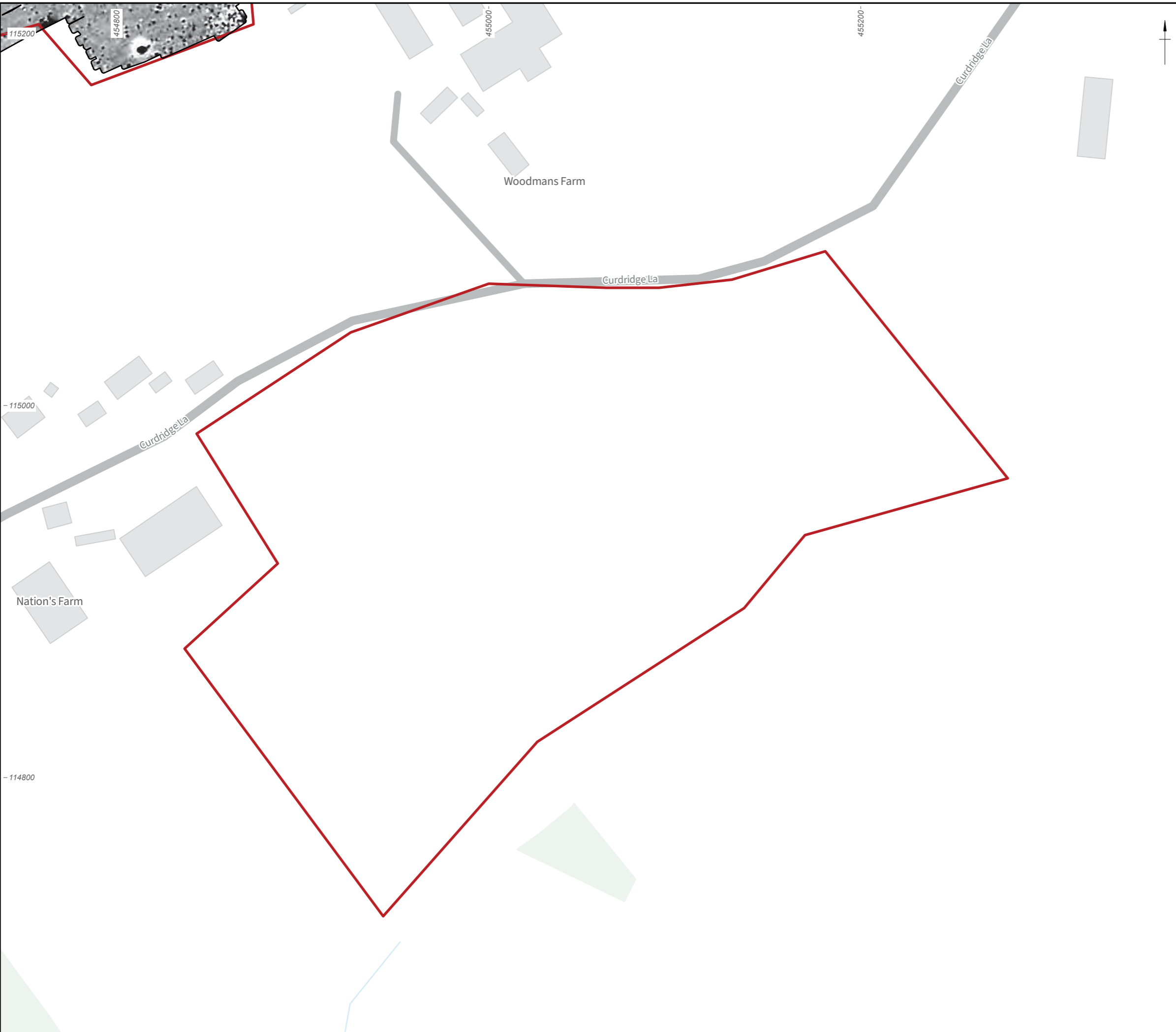



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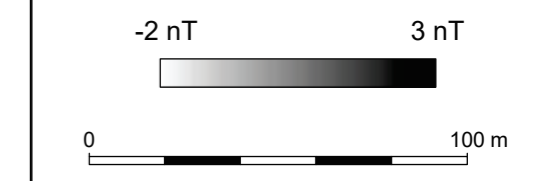
Figure 49: Detailed gradiometer survey results: interpretation GS014

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Pipeline sections

-  Site boundary
-  Detailed survey extent
-  Scheduled monuments



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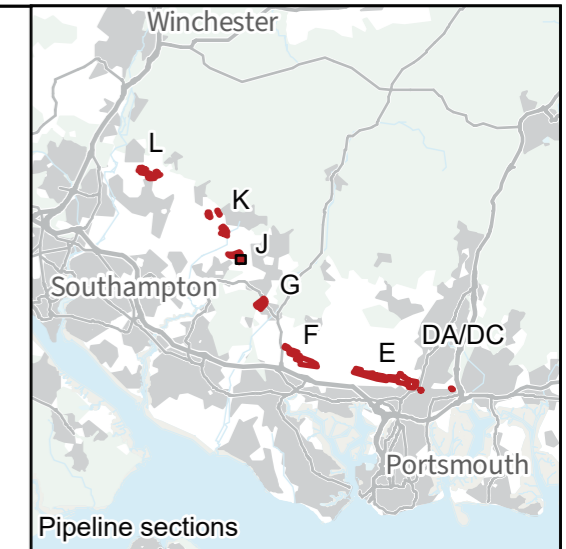
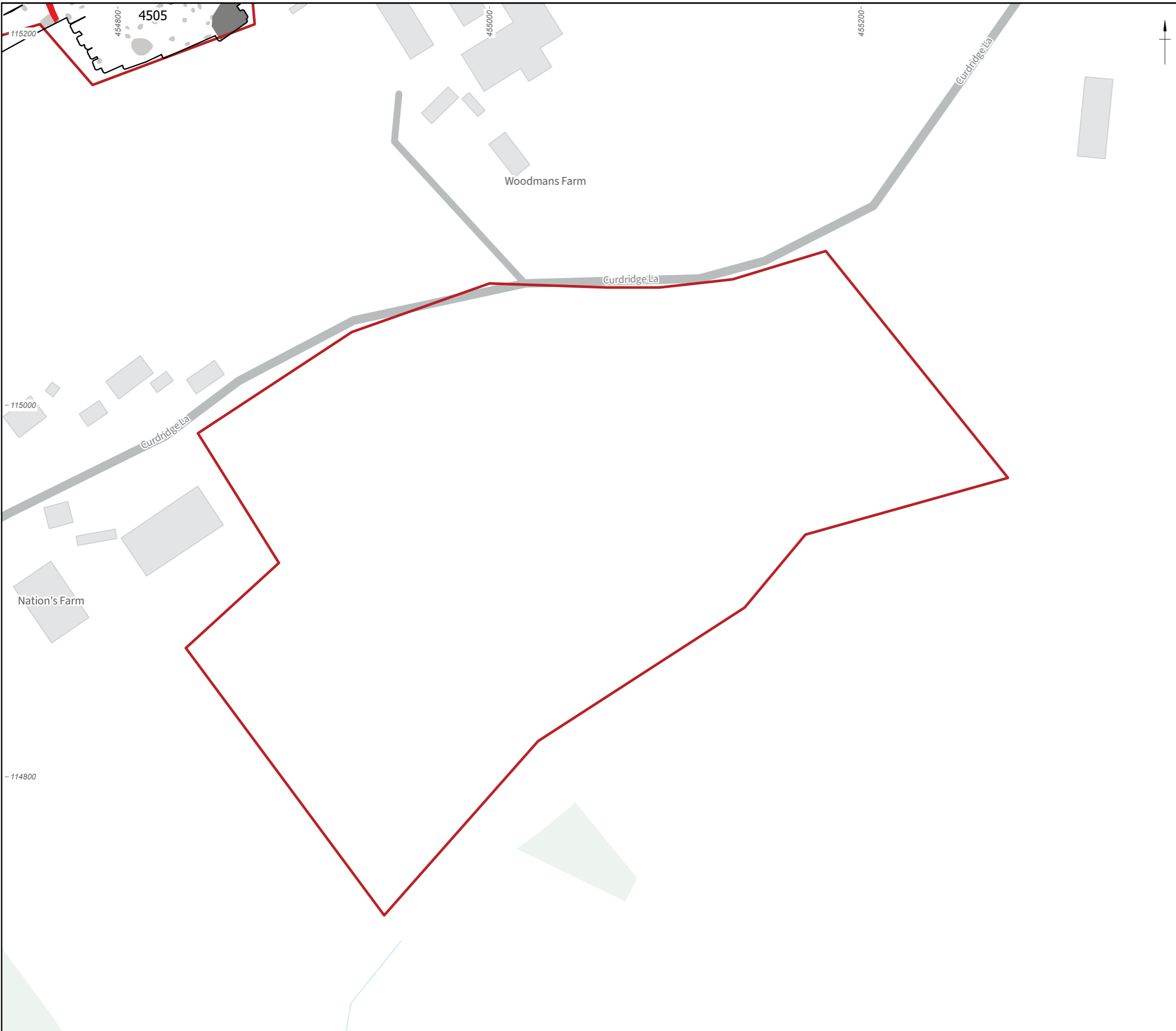
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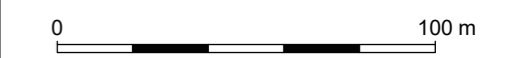
Figure 50: Detailed gradiometer survey results: greyscale plot GS015

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Pipeline sections

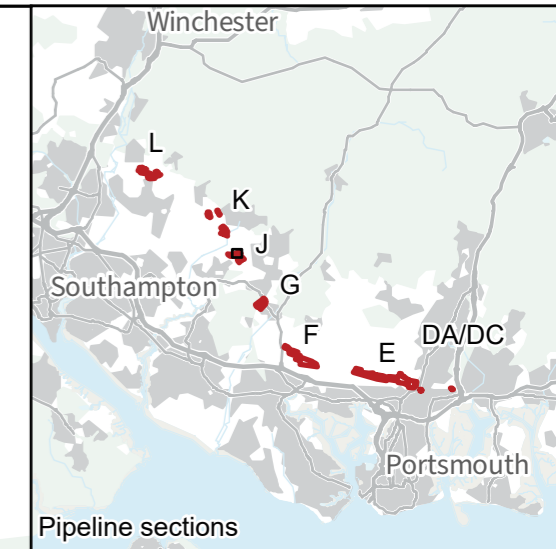
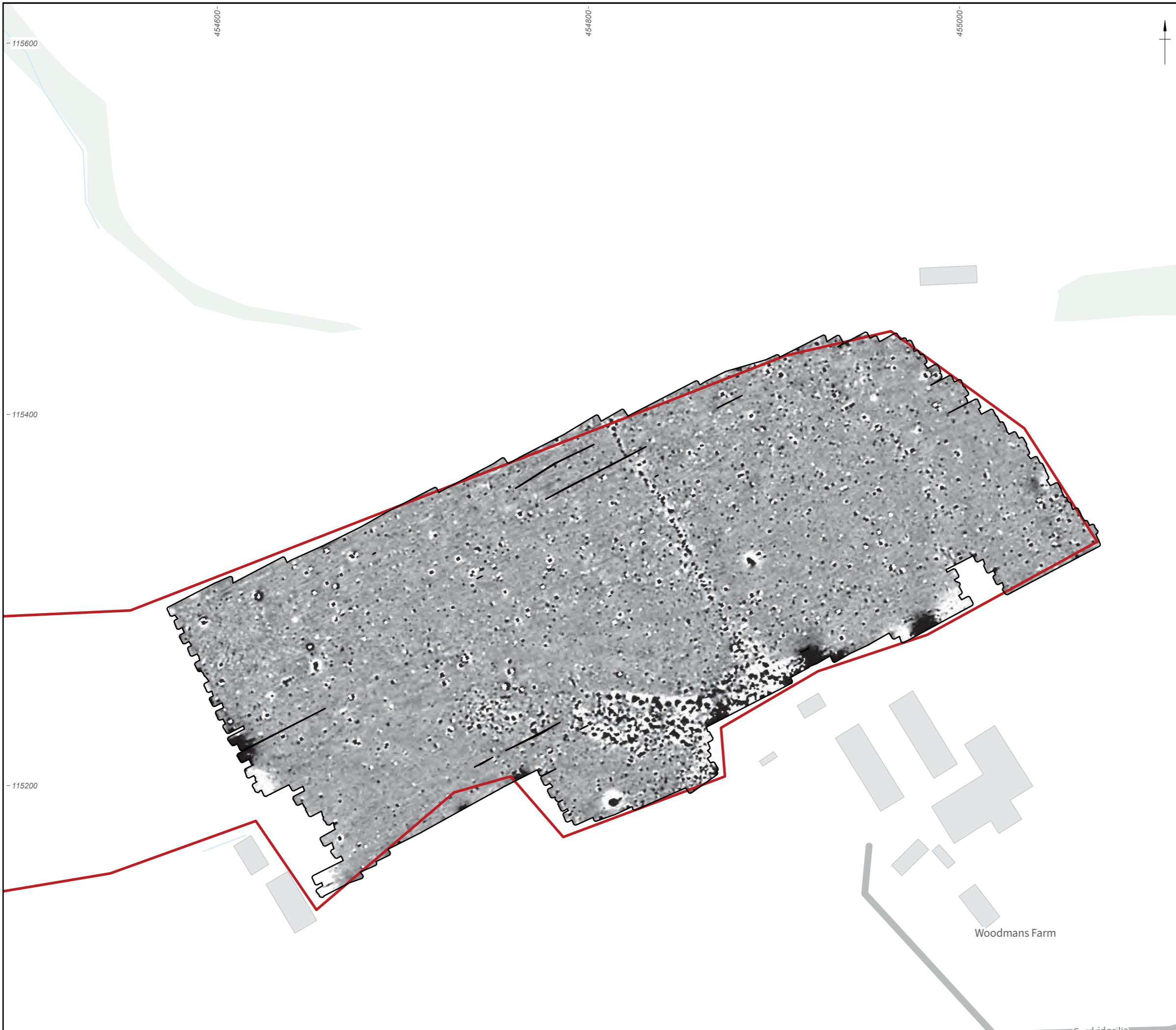
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological_trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



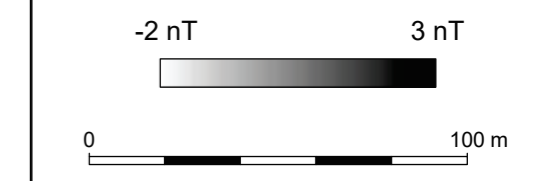
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Figure 51: Detailed gradiometer survey results: interpretation GS015



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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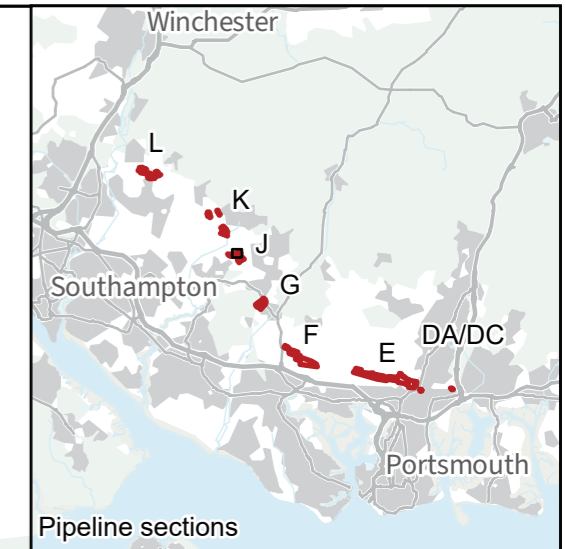
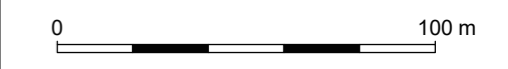
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Scale: 1:2000 at A3	Revision: 1	

Figure 52: Detailed gradiometer survey results: greyscale plot GS015



- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

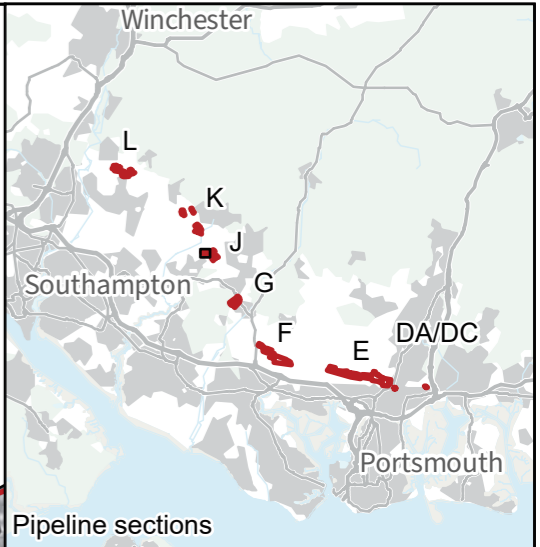
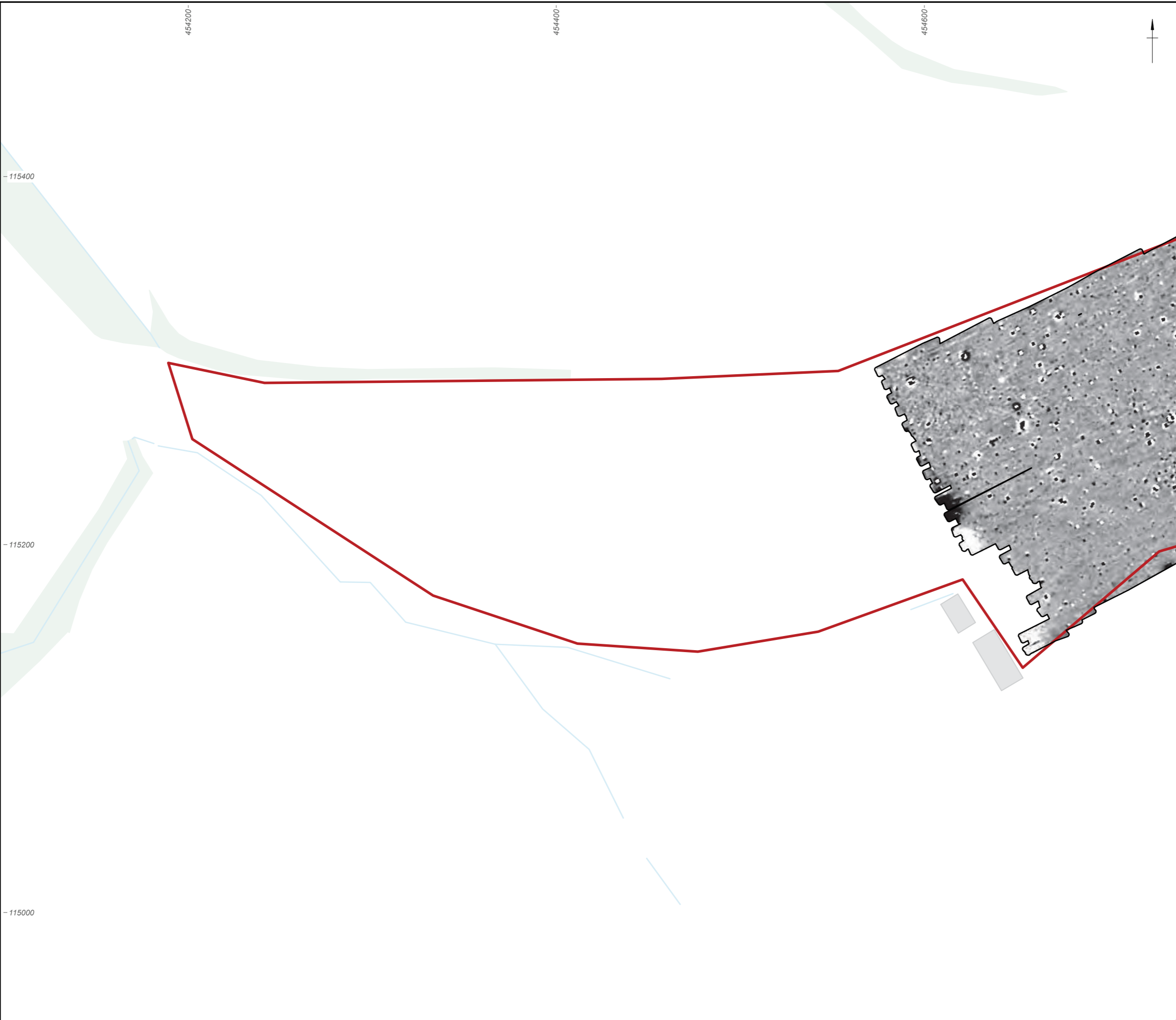


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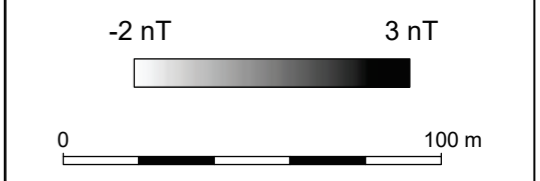
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Figure 53: Detailed gradiometer survey results: interpretation GS015

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- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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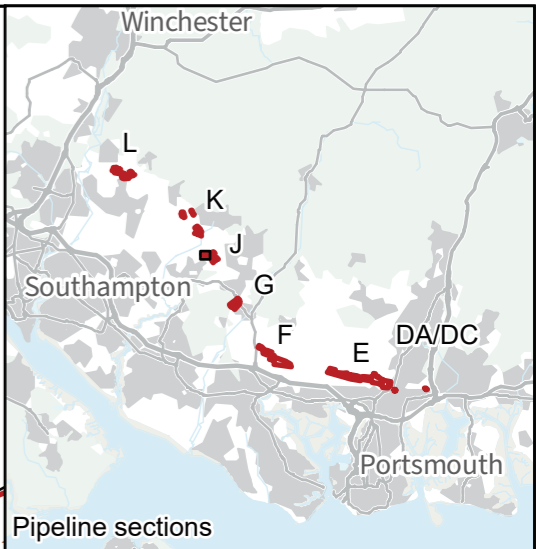
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Scale: 1:2000 at A3	Revision: 1	

Figure 54: Detailed gradiometer survey results: greyscale plot GS016



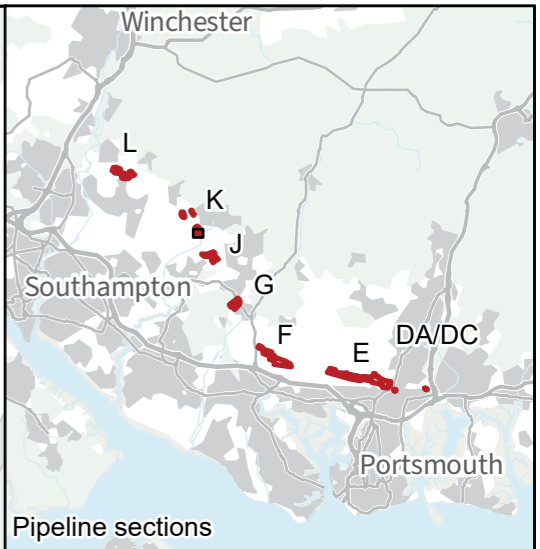
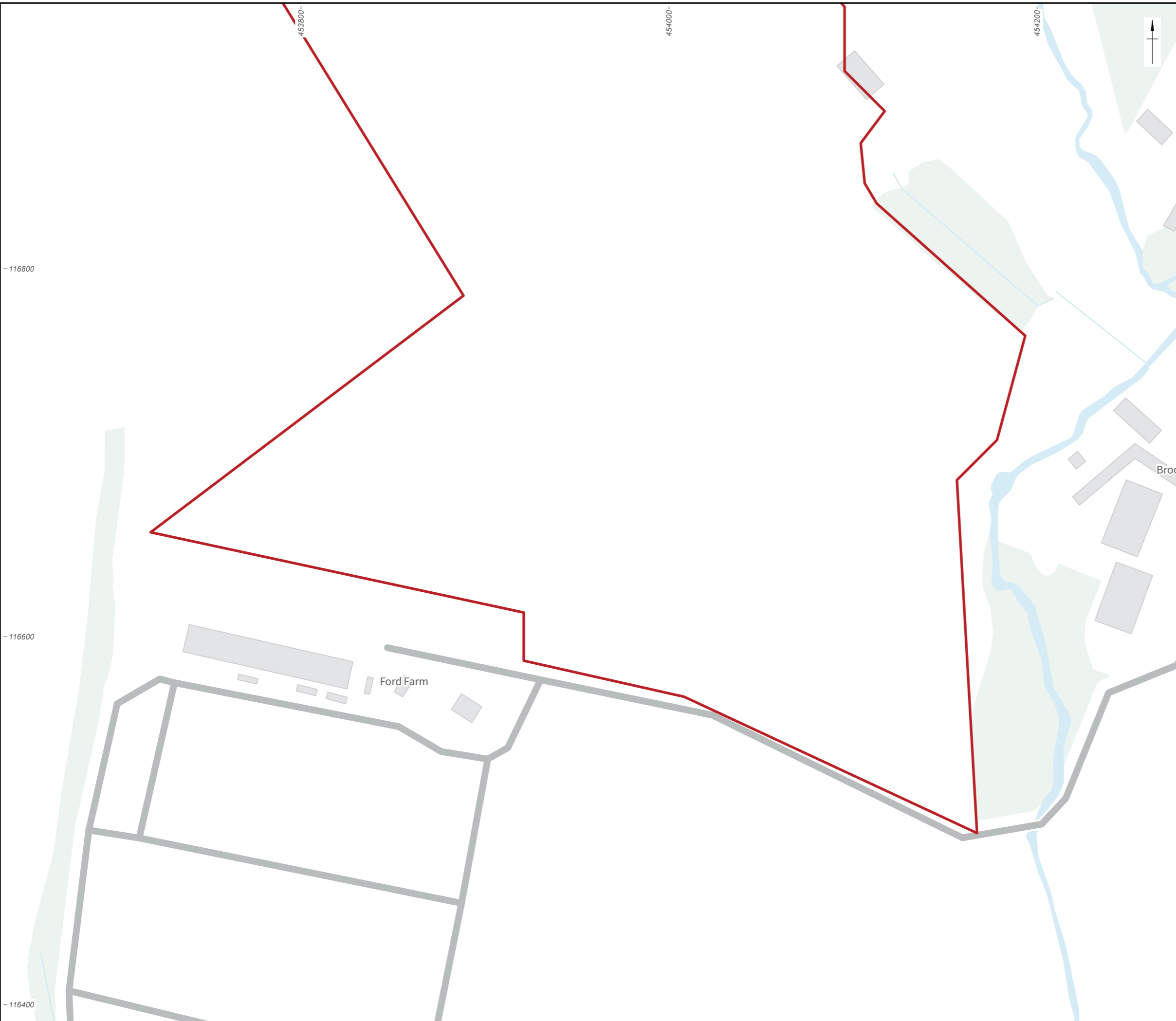
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous






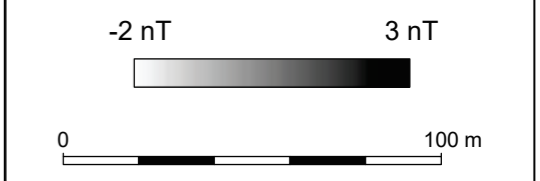
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Figure 55: Detailed gradiometer survey results: interpretation GS016



-  Site boundary
-  Detailed survey extent
-  Scheduled monuments



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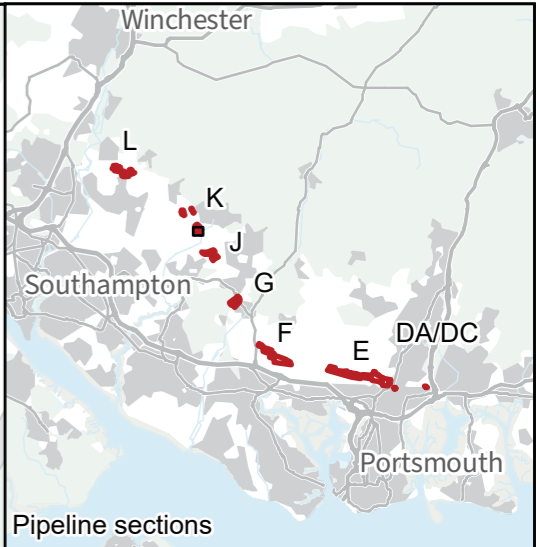
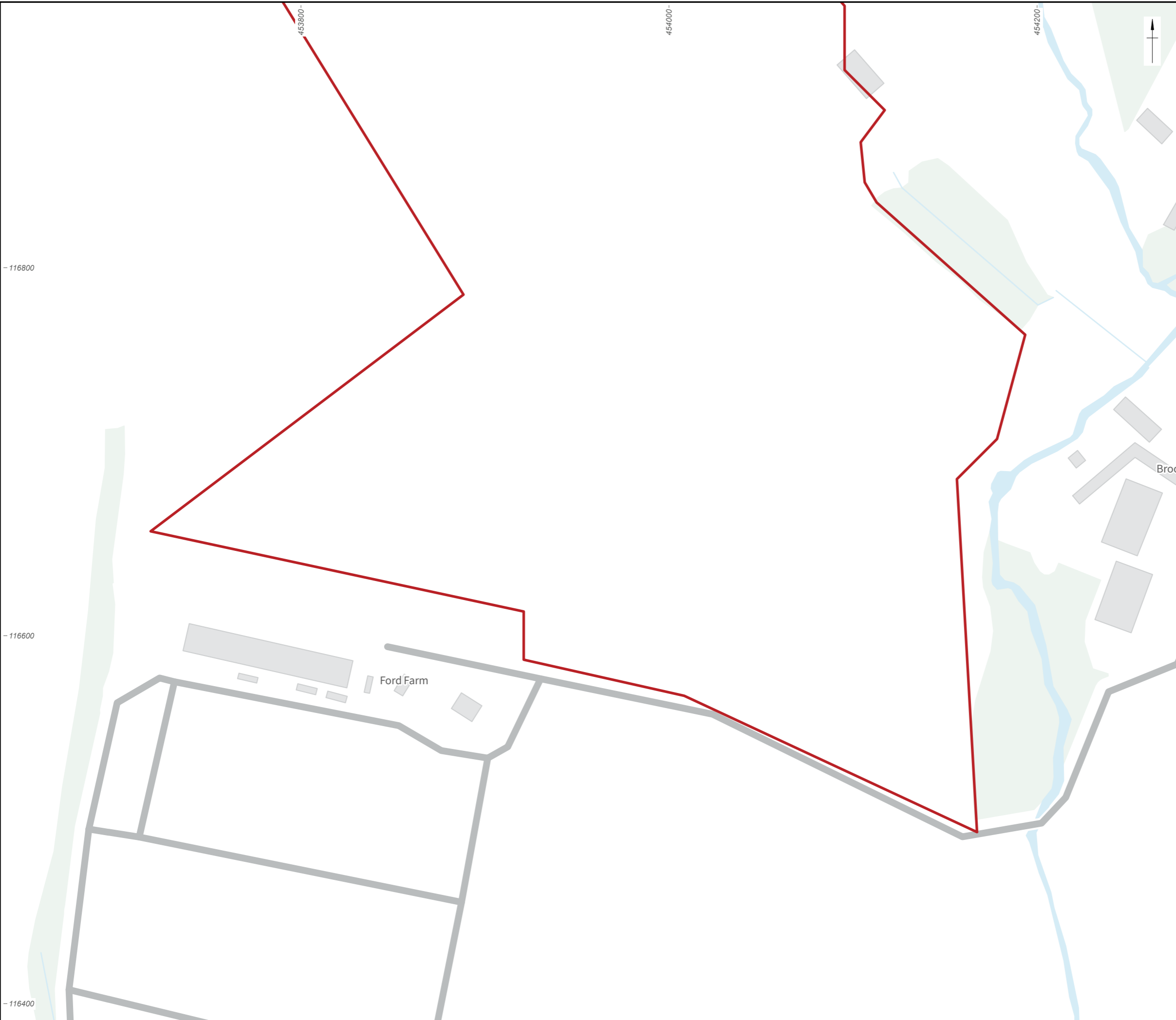
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Scale: 1:2000 at A3	Revision: 1	

Figure 56: Detailed gradiometer survey results: greyscale plot GS016



Pipeline sections

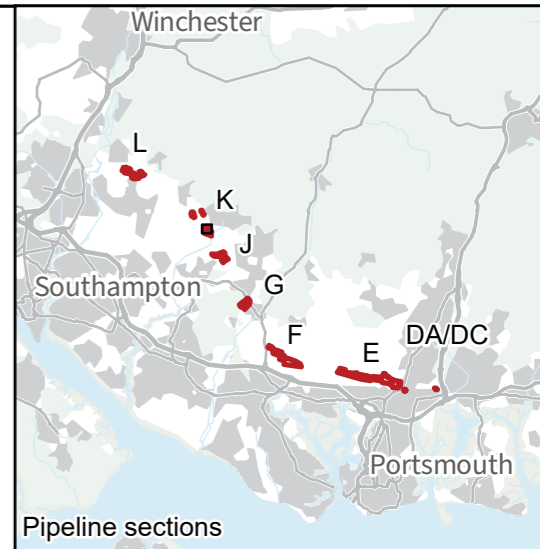
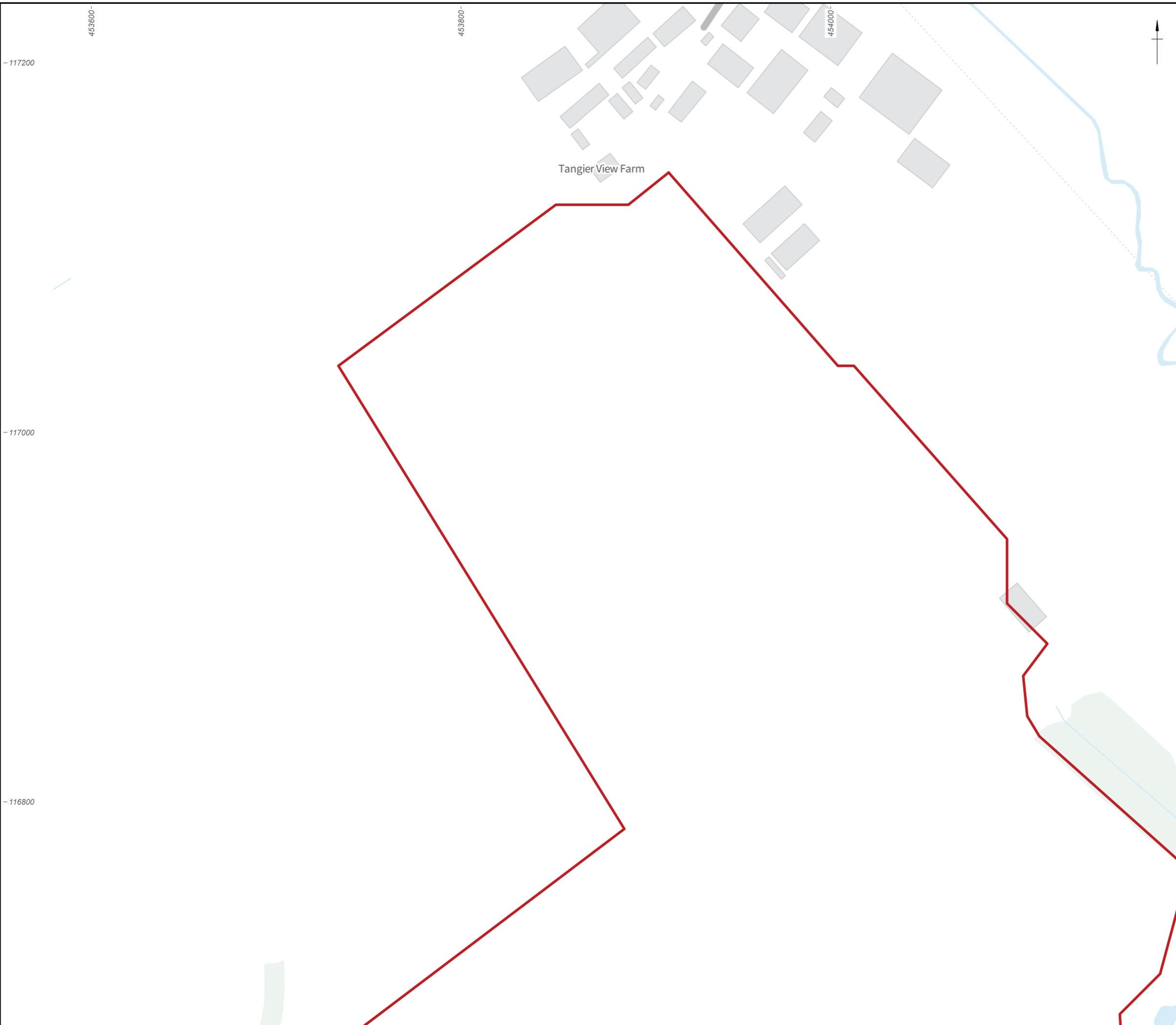
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological_trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

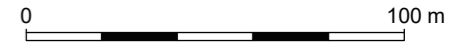
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Figure 57: Detailed gradiometer survey results: interpretation GS016



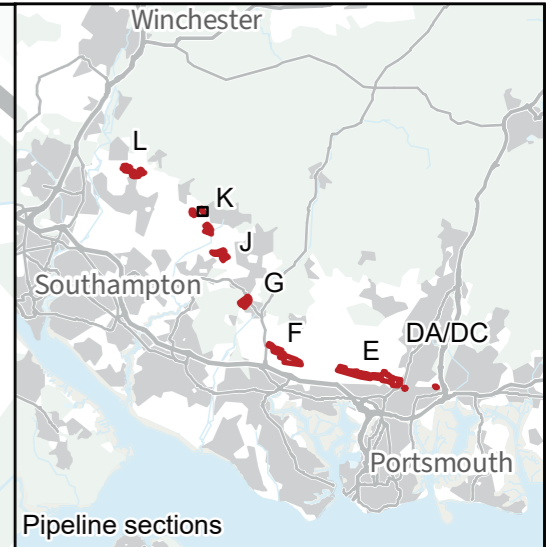
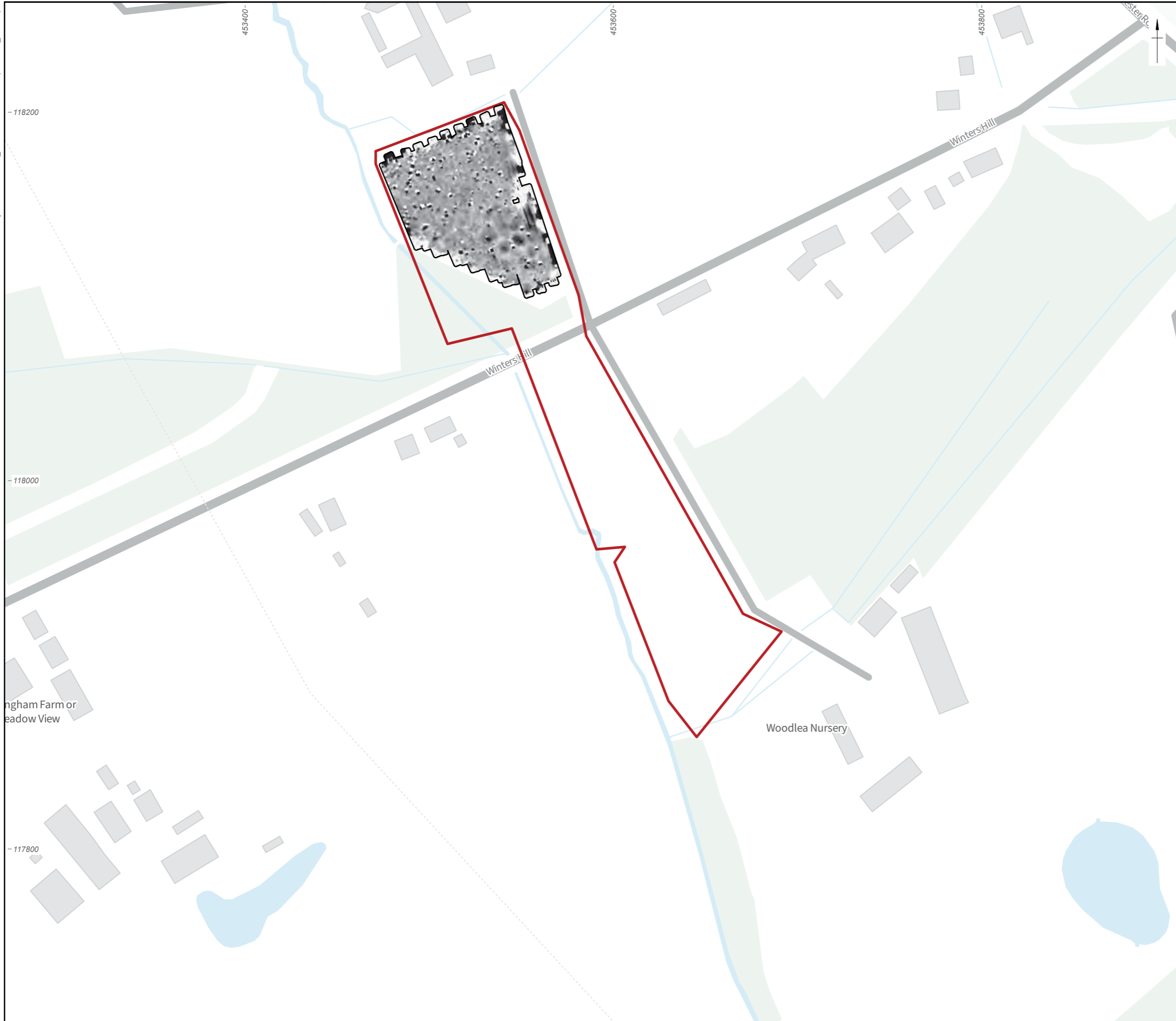
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological_trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



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Figure 59: Detailed gradiometer survey results: interpretation GS018 and GS017



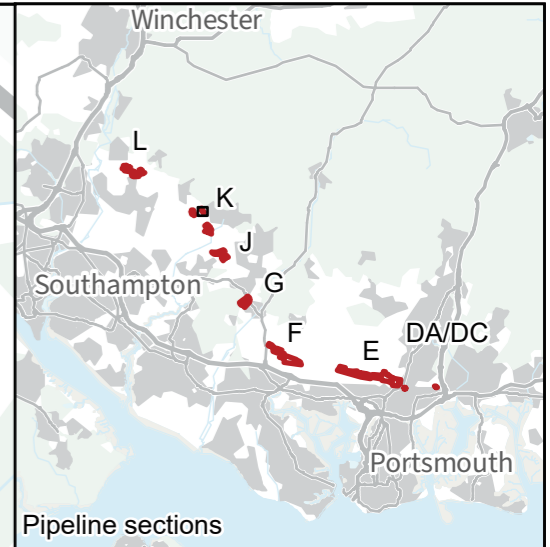
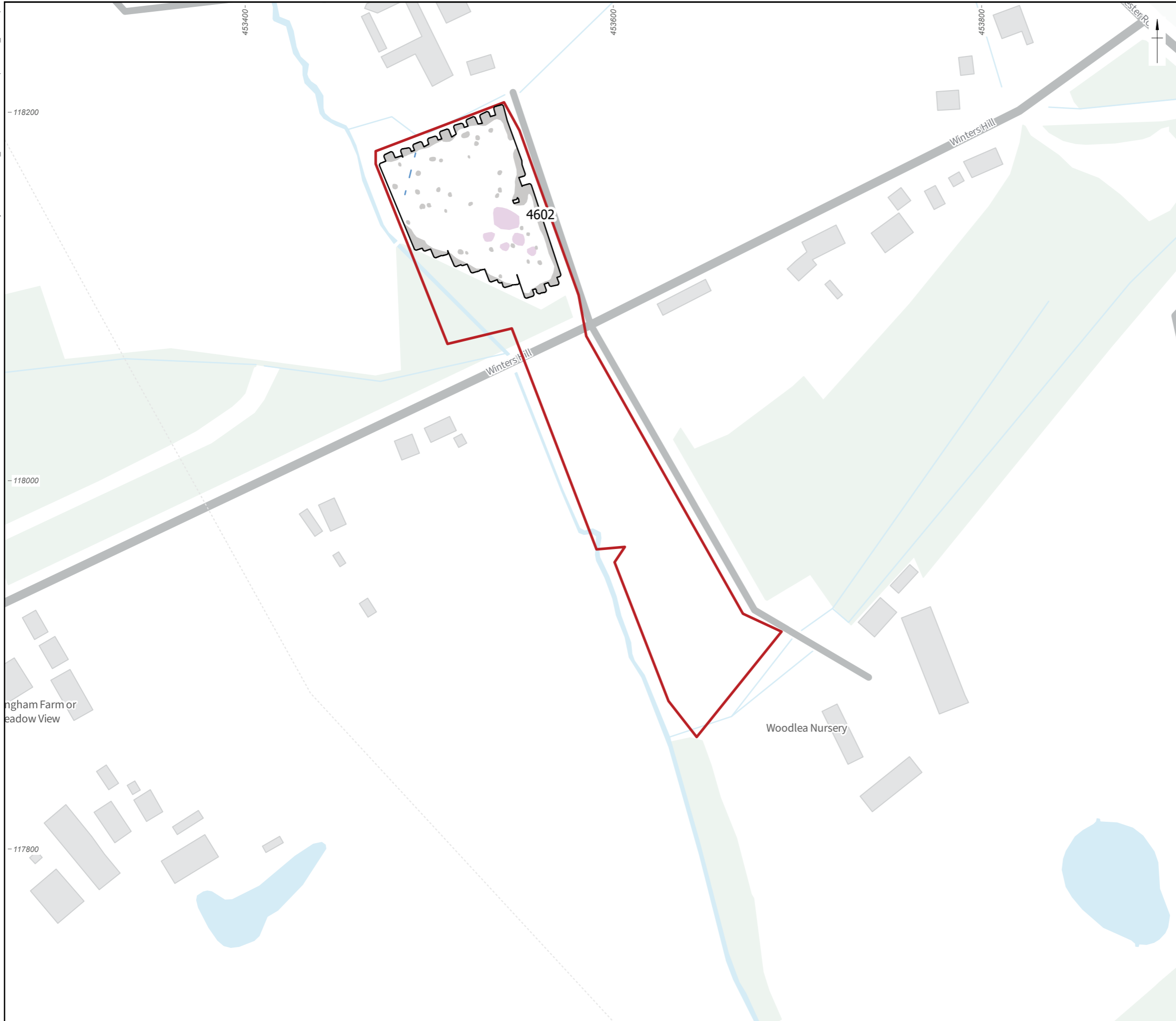
- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



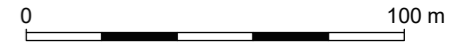
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Figure 60: Detailed gradiometer survey results: greyscale plot GS019



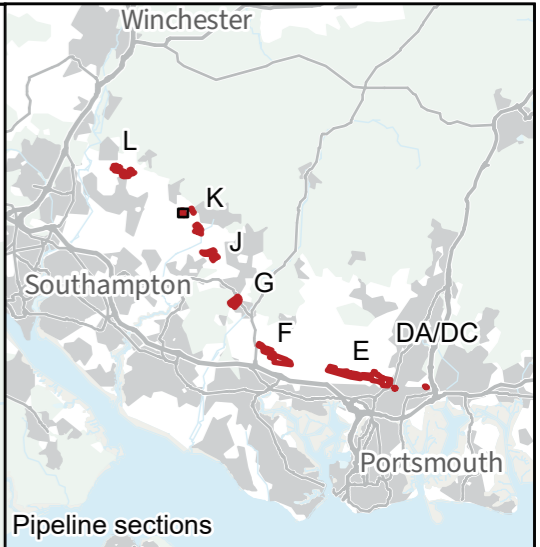
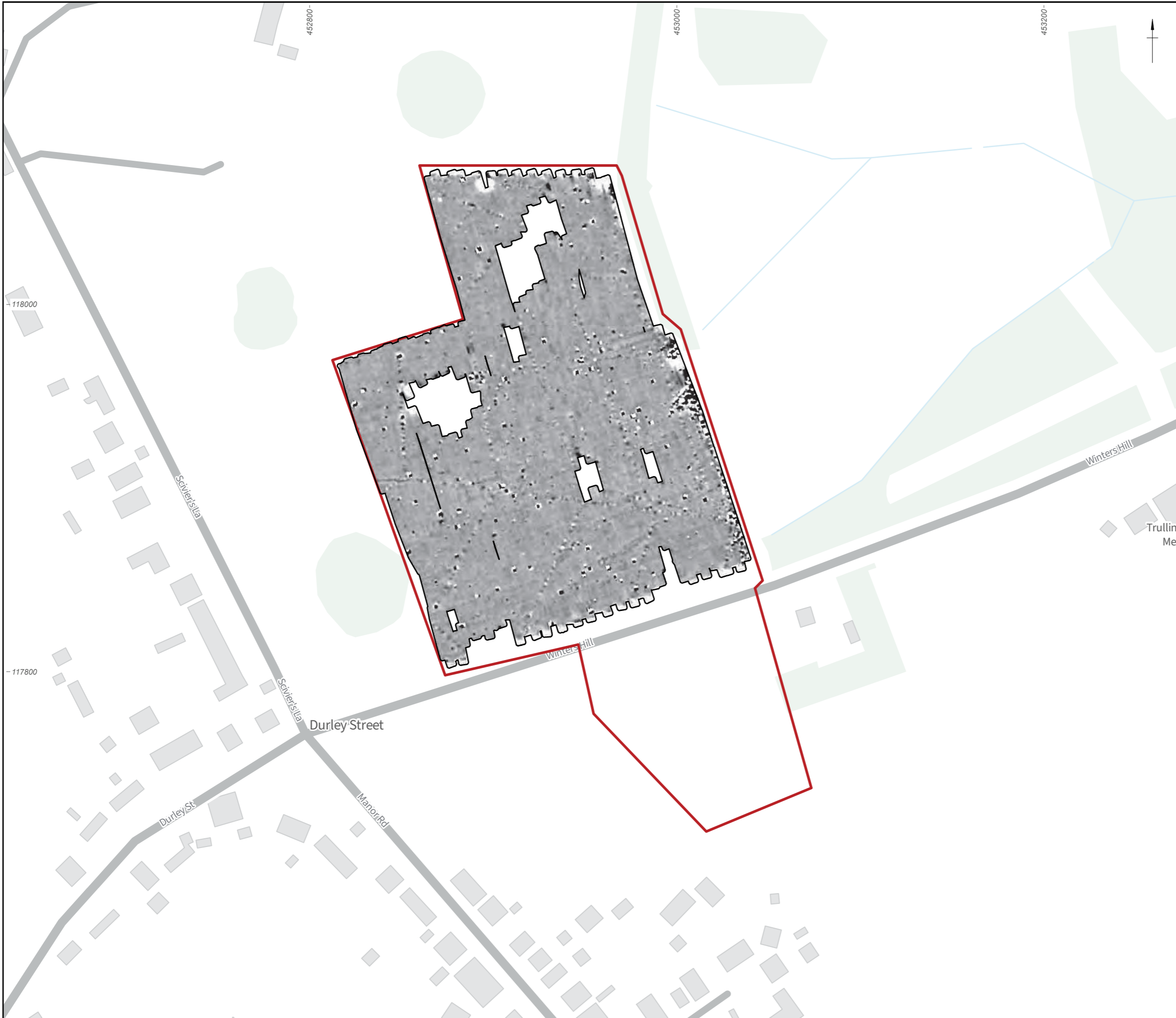
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous



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Figure 61: Detailed gradiometer survey results: interpretation GS019



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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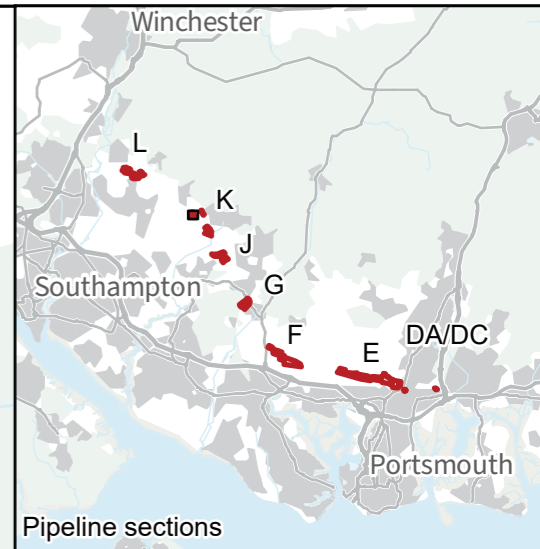
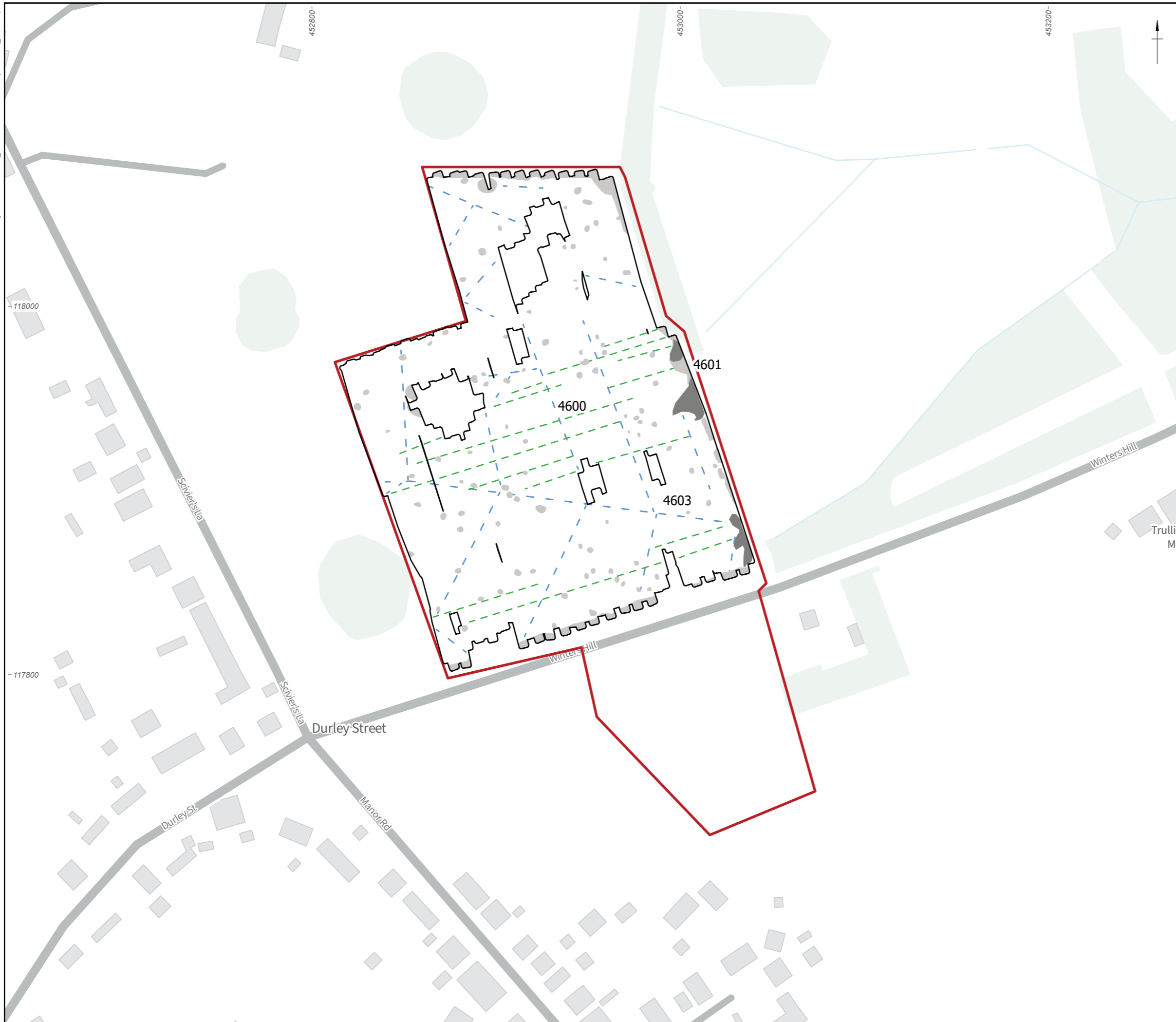
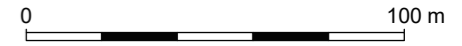
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Figure 62: Detailed gradiometer survey results: greyscale plot GS020, GS021 and GS033



- ▭ Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

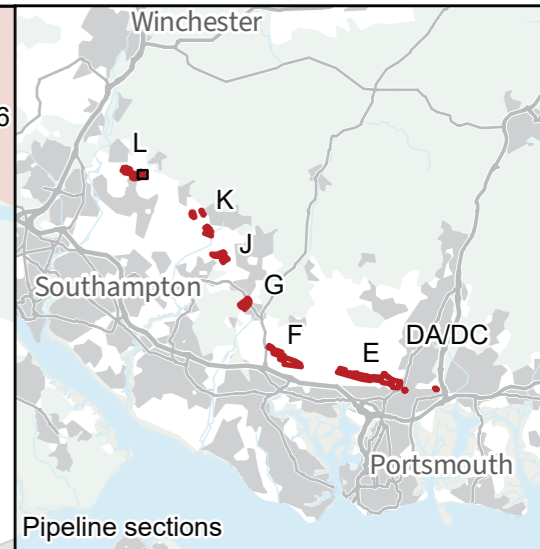


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Figure 63: Detailed gradiometer survey results: interpretation GS020, GS021 and GS033

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- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments

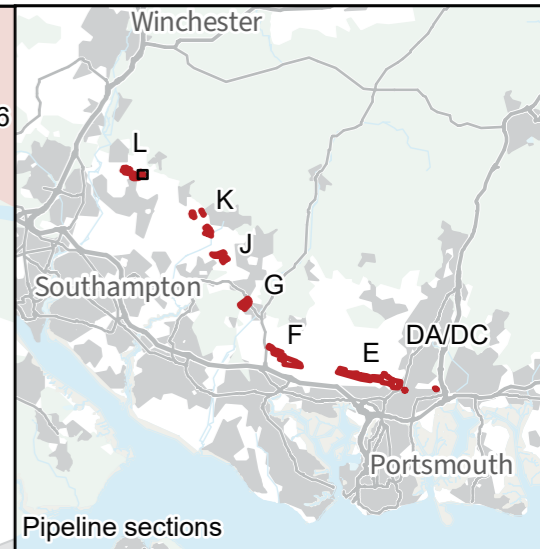
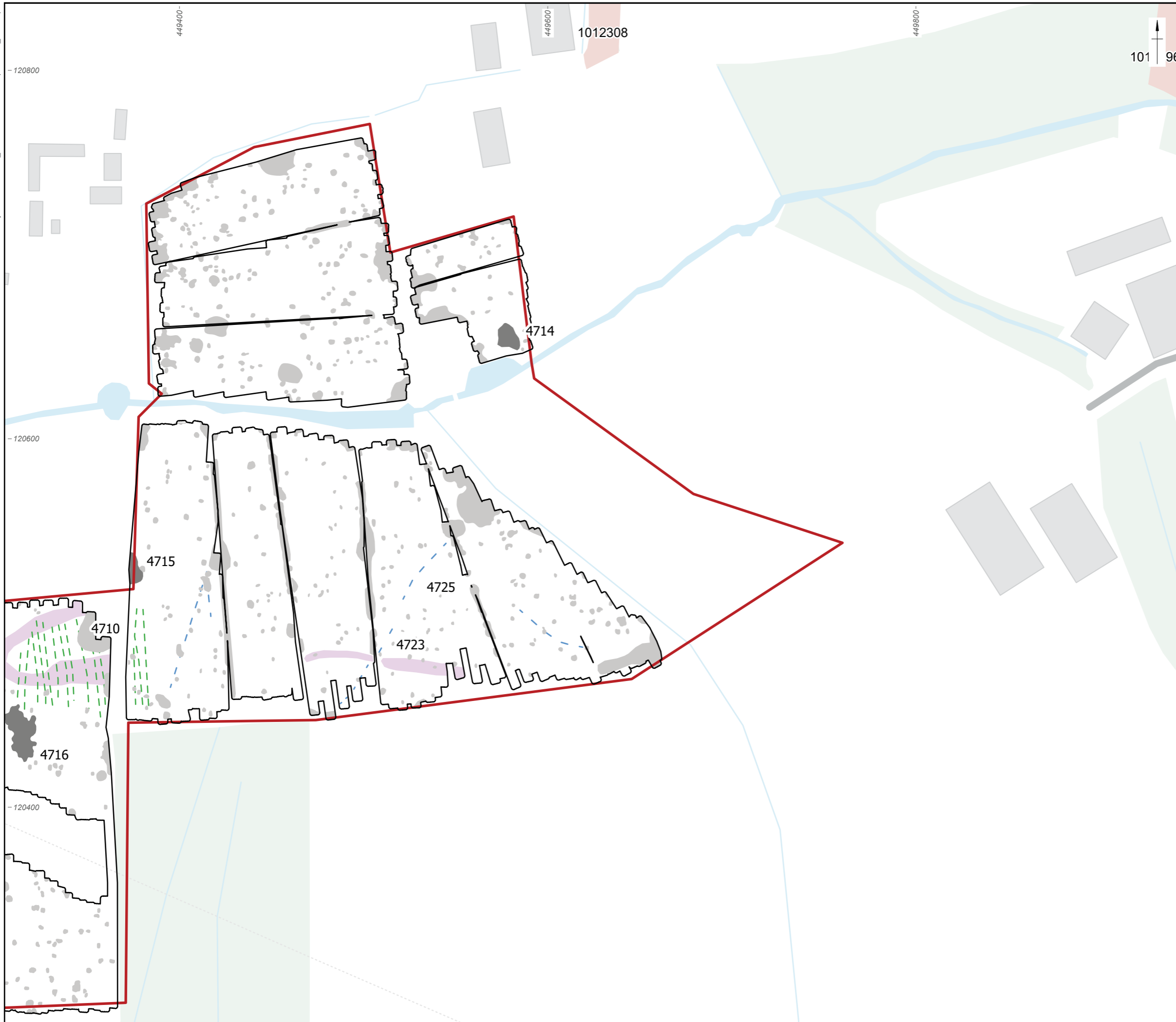


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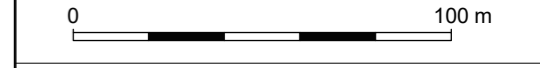
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Scale: 1:2000 at A3	Revision: 1	

Figure 64: Detailed gradiometer survey results: greyscale plot GS022 and GS032

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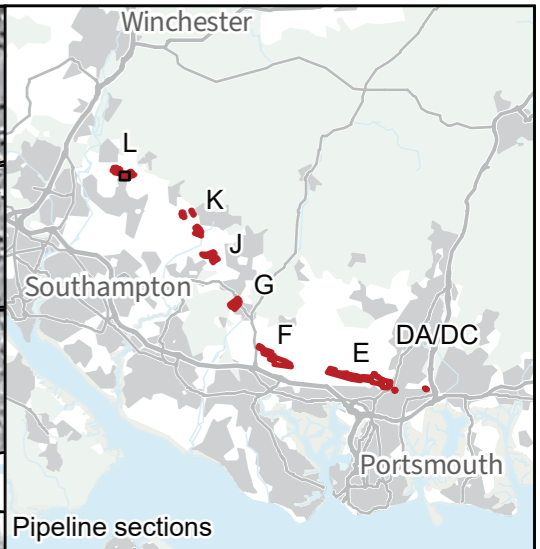
- Pipeline sections**
- ▬ Site boundary
 - Detailed survey extent
 - Scheduled monuments
 - Archaeology
 - Possible archaeology
 - Former field boundary
 - Historic landscape feature
 - Historic cultivation
 - Geology
 - Geological trend
 - Geomorphology
 - Agricultural feature
 - Drain
 - Trend
 - Modern service
 - Increased response
 - Ferrous



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Figure 65: Detailed gradiometer survey results: interpretation GS022 and GS032



- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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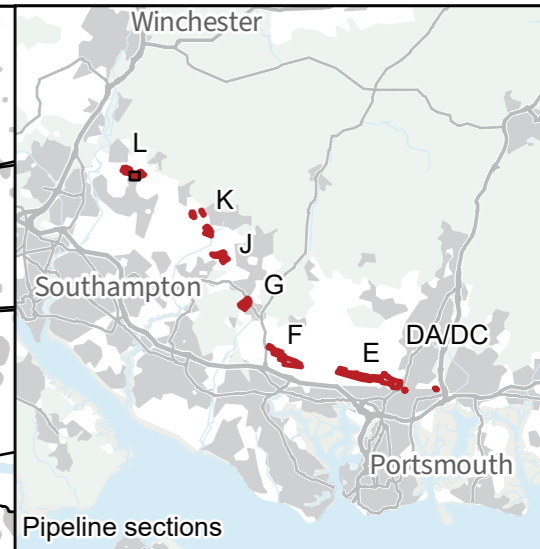
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Figure 66: Detailed gradiometer survey results: greyscale plot GS028 and GS009

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Pipeline sections

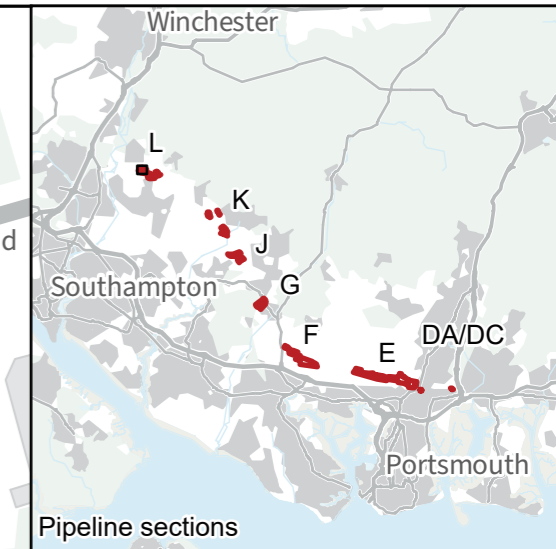
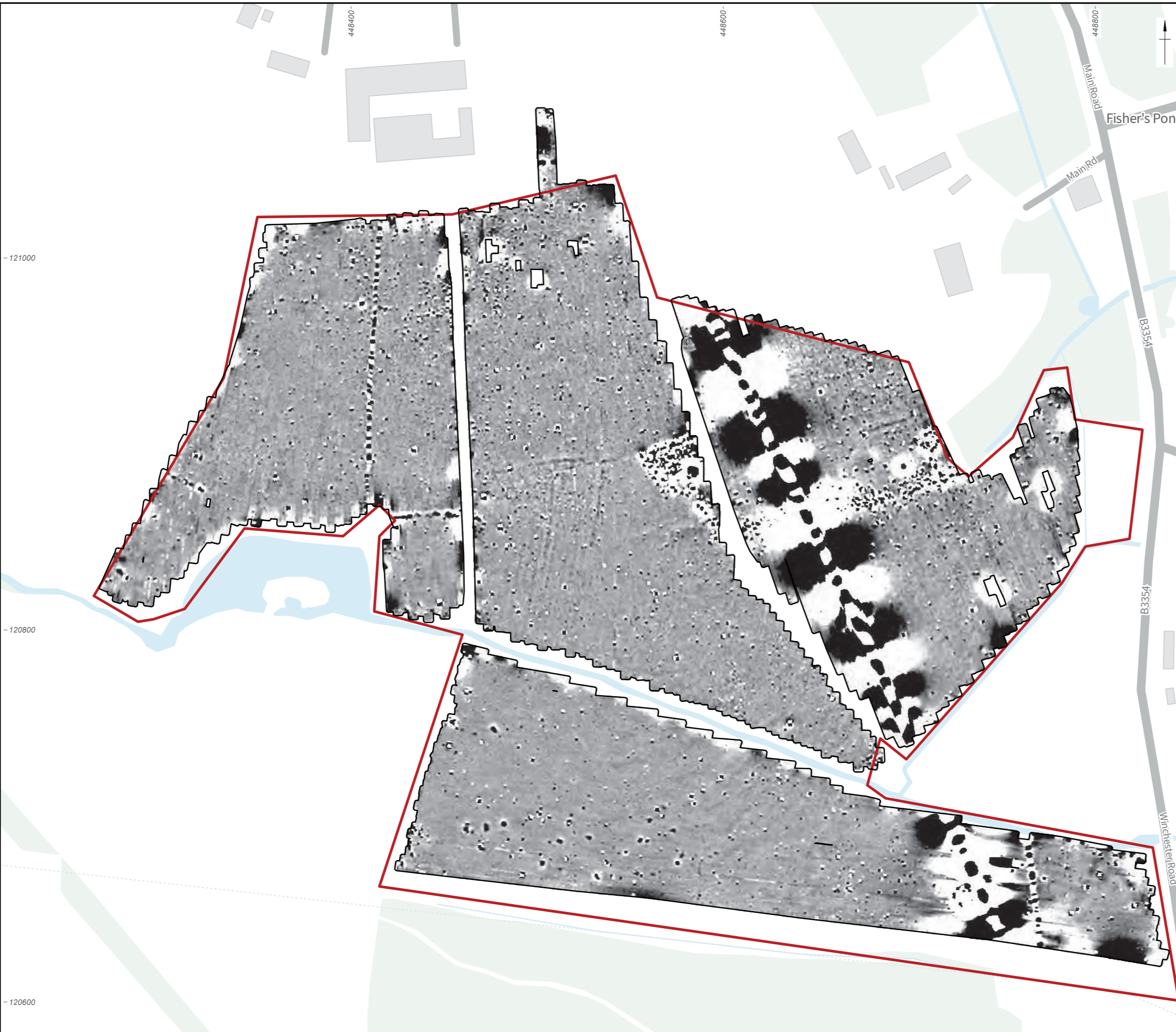
- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

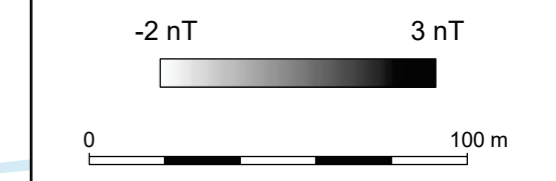
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Figure 67: Detailed gradiometer survey results: interpretation GS028 and GS009



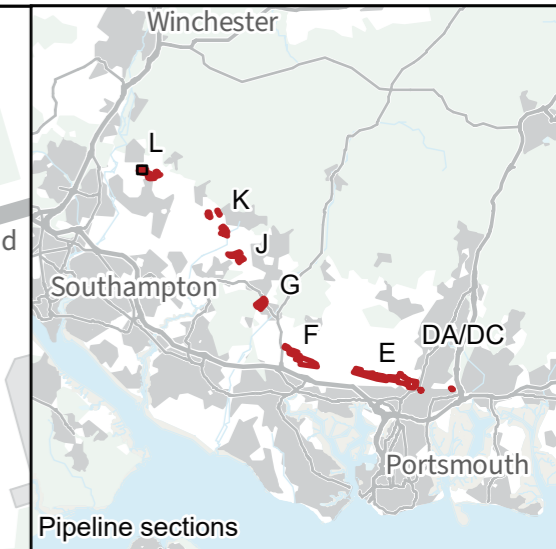
- Pipeline sections
- Site boundary
 - Detailed survey extent
 - Scheduled monuments



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Figure 68: Detailed gradiometer survey results: greyscale plot GS031 and GS030



Legend

- Site boundary
- Detailed survey extent
- Scheduled monuments
- Archaeology
- Possible archaeology
- Former field boundary
- Historic landscape feature
- Historic cultivation
- Geology
- Geological_trend
- Geomorphology
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous

0 100 m

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Figure 69: Detailed gradiometer survey results: interpretation GS031 and GS030



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



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