

# Tween Bridge Solar Farm

## Environmental Statement

### Appendix 8.2: Geophysical Survey Report – Part 6

Planning Act 2008

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

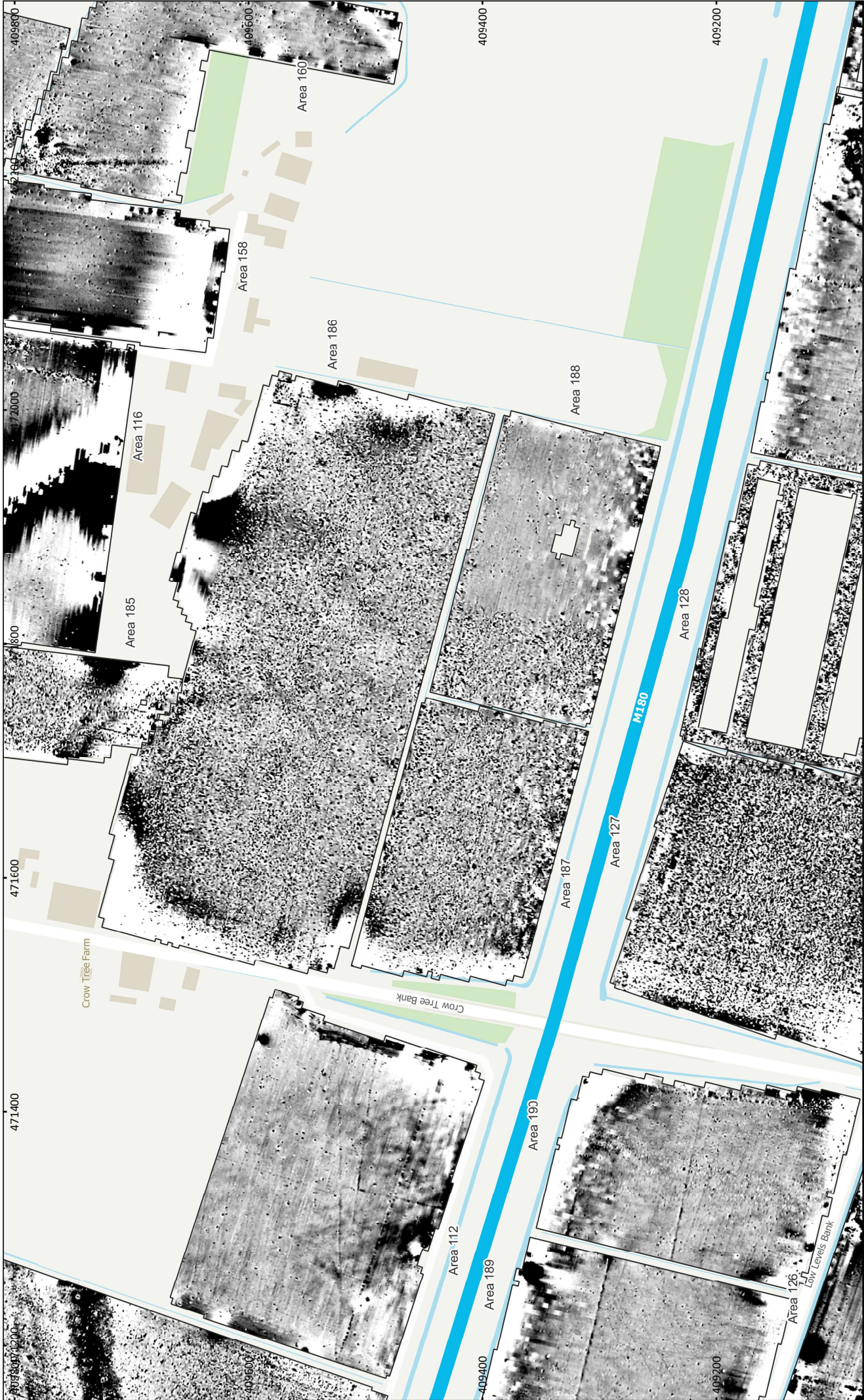
APFP Regulation 5(2)(a)

Document Reference: 6.3.8.2

August 2025

Revision 1





MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 123 - Magnetic Total Field (Lower Sensor) (Areas 112, 126, 127, 128, 129, 131, 150, 179 & 182)

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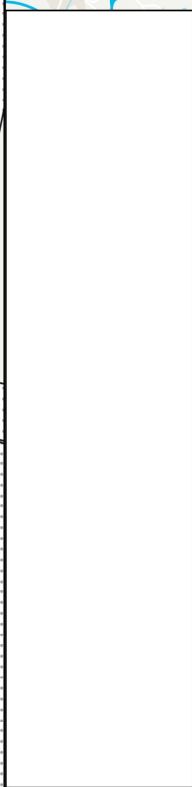
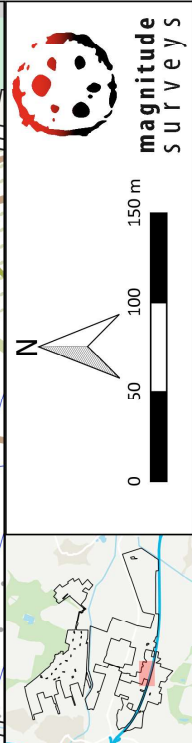


MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 124 - Magnetic Gradient (Areas 1:2, 126, 127, 128, 129, 131, 160, 179 & 182)  
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0 50 100 150 m

N





MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
 Figure 125 - Magnetic Interpretation (Areas 112, 126, 127, 128, 129, 131, 160, 179 & 182)  
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 127 - Magnetic Total Field (Lower Sensor) (Areas 114, 115, 116, 157, 158, 159, 161 & 163)  
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48997    nT    49005

0    50    100    150 m

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 128 - Magnetic Gradient (Areas 114, 115, 116, 157, 158, 159, 161 & 163)  
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0 -1 1 2  
nT







050100150m

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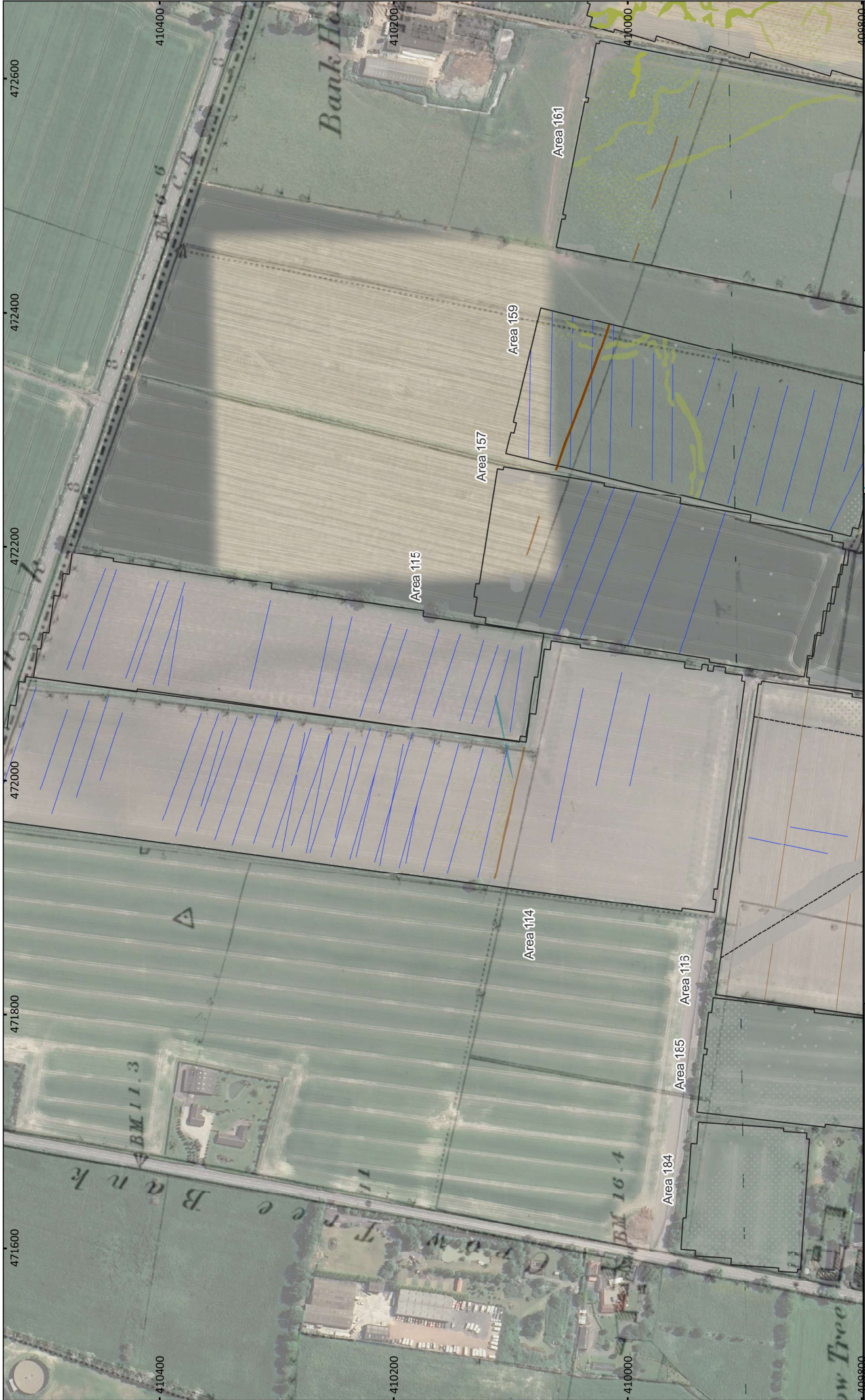
Figure 129 - Magnetic Interpretation (Areas 114, 115, 116, 157, 158, 159, 161 & 163)

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 130 - Magnetic Interpretation Over Historical Maps and Satellite Imagery  
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0 50 100 150 m

Area 113  
Area 114  
Area 115  
Area 157  
Area 159  
Area 161

Bank Ho

Crown Tree

BM 11.3

BM 16.4

Agricultural (Strong) — Agricultural (Trend)  
Agricultural (Weak) — Undetermined (Weak)  
Natural (Strong) — Magnetic Disturbance  
Natural (Weak) — Ferrous/Debris (Spread) — Ferrous (Spike)

Service — Drainage Feature






MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 131 - Magnetic Total Field (Lower Sensor) (Areas 114, 115, 116, 157, 158, 159, 160, 161, 162, 163 & 164)

1:3,000 @ A3

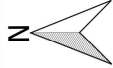
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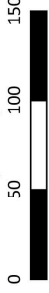


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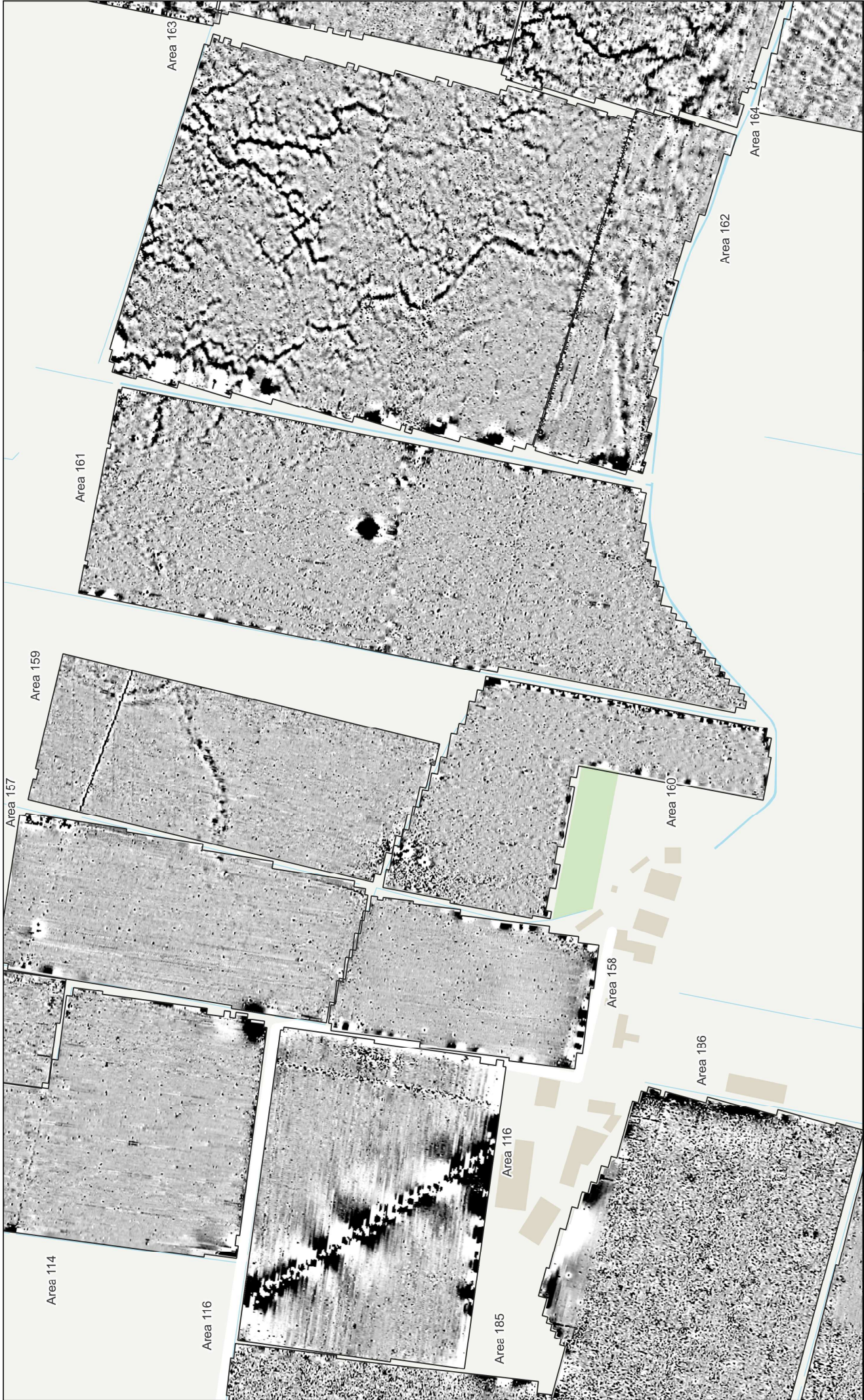
N



0    50    100    150 m







MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 132 - Magnetic Gradient (Areas 1:4, 115, 116, 157, 158, 159, 160, 161, 162, 163 & 164)  
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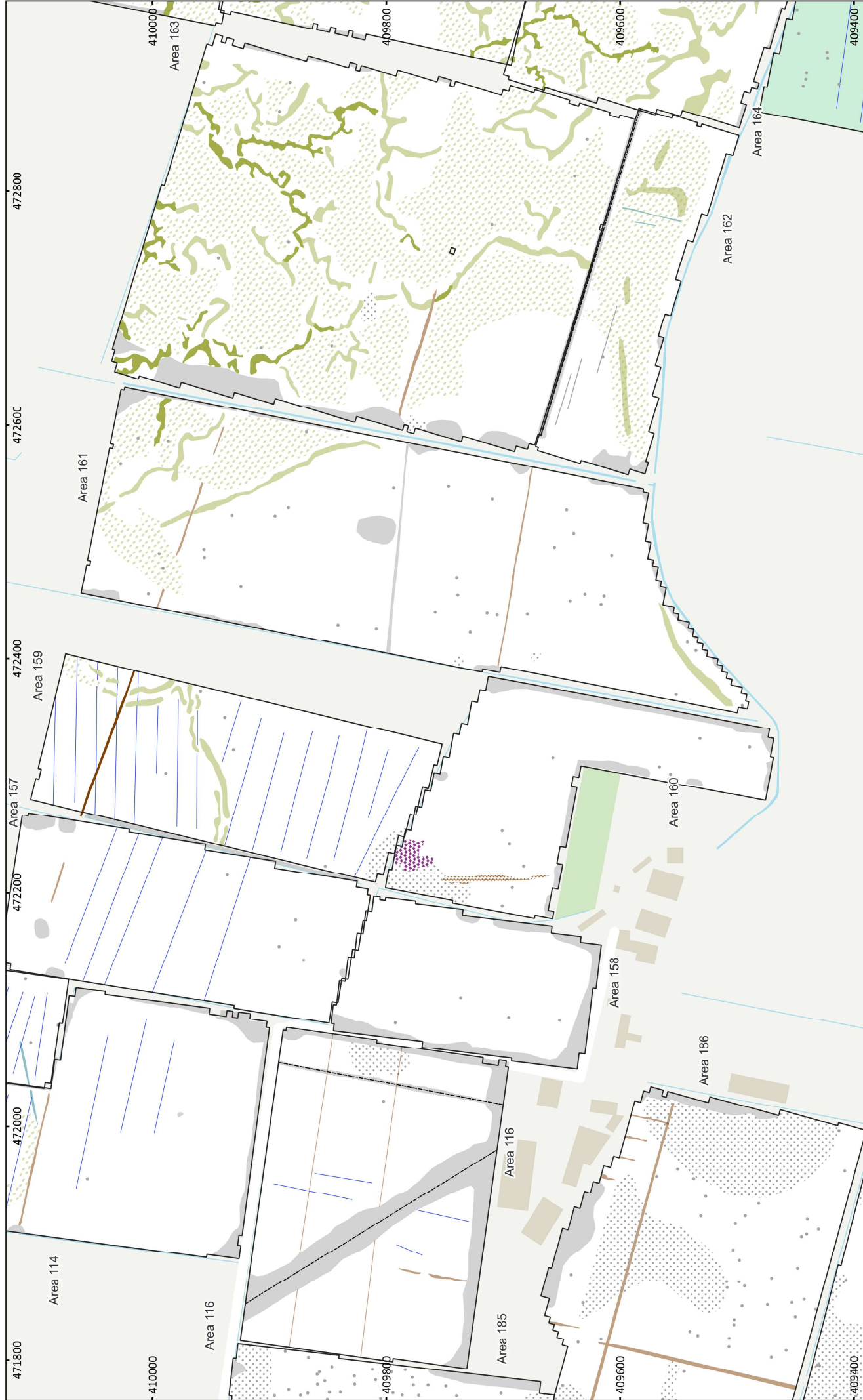
0 50 100 150 m

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-1 0 1 2 nT







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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 133 - Magnetic Interpretation (Areas 114, 115, 116, 157, 158, 159, 160, 161, 162, 163 & 164)

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Figure 134 - Magnetic Interpretation Over Historical Maps and Satellite Imagery  
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SURVEYS

— Data Artefact  
--- Service  
--- Drainage Feature  
• Ferrous (Spike)  
— Ferrous (Trend)

■ Agricultural (Strong)  
■ Agricultural (Weak)  
■ Agricultural (Spread)  
■ Natural (Strong)  
■ Natural (Weak)  
■ Natural (Spread)

■ Palaeochannel  
■ Undetermined (Weak)  
■ Industrial/Modern (Spread)  
■ Magnetic Disturbance  
■ Ferrous/Debris (Spread)  
■ Agricultural (Trend)

0 50 100 150 m

N





MSS51548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 135 - Magnetic Total Field (Lower Sensor) (Areas 131, 133, 175 & 180)

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48997 nT 49005

0 50 100 150 m

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MSS51548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 136 - Magnetic Gradient (Areas 131, 133, 179 & 180)  
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Area 188

Area 127

Area 128

Area 129

Area 131

Area 191

Area 192

Area 193

M180

Low Levels Bank

Willston Farm

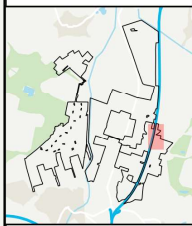
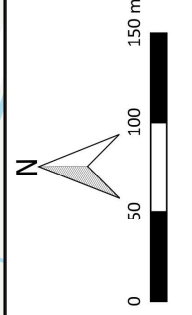
0 50 100 150 m

N

-1 nT 2

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 138 - Magnetic Interpretation Over Historical Maps and Satellite Imagery  
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**Legend**

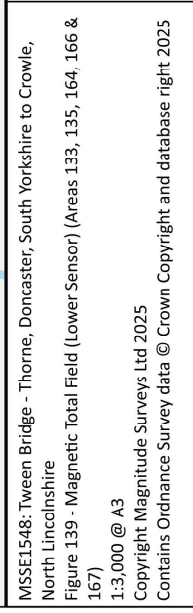
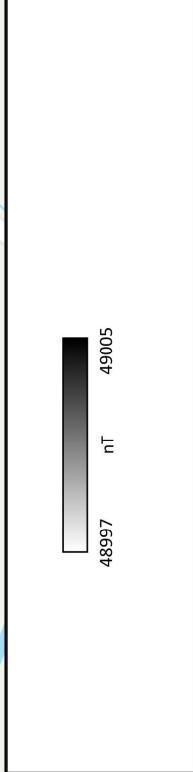
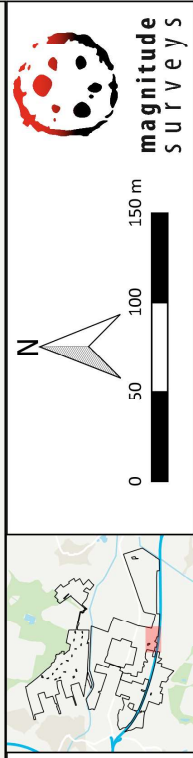
Agricultural (Weak)	Natural (Spread)	Ferrous/Debris (Spread)
Agricultural (Strong)	Palaeochannel	Service
Natural (Weak)	Undetermined (Weak)	Drainage Feature
Natural (Strong)	Magnetic Disturbance	Ferrous (Spike)

**Scale and Orientation**

0 50 100 150 m

N









MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 140 - Magnetic Gradient (Areas 133, 135, 164, 166 & 167)  
1:3,000 @ A3  
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Area 162  
Area 164  
Area 167  
Area 133  
Area 194  
Area 166  
Area 135  
Area 166  
The Poultry Farm  
Plains House Farm  
M180  
Plains Lane

Area 166  
Area 135  
Area 166  
Area 167  
Area 133  
Area 194  
Area 162  
Area 164


0 50 100 150 m

N


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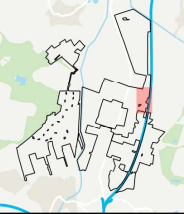




0 50 100 150 m



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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
 Figure 141 - Magnetic Interpretation (Areas 133, 135, 166, 167 & 167)  
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 142 - Magnetic Interpretation Over Historical Maps and Satellite Imagery  
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Archaeology Possible (Weak)  
Archaeology Possible (Spread)  
Agricultural (Strong)  
Agricultural (Weak)  
Agricultural (Spread)

Natural (Strong)  
Natural (Weak)  
Natural (Spread)  
Palaeochannel  
Undetermined (Weak)

Magnetic Disturbance  
Ferrous/Debris (Spread)  
Agricultural (Trend)  
Drainage Feature  
Ferrous (Spike)

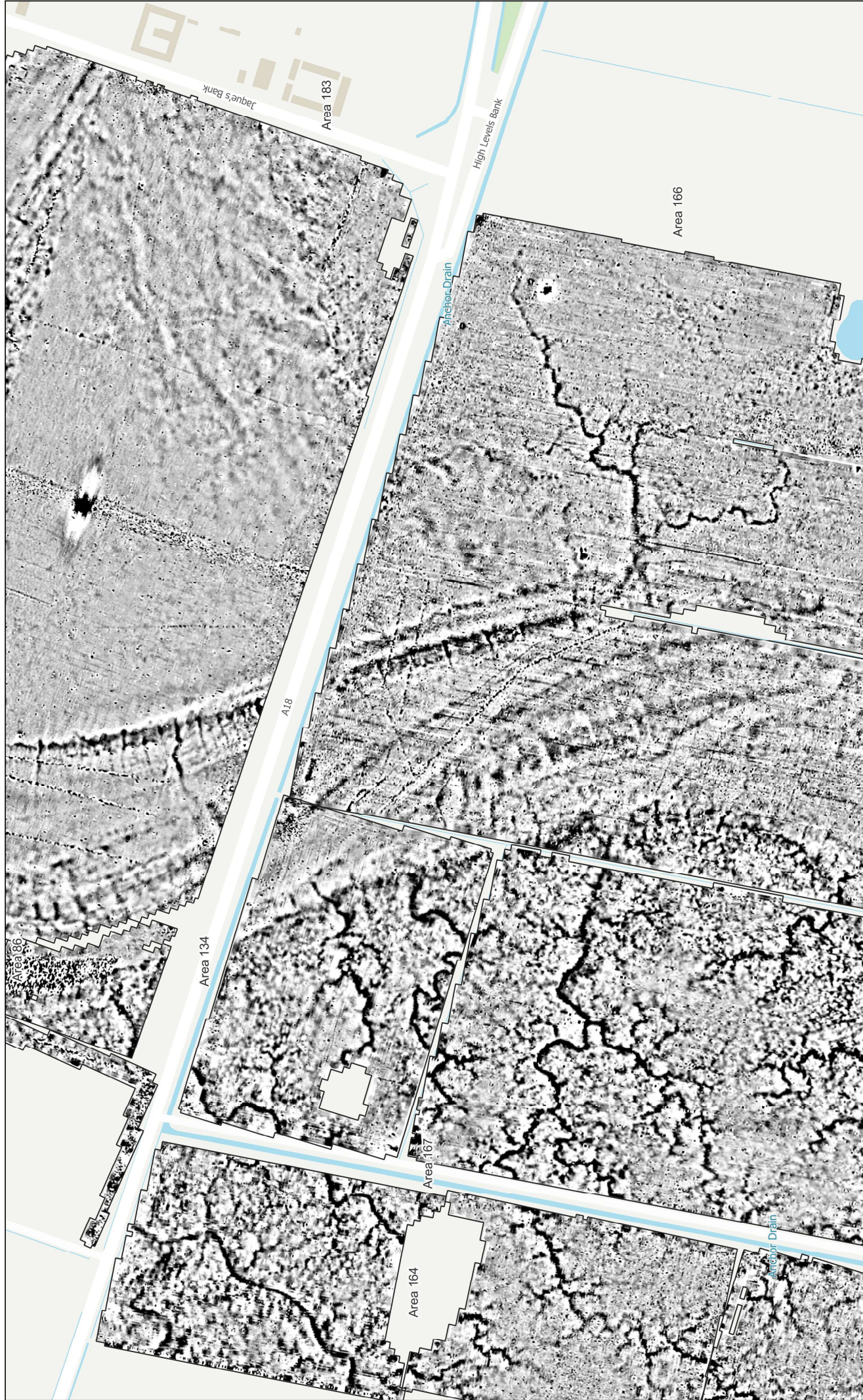
0 50 100 150 m

N









MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 144 - Magnetic Gradient (Areas 86, 134, 163, 164, 166, 167, & 183)  
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Area 183

Area 166

Area 167

Area 164

Area 134

A18

Anchor Drain

High Levels Bank

Jaques Bank

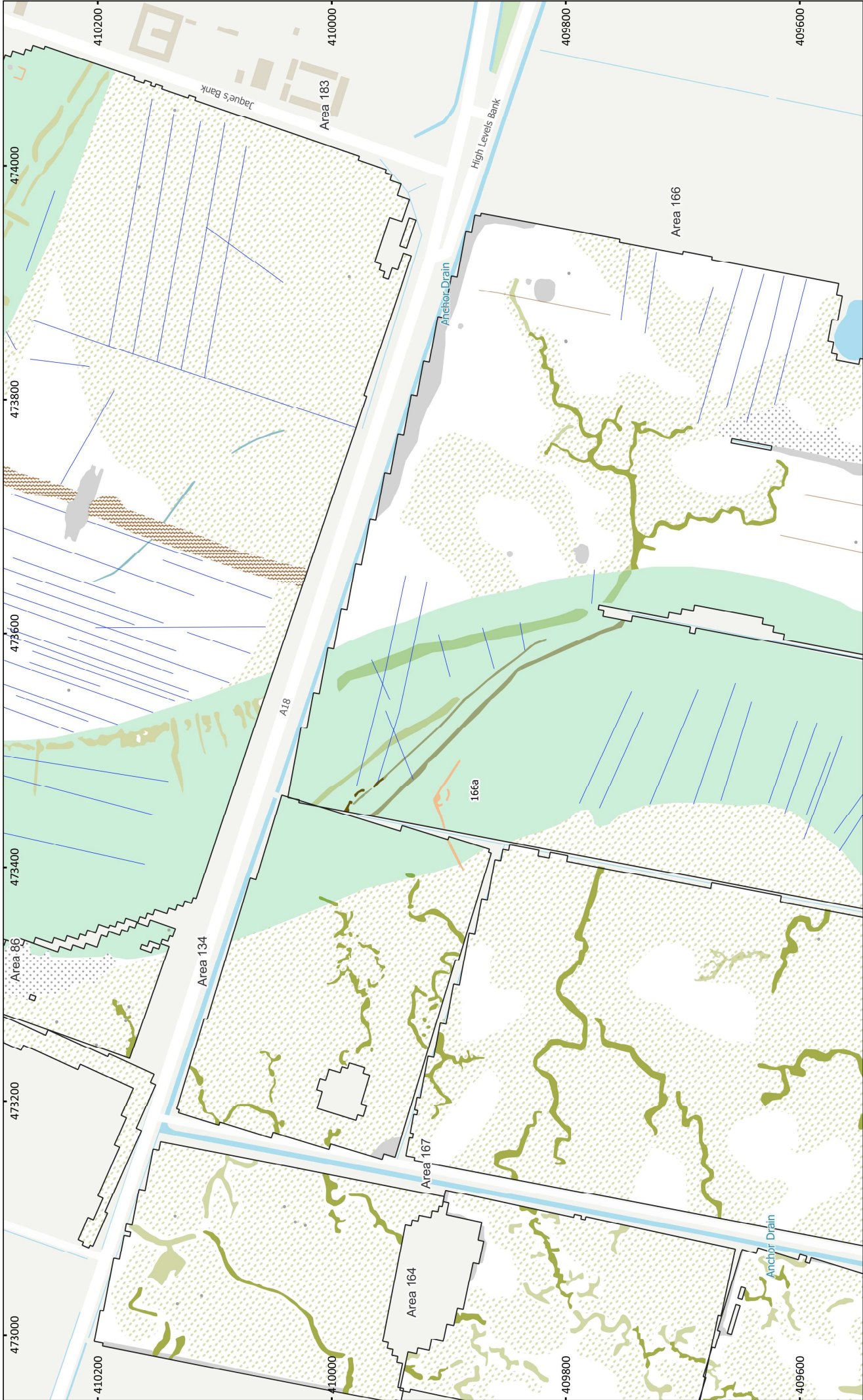
0 50 100 150 m

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0 1 nT 2

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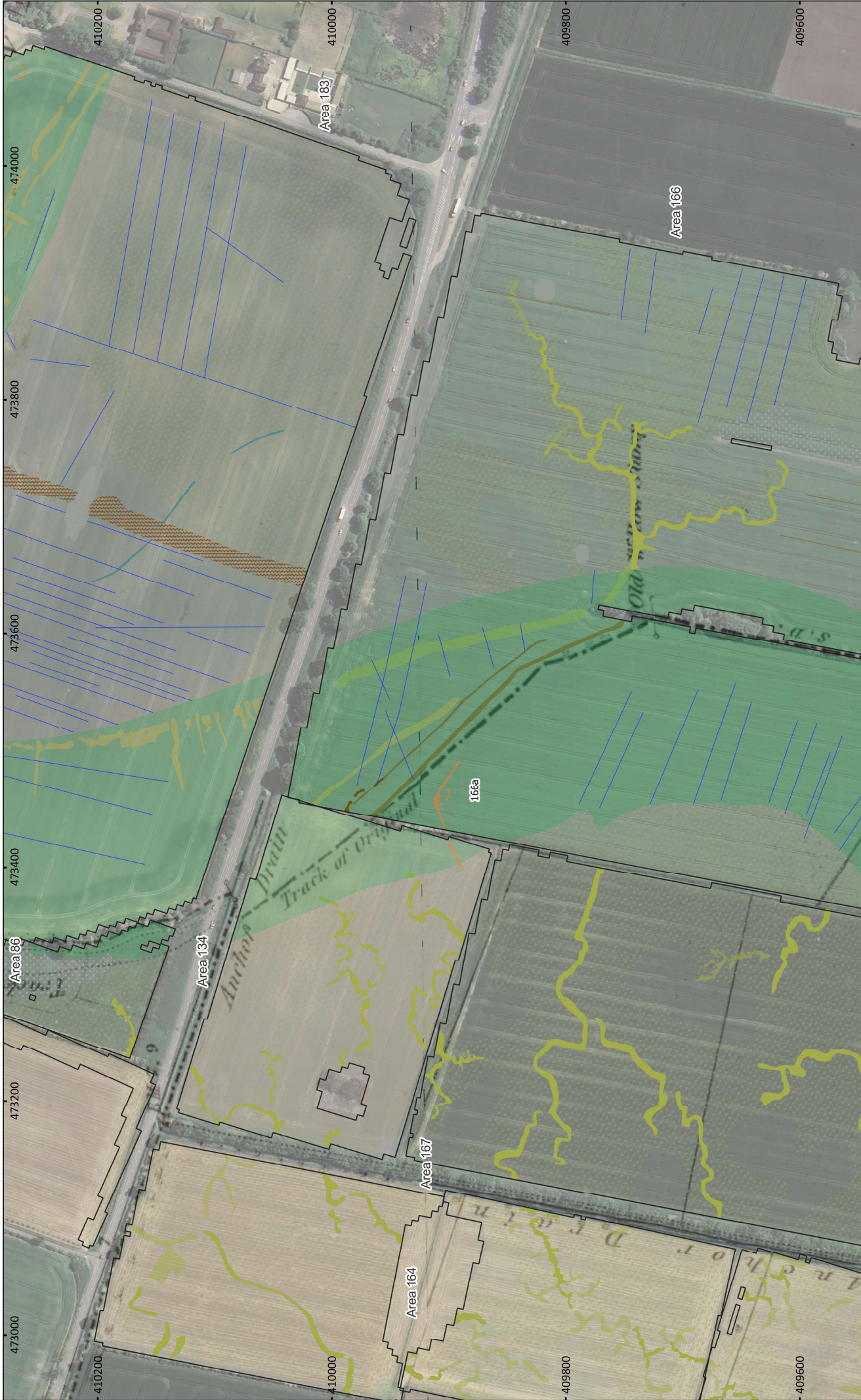






MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 145 - Magnetic Interpretation (Areas 86, 134, 163, 164, 166, 167, & 183)  
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 146 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

1:3,000 @ A3

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Area 183

Area 166

Area 167

Area 164

Area 134

Area 88

409600

409800

410000

410200

473000

473200

473400

473600

473800

474000

Anchor Drain

Track of Original

166a

0 50 100 150 m

N

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SURVEYS

Archeology Possible (Weak)

Archeology Possible (Strong)

Agricultural (Strong)

Agricultural (Weak)

Agricultural (Spread)

Natural (Strong)

Natural (Weak)

Natural (Spread)

Palaeochannel

Undetermined (Weak)

Magnetic Disturbance

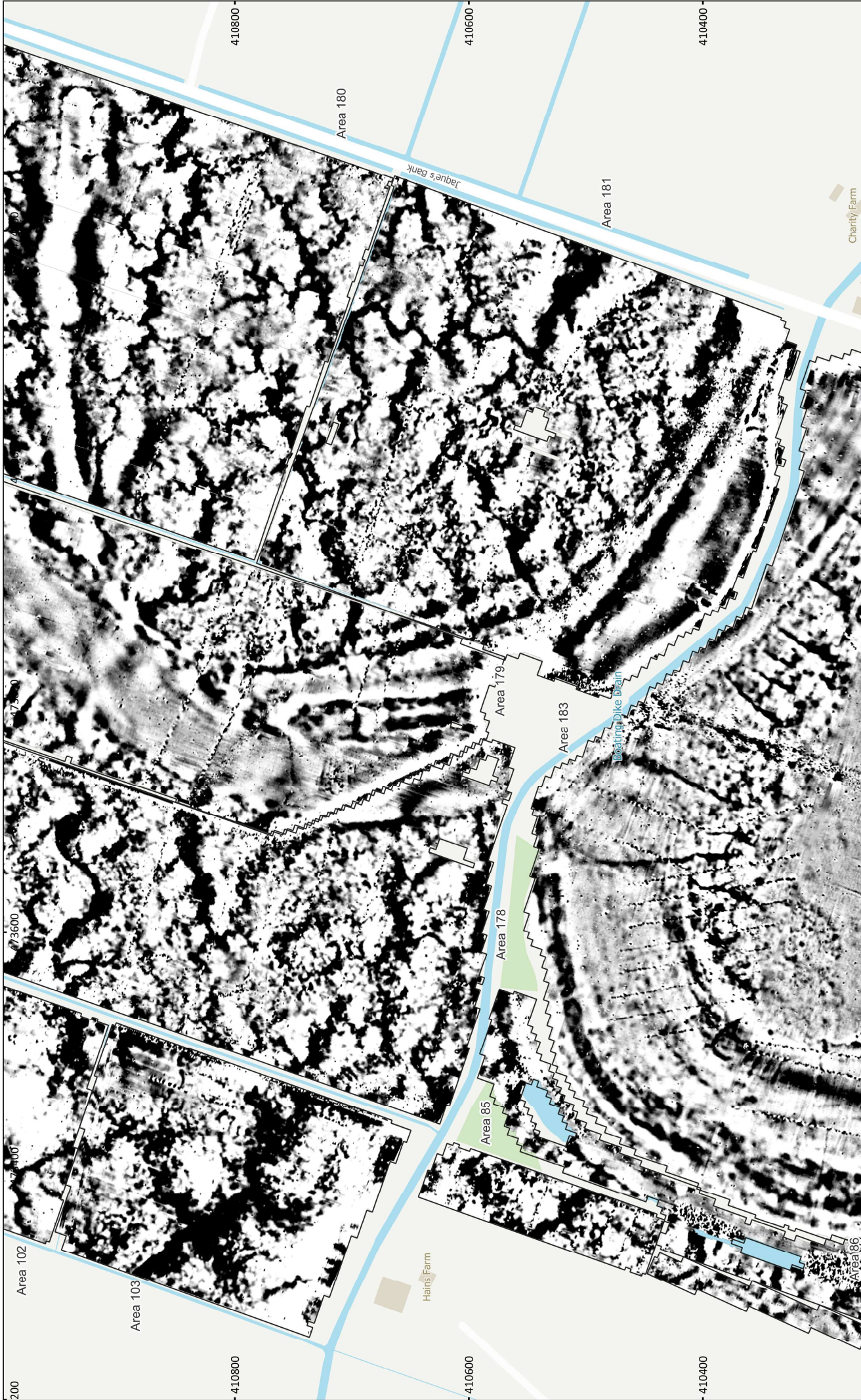
Ferrous/Debris (Spread)

Agricultural (Trend)

Drainage Feature

Ferrous (Spoke)



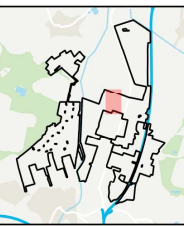
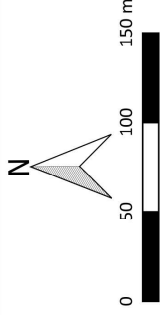


MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 147 - Magnetic Total Field (Lower Sensor) (Areas 85, 86, 102, 103, 178, 179, 180, 181, 182, & 183)  
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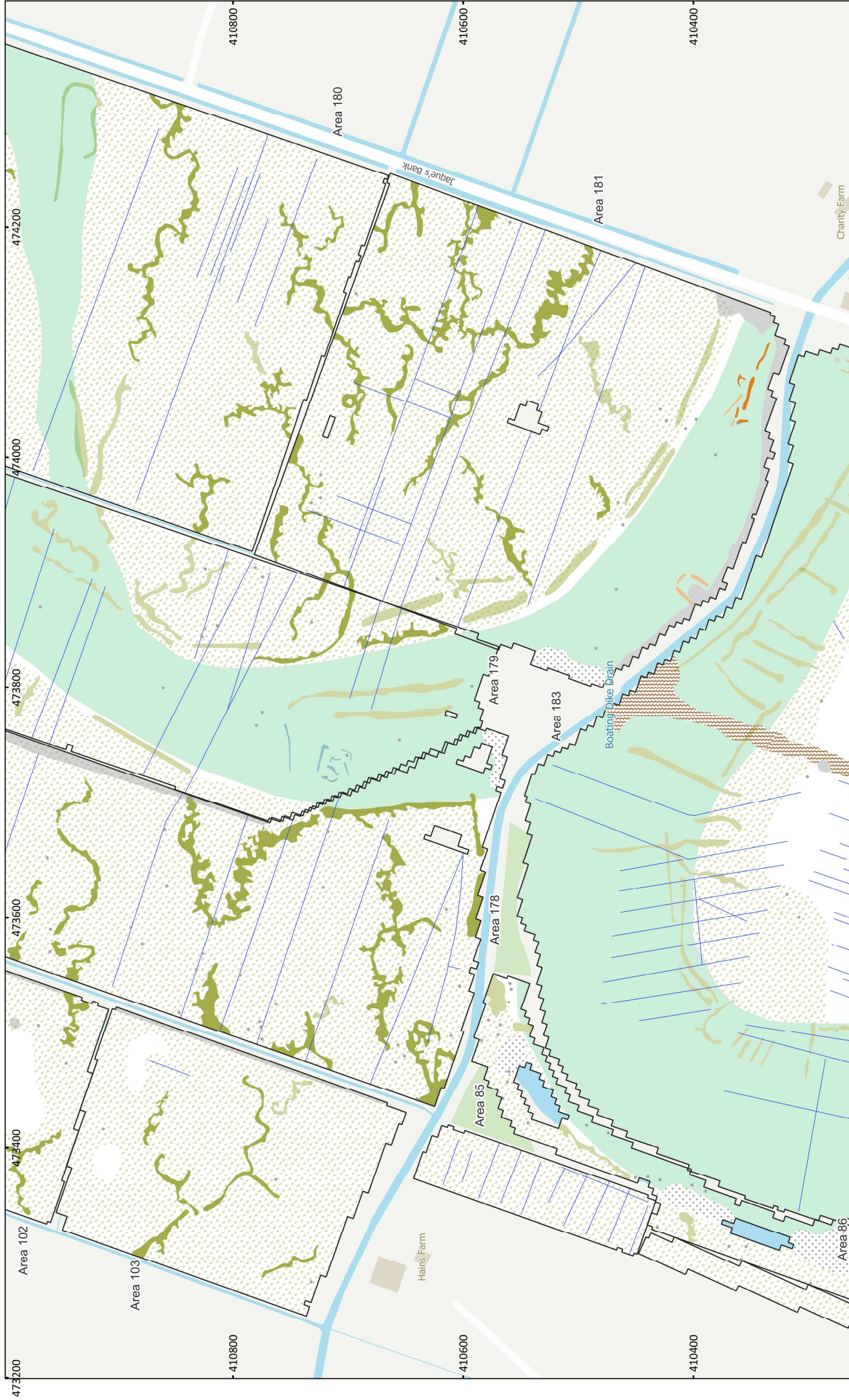
0 50 100 150 m





MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
 Figure 148 - Magnetic Gradient (Areas 85, 86, 102, 103, 178, 179, 180, 181, 182, & 183)  
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MSSE1548: Treen Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 149 - Magnetic Interpretation (Areas 85, 86, 102, 103, 178, 179, 180, 181, 182, & 183)

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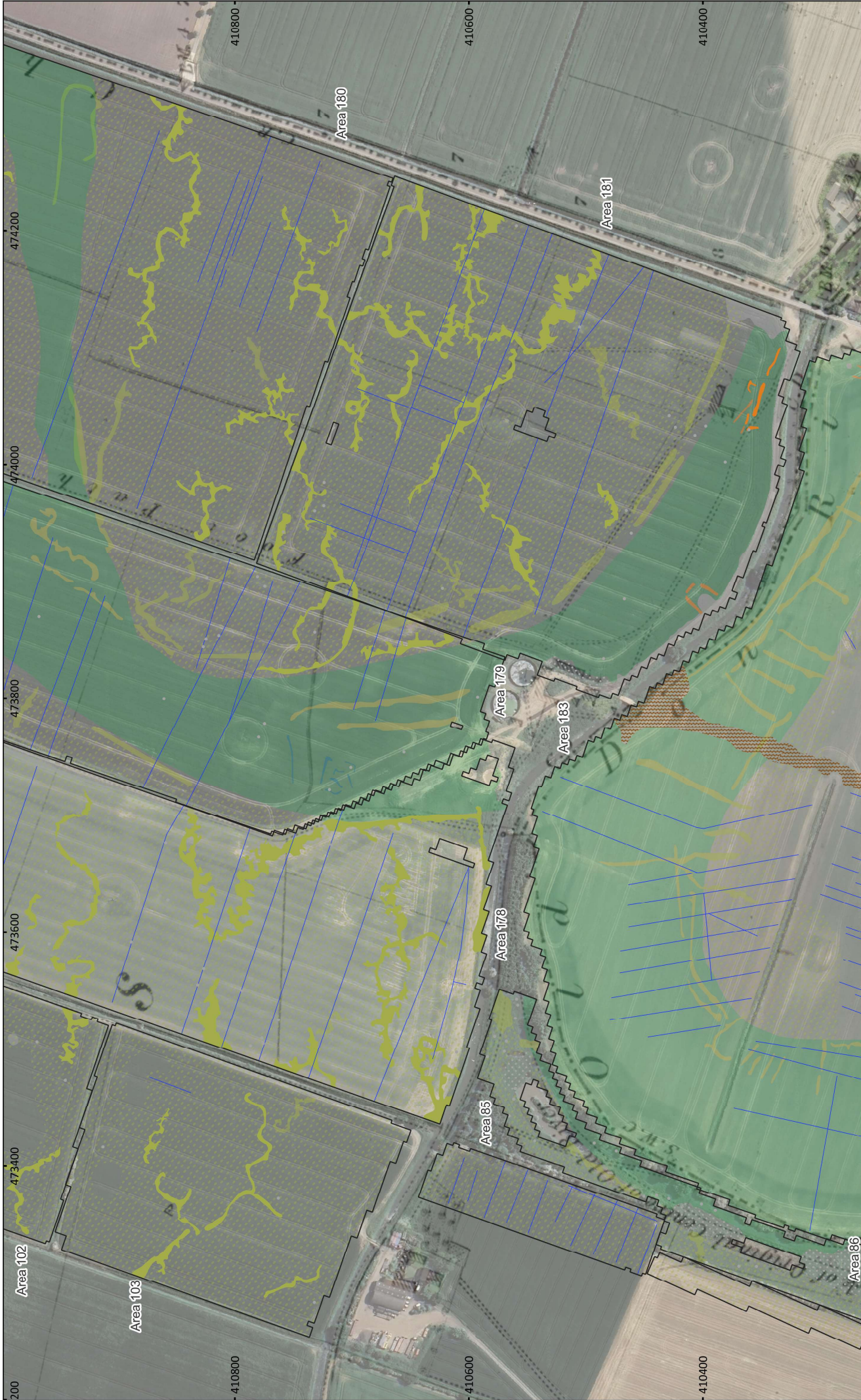
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0 50 100 150 m

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Figure 150 - Magnetic Interpretation Over Historical Maps and Satellite Imagery


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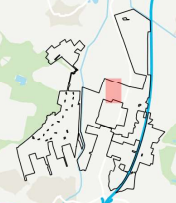
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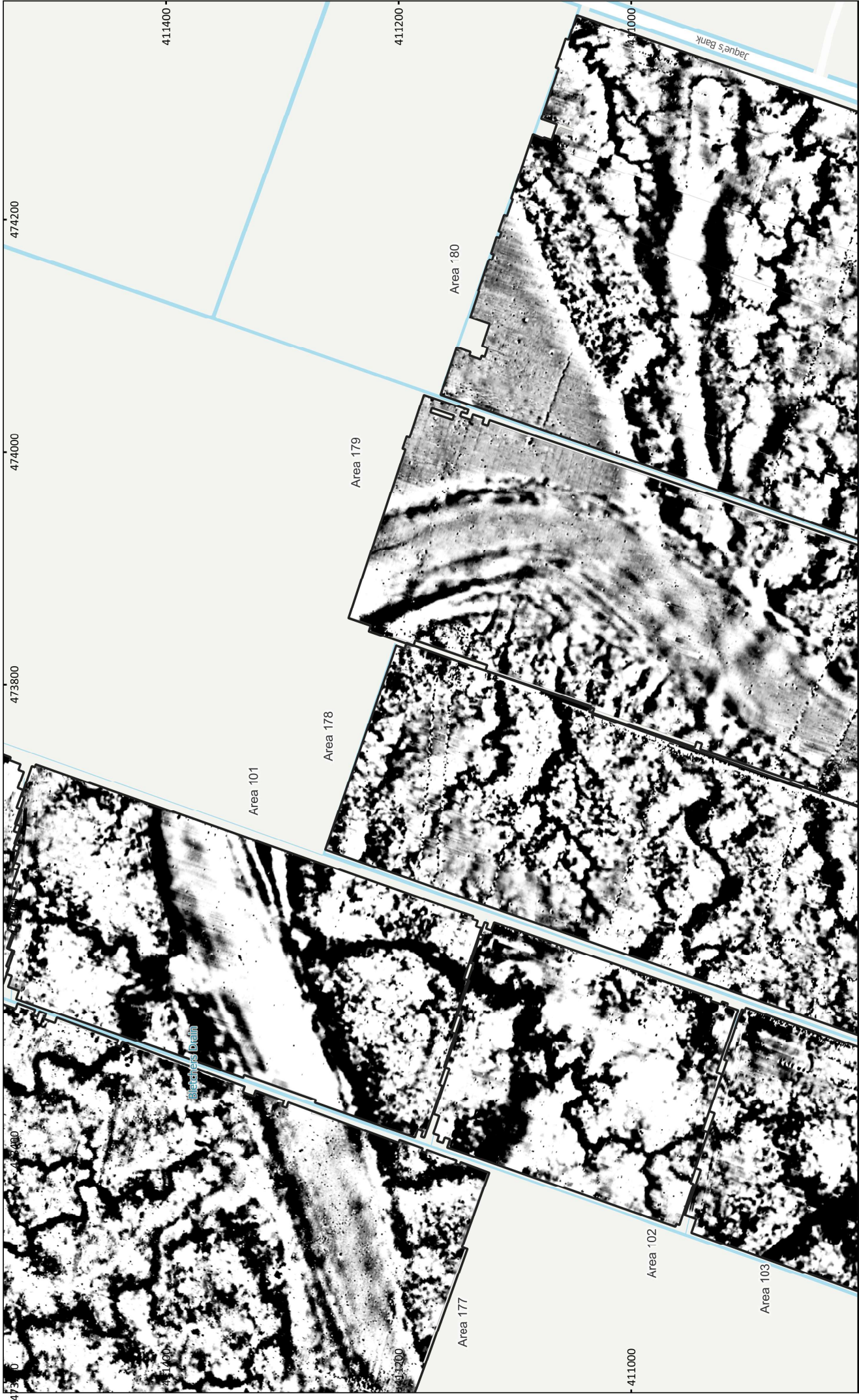


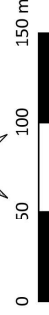
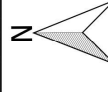
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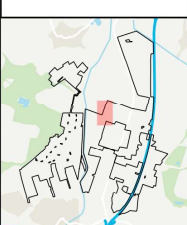



<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black; margin-right: 5px;"></span> Archaeology Possible (Strong)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightorange; border: 1px solid black; margin-right: 5px;"></span> Archaeology Possible (Weak)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, lightgrey 2px, lightgrey 4px); border: 1px solid black; margin-right: 5px;"></span> Agricultural (Spread)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black; margin-right: 5px;"></span> Natural (Strong)</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black; margin-right: 5px;"></span> Natural (Weak)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, lightgrey 2px, lightgrey 4px); border: 1px solid black; margin-right: 5px;"></span> Natural (Spread)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightblue; border: 1px solid black; margin-right: 5px;"></span> Palaeochannel</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightblue; border: 1px solid black; margin-right: 5px;"></span> Undetermined (Weak)</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: grey; border: 1px solid black; margin-right: 5px;"></span> Magnetic Disturbance</li> <li><span style="display: inline-block; width: 15px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></span> Ferrous/Debris (Spread)</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 2px solid blue; margin-right: 5px;"></span> Drainage Feature</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 2px dotted black; margin-right: 5px;"></span> Ferrous (Spike)</li> </ul>
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 151 - Magnetic Total Field (Lower Sensor) (Areas 101, 102, 177, 178, 179, & 180)

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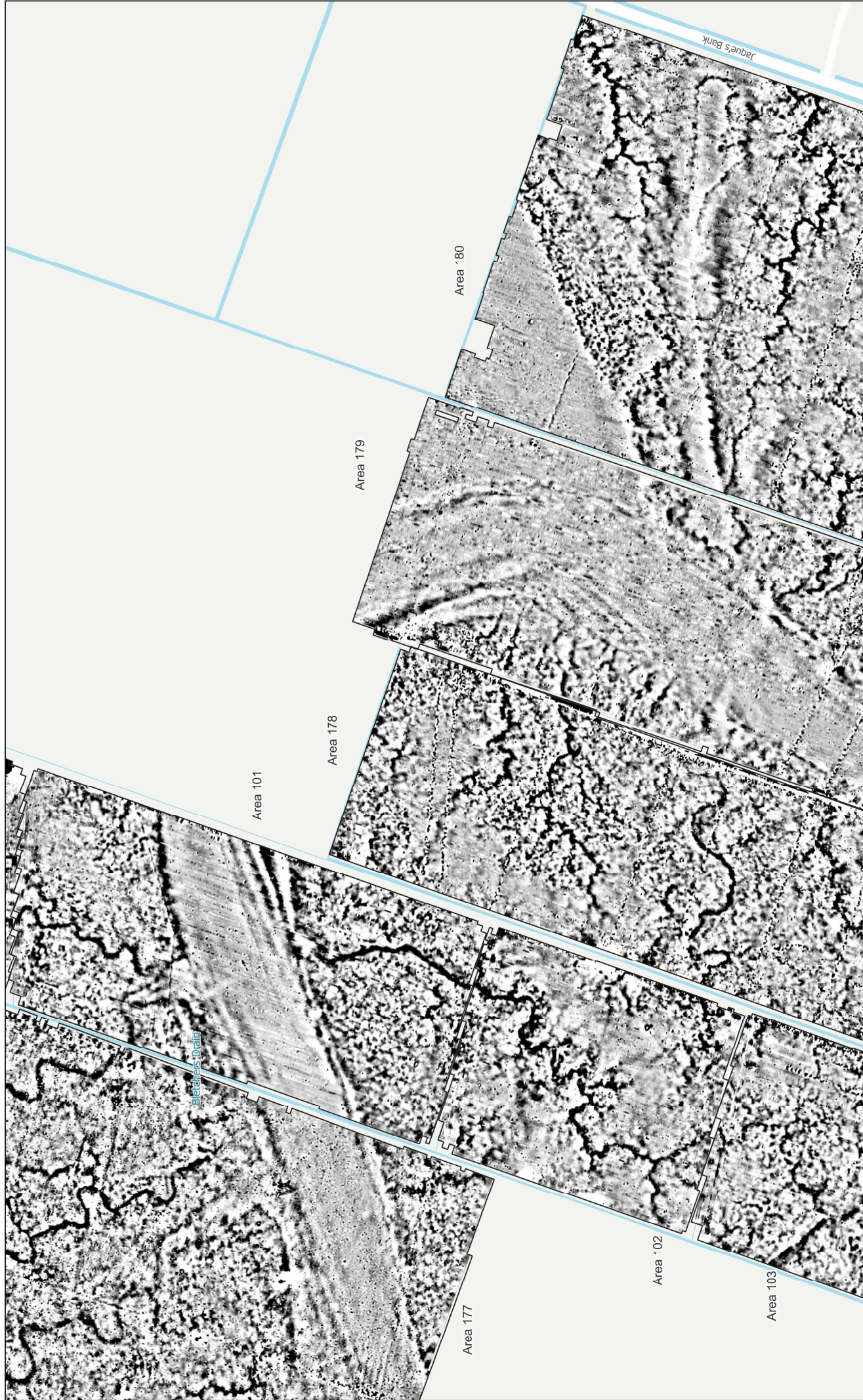
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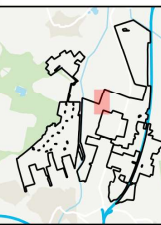
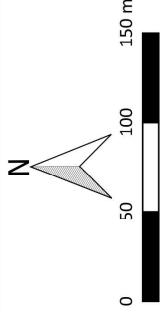
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire  
Figure 152 - Magnetic Gradient (Areas 101, 102, 177, 178, 179, & 180)  
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