

Tween Bridge Solar Farm

Environmental Statement

Appendix 8.2: Geophysical Survey Report – Part 7

Planning Act 2008

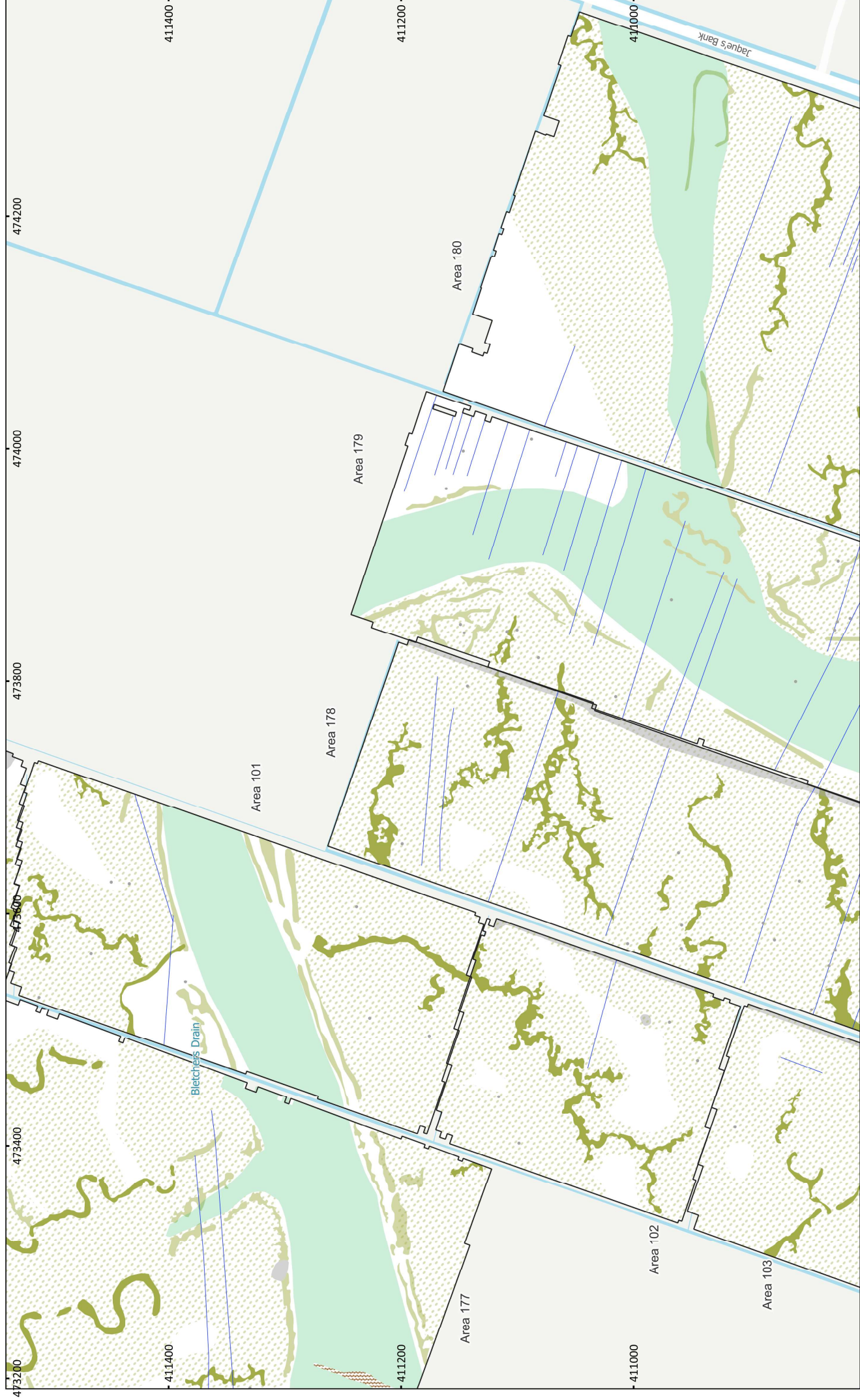
Infrastructure Planning (Applications: Prescribed Forms
and Procedure) Regulations 2009

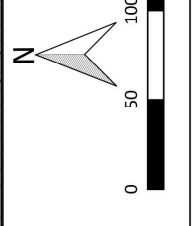
APFP Regulation 5(2)(a)

Document Reference: 6.3.8.2

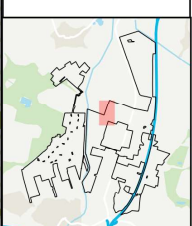
August 2025

Revision 1

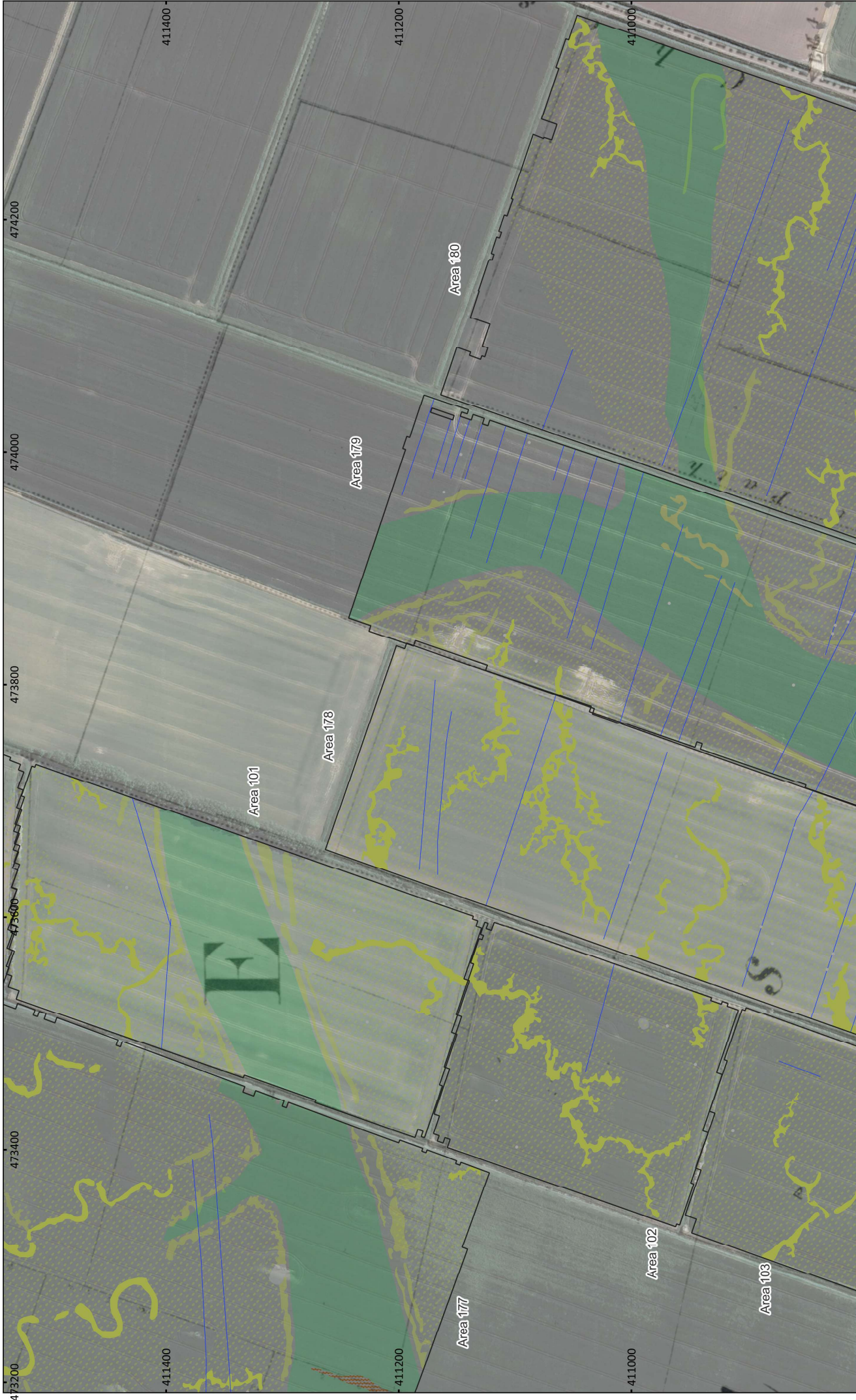




MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 153 - Magnetic Interpretation (Areas 101, 102, 177, 178, 179, & 180)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 154 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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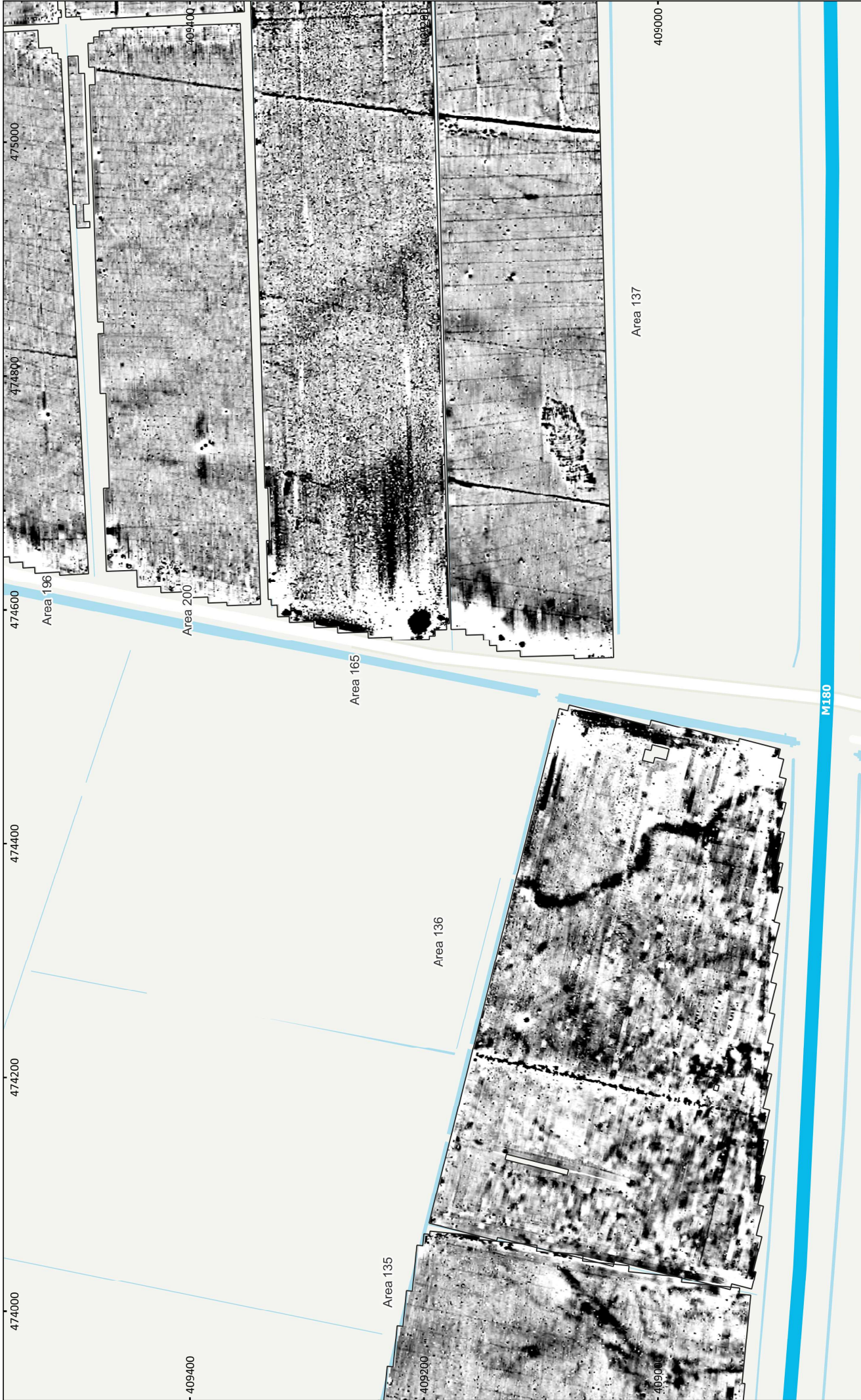
Legend

	Agricultural (Spread)		Drainage Feature
	Natural (Strong)		Natural (Spread)
	Natural (Weak)		Palaeochannel
			Ferrous (Spike)
			Magnetic Disturbance

N

0 50 100 150 m

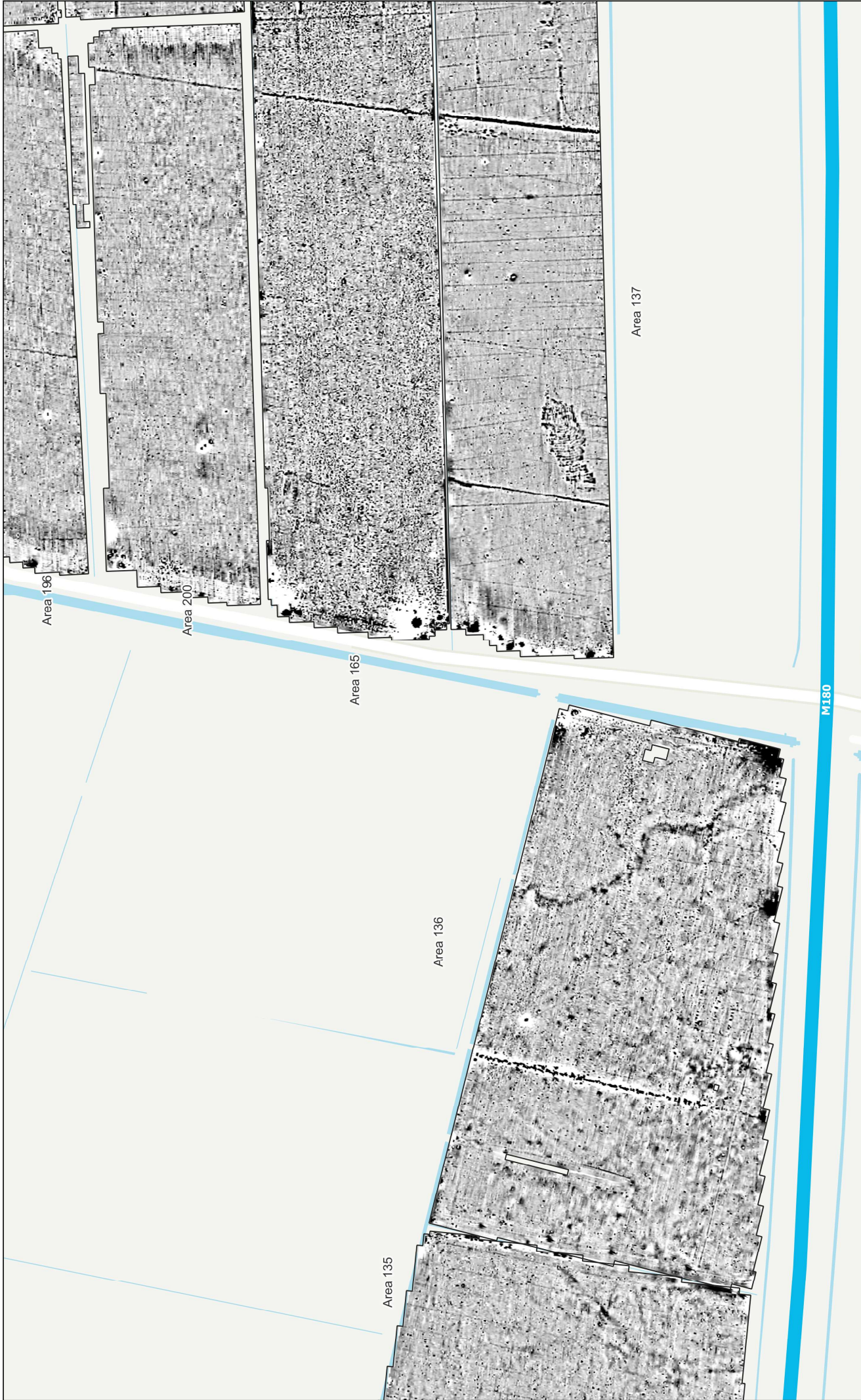
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 155 - Magnetic Total Field (Lower Sensor) (Areas 135, 136, 137, 165, 196, & 200)
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48997 nT 49005

0 50 100 150 m

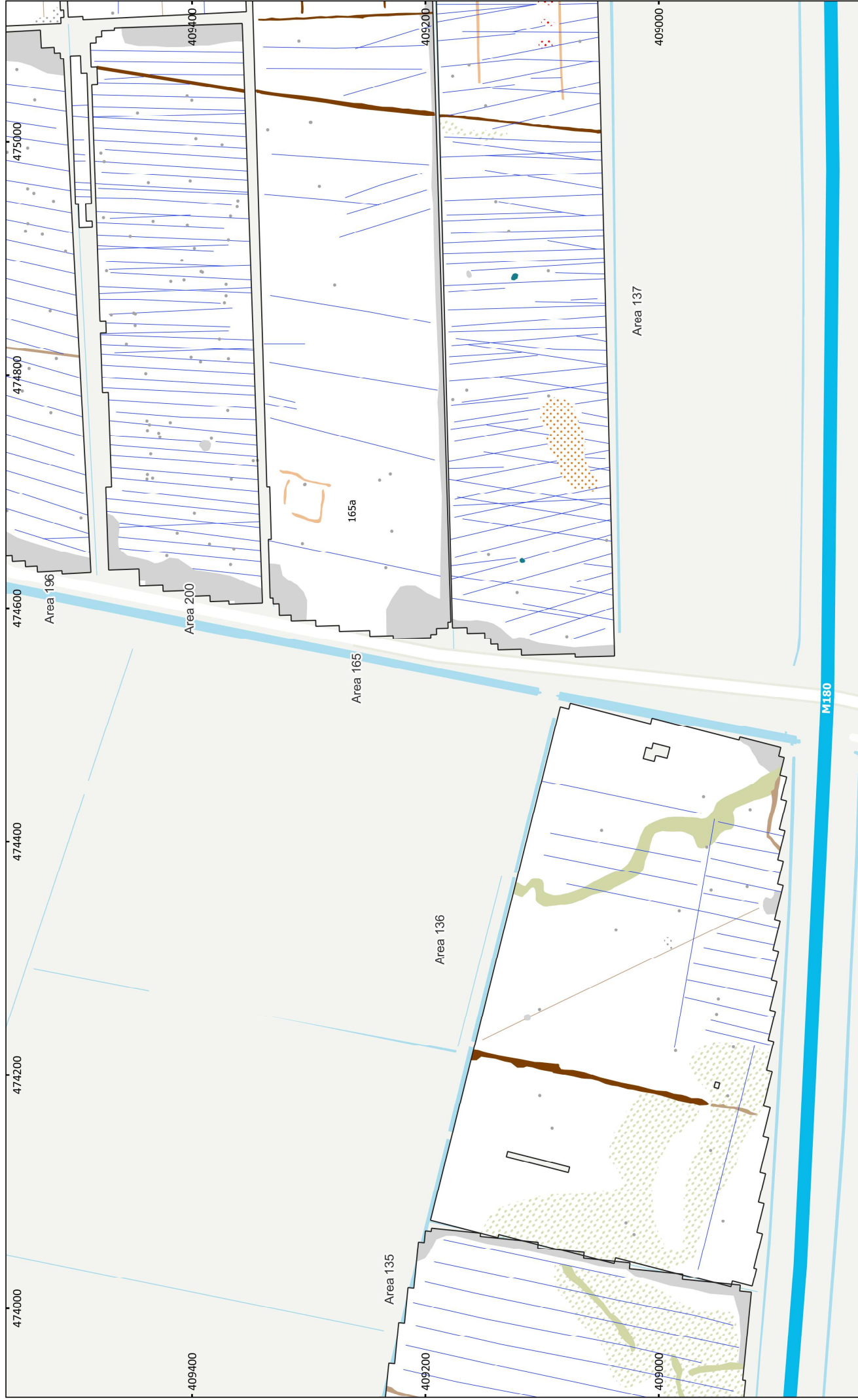


MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 156 - Magnetic Gradient (Areas 135, 136, 137, 165, 196, & 200)
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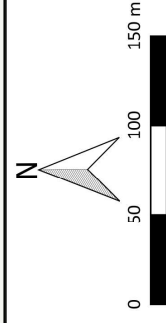
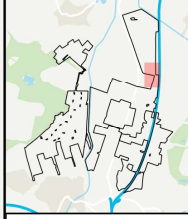
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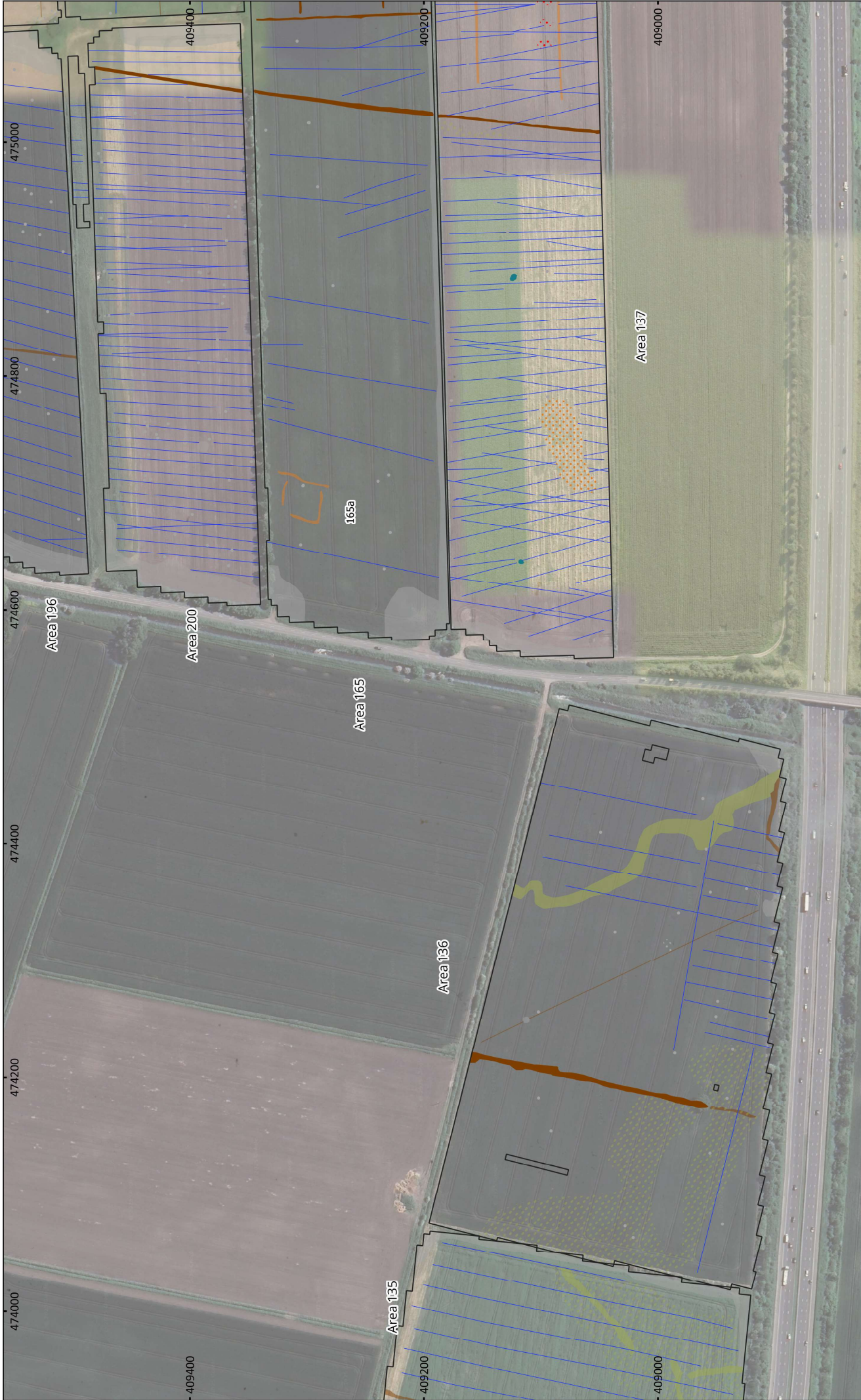
0 50 100 150 m

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
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Figure 157 - Magnetic Interpretation (Areas 135, 136, 137, 165, 196, & 200)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 158 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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••• Archaeology Probable (Spread)	■ Natural (Weak)	— Agricultural (Trend)
■ Archaeology Possible (Weak)	■ Natural (Spread)	— Drainage Feature
••• Archaeology Possible (Spread)	■ Undetermined (Strong)	• Ferrous (Spike)
■ Agricultural (Strong)	■ Magnetic Disturbance	
■ Agricultural (Weak)	■ Ferrous/Debris (Spread)	

N

0 50 100 150 m





0 50 100 150 m





48997 nT 49005

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

Figure 159 - Magnetic Total Field (Lower Sensor) (Areas 100, 101, 173, 174, 176, & 177)

1:3,000 @ A3

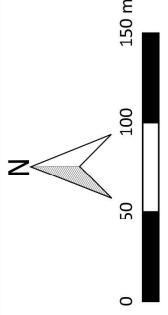
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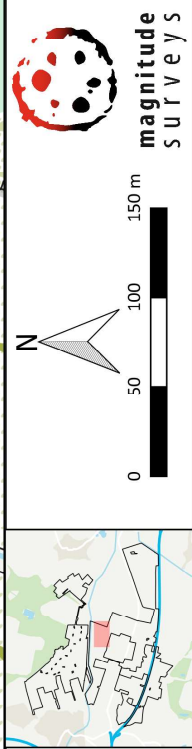
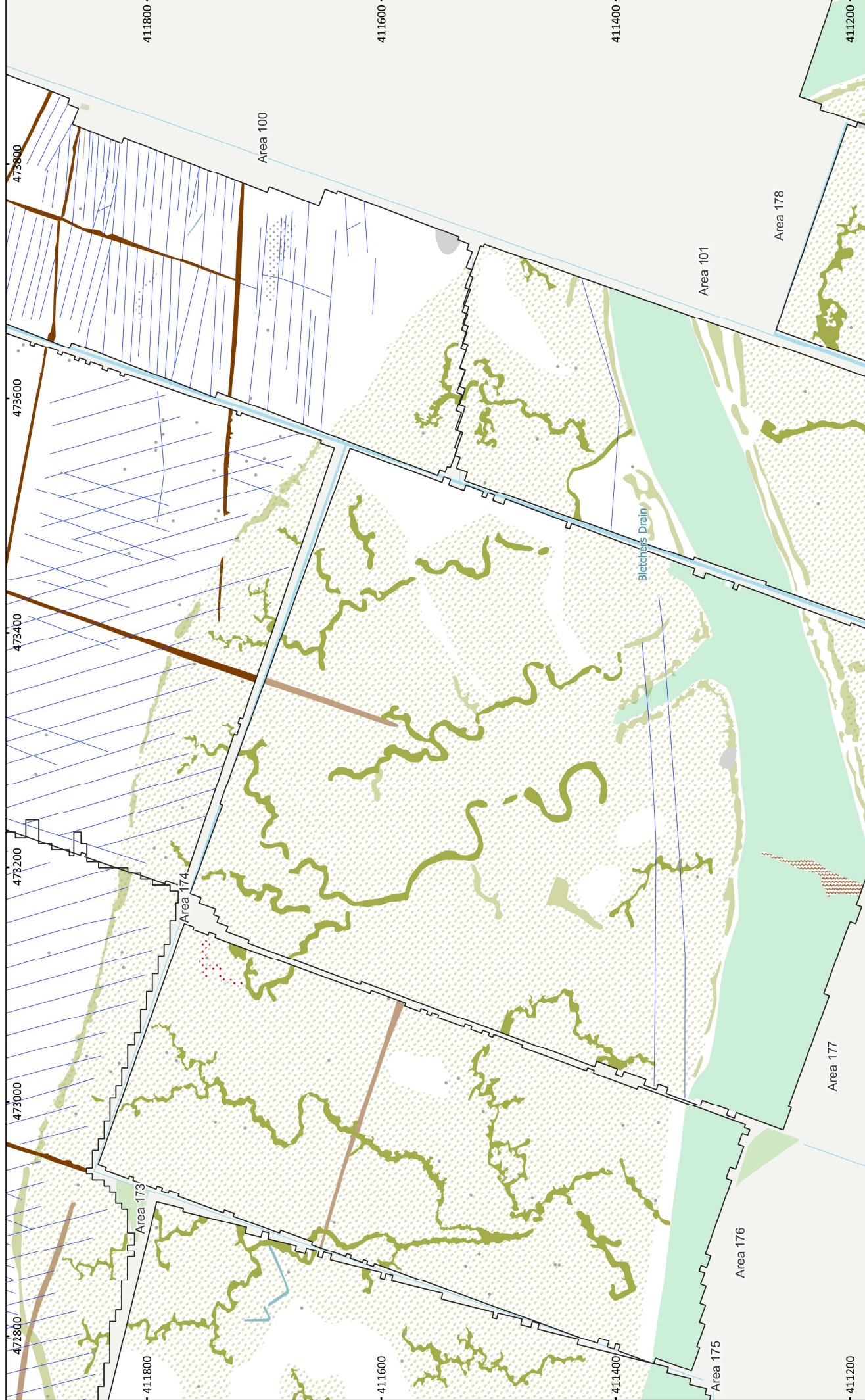




MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 160 - Magnetic Gradient (Areas 100, 101, 173, 174, 176, & 177)
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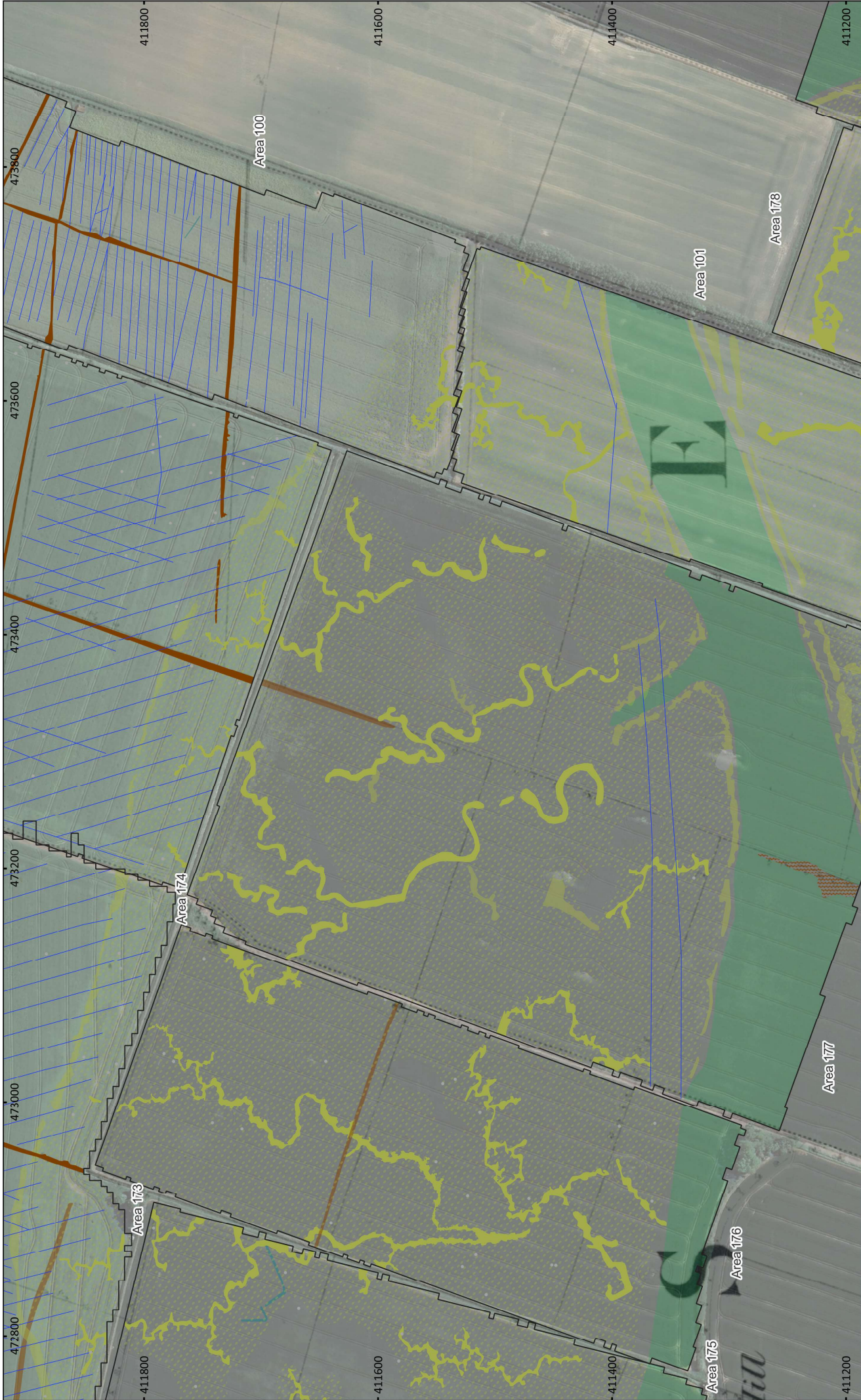


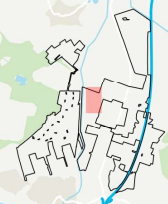
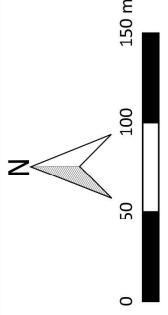
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 161 - Magnetic Interpretation (Areas 100, 101, 173, 174, 176, & 177)
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— Agricultural (Trend)
— Drainage Feature
• Ferrous (Spike)

• Natural (Spread)
• Palaeochannel
• Undetermined (Weak)
• Magnetic Disturbance
• Ferrous/Debris (Spread)

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

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Figure 162 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Figure 163 - Magnetic Total Field (Lower Sensor) (Areas 171, 172, 174, 175, 176, 177 & 178)

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48997 nT 49005

N

0 50 100 150 m

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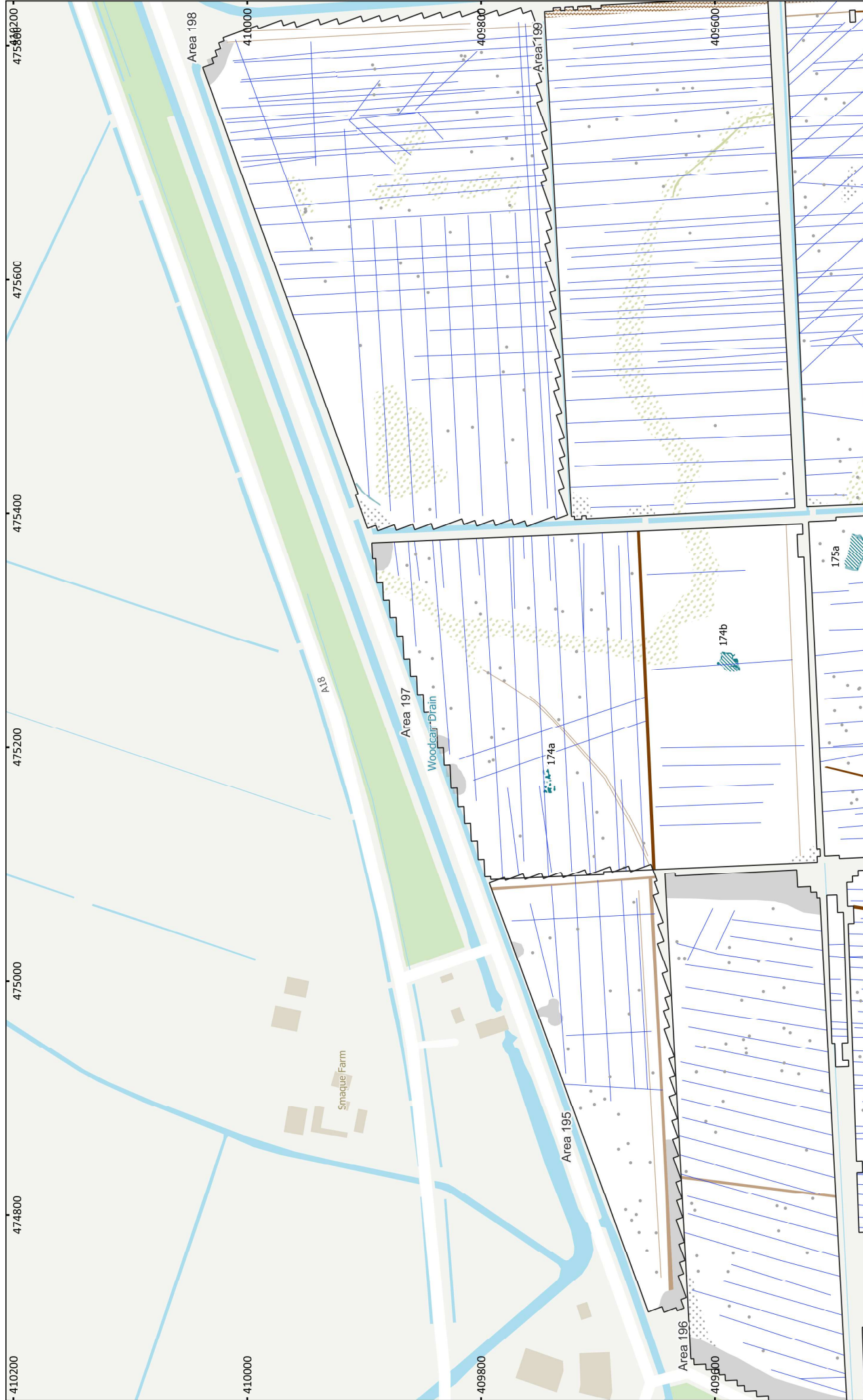
MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 164 - Magnetic Gradient (Areas 171, 172, 174, 175, 176, 177 & 178)
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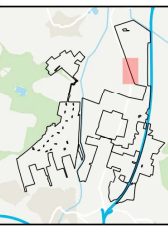
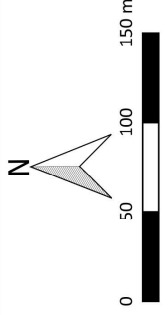
-1 nT 2

N

0 50 100 150 m

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 165 - Magnetic Interpretation (Areas 171, 172, 174, 175, 176, 177 & 178)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 166 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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Legend

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

Scale

0 50 100 150 m

North Arrow

N

Inset Map

Location map showing the area of study in the context of the surrounding region.

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

Figure 168 - Magnetic Gradient (Areas 137, 138, 139, 140, 174, 199, 201, &202)

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Area 137

Area 138

Area 139

Area 140

Area 165

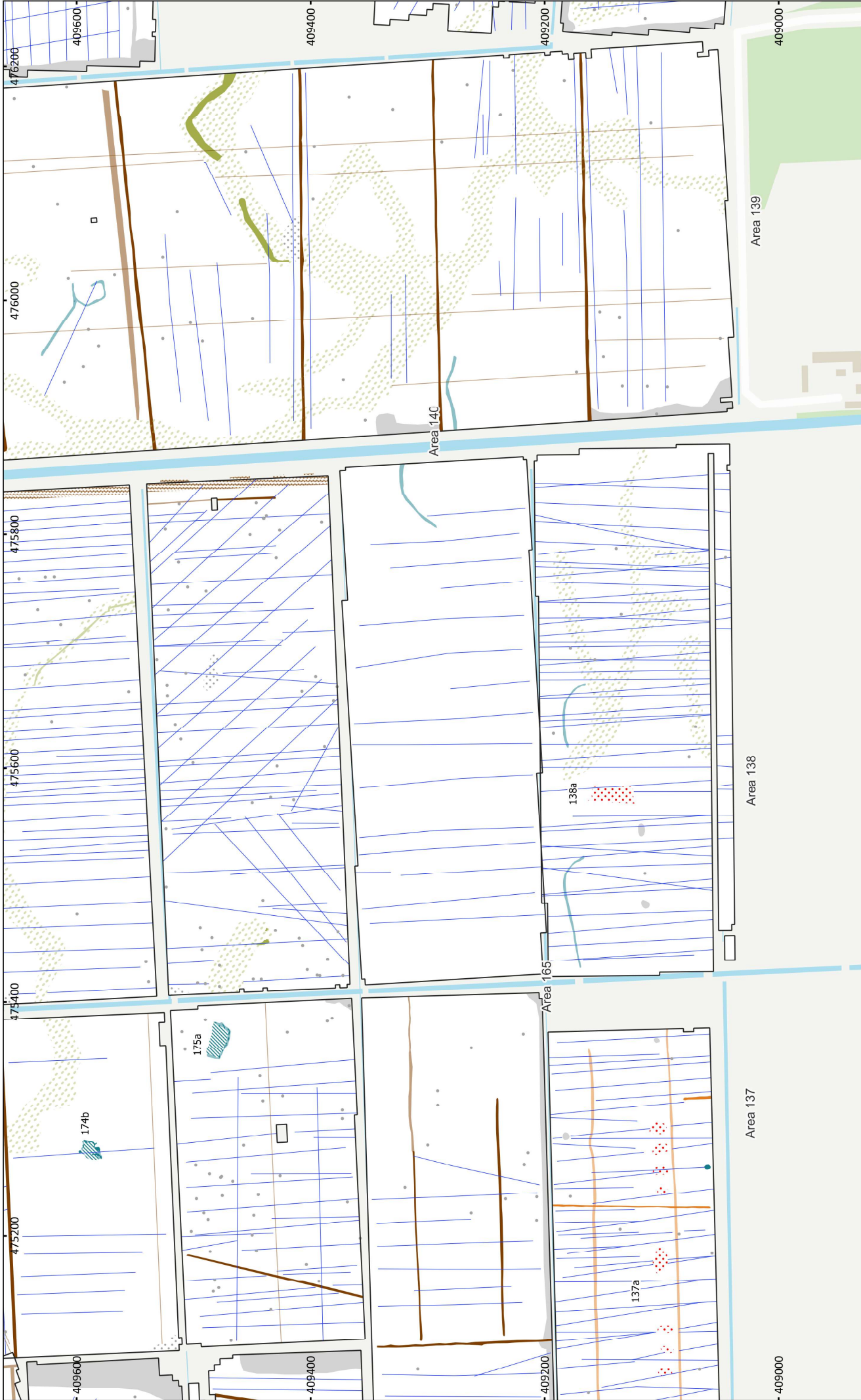
0 50 100 150 m

N

0 50 100 150 m

-1 nT 2

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 169 - Magnetic Interpretation (Areas 137, 138, 139, 140, 174, 199, 201, & 202)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 170 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Archaeology Probable (Spread)
Archaeology Possible (Strong)
Archaeology Possible (Weak)
Archaeology Possible (Strong)
Agricultural (Strong)
Agricultural (Weak)
Agricultural (Spread)

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

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

0 50 100 150 m

N



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

Figure 172 - Magnetic Gradient (Areas 139, 141, 142, 143, 145, 147, 176 & 177)

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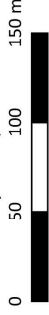
0 50 100 150 m

N

-1 0 1 2 nT

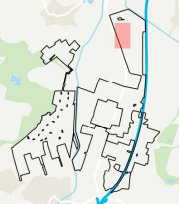
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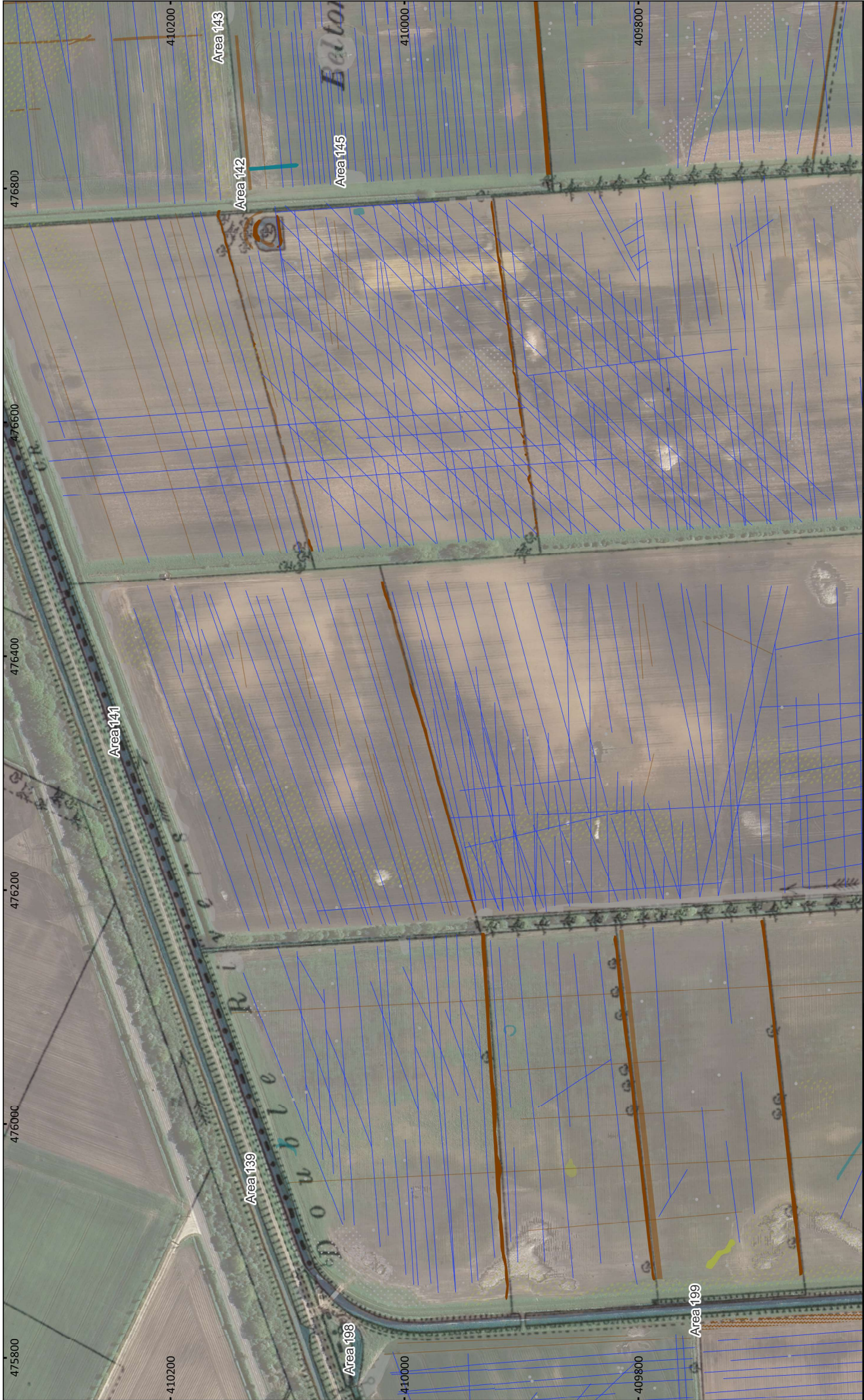


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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 173 - Magnetic Interpretation (Areas 139, 141, 142, 143, 145, 147, 176 & 177)

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Figure 174 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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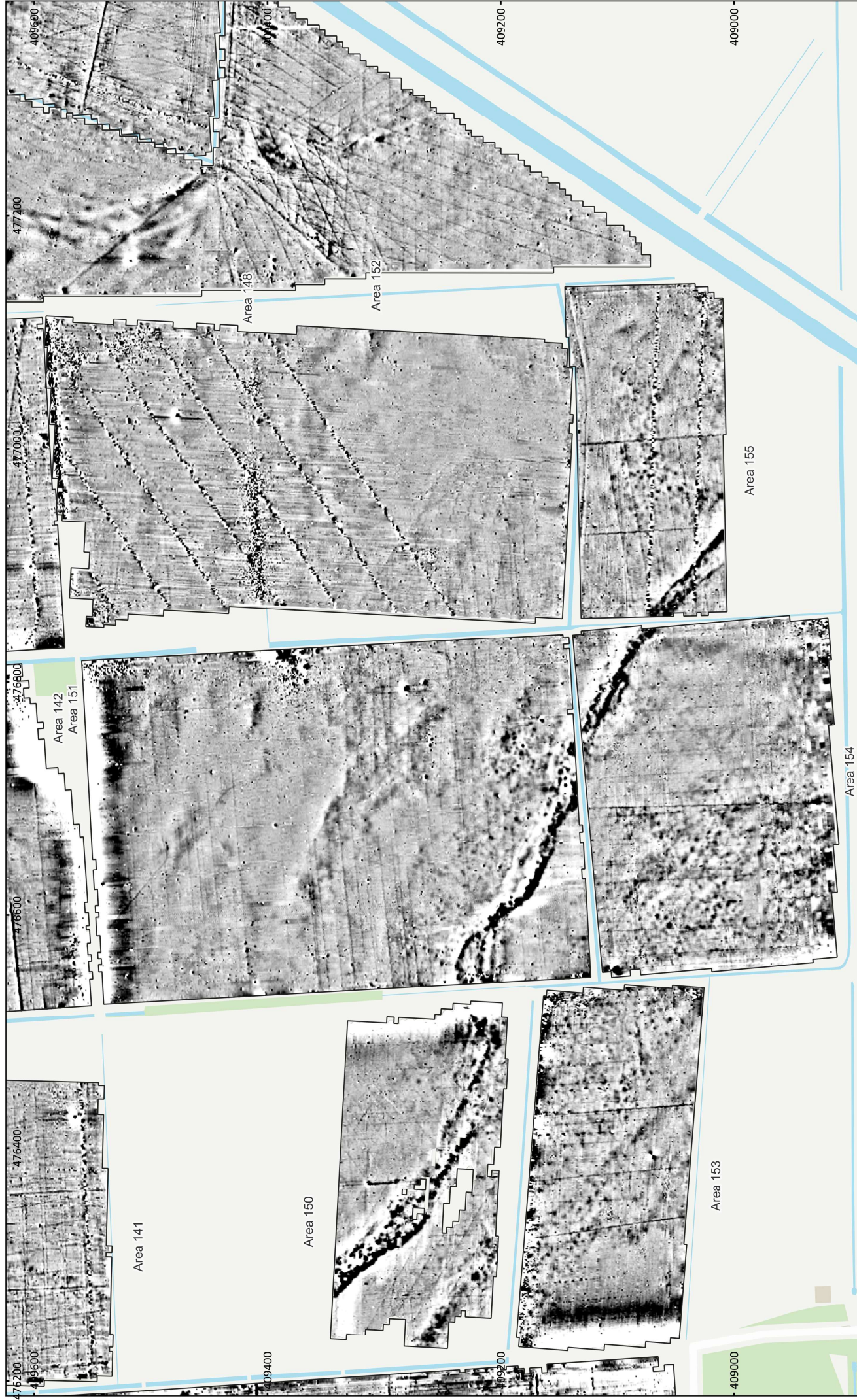
Legend

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

N

0 50 100 150 m

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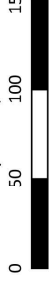


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N

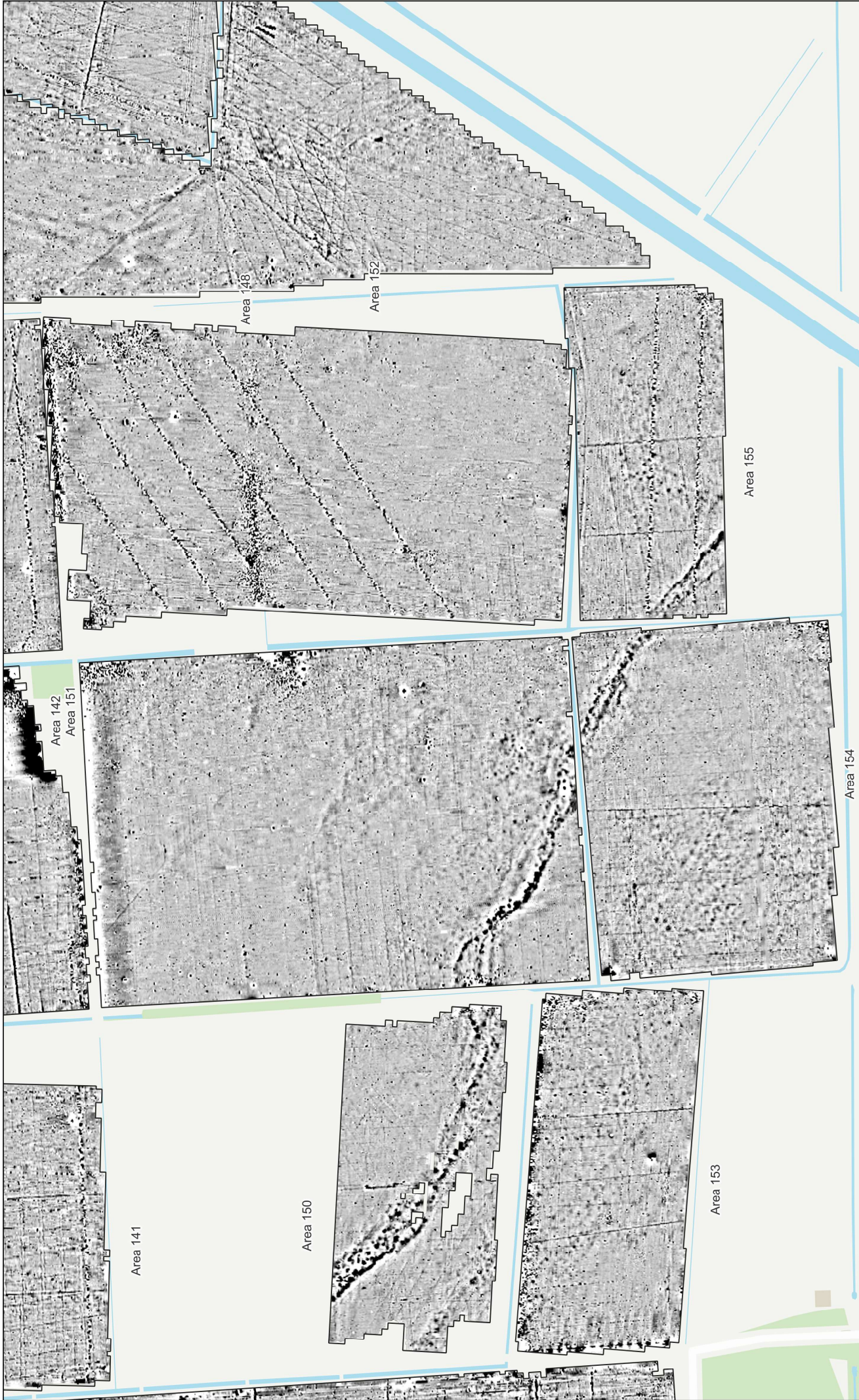


0 50 100 150 m



48997 nT 49005

MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
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Figure 175 - Magnetic Total Field (Lower Sensor) (Areas 141, 148, 150, 151,
152, 153, 154 & 155)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 176 - Magnetic Gradient (Areas 141, 148, 150, 151, 152, 153, 154 & 155)
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0 50 100 150 m

N

Area 141

Area 142

Area 151

Area 150

Area 153

Area 154

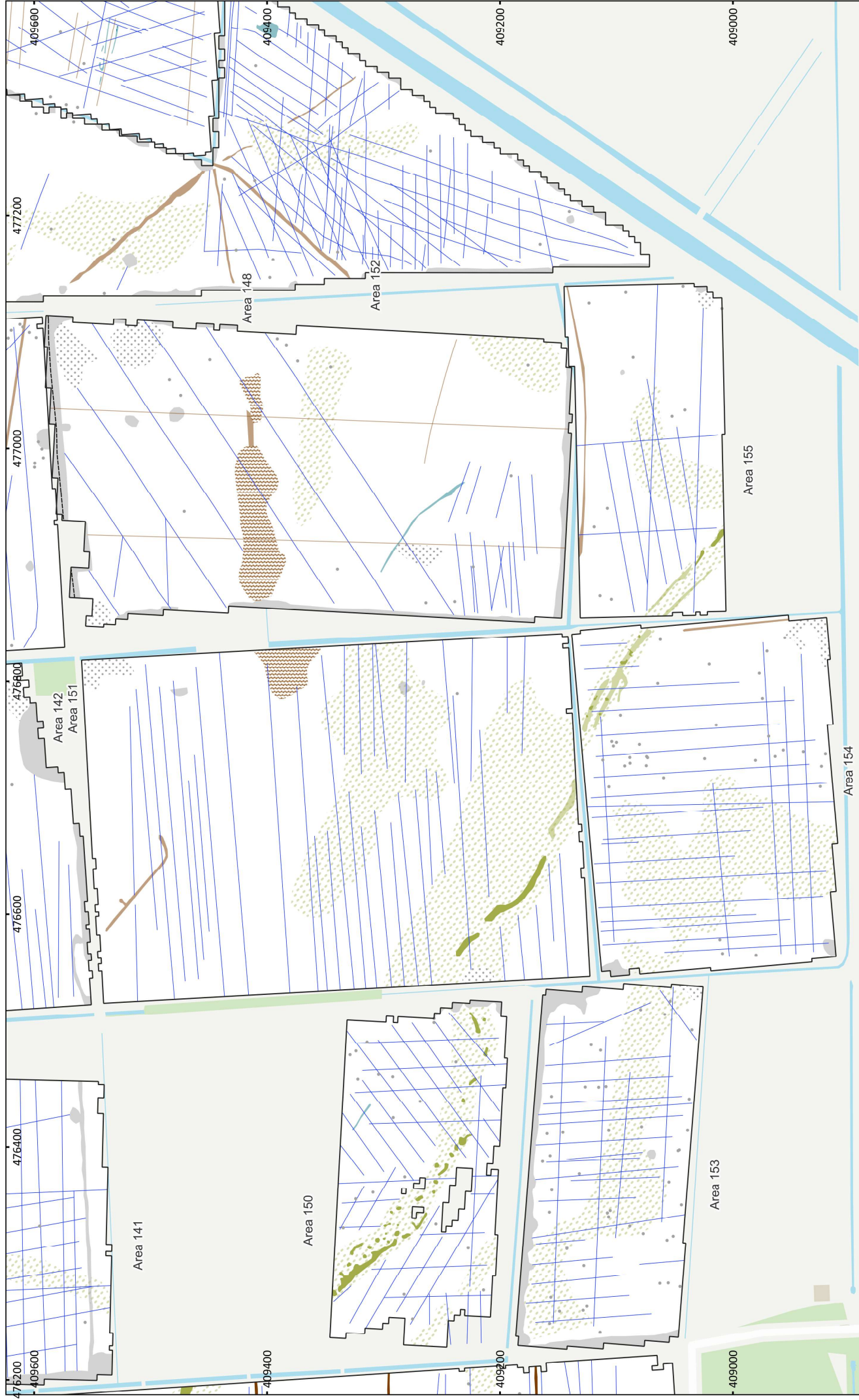
Area 155

Area 148

Area 152

-1 nT 2

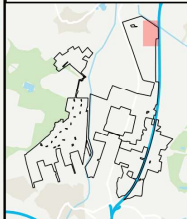
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0 50 100 150 m

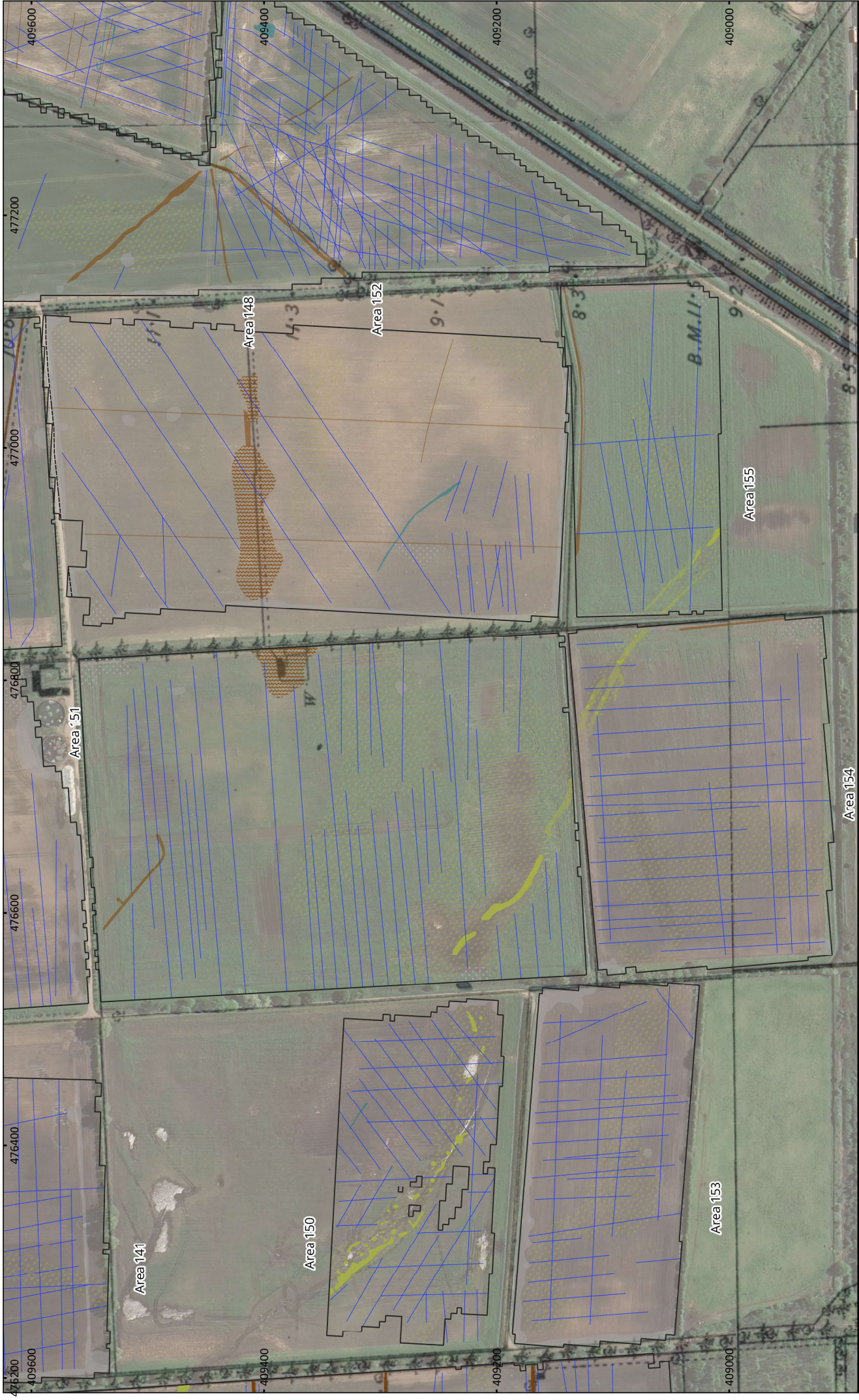


MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
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Figure 177 - Magnetic Interpretation (Areas 141, 148, 150, 151, 152, 153, 154
& 155)

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 Figure 178 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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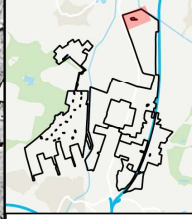
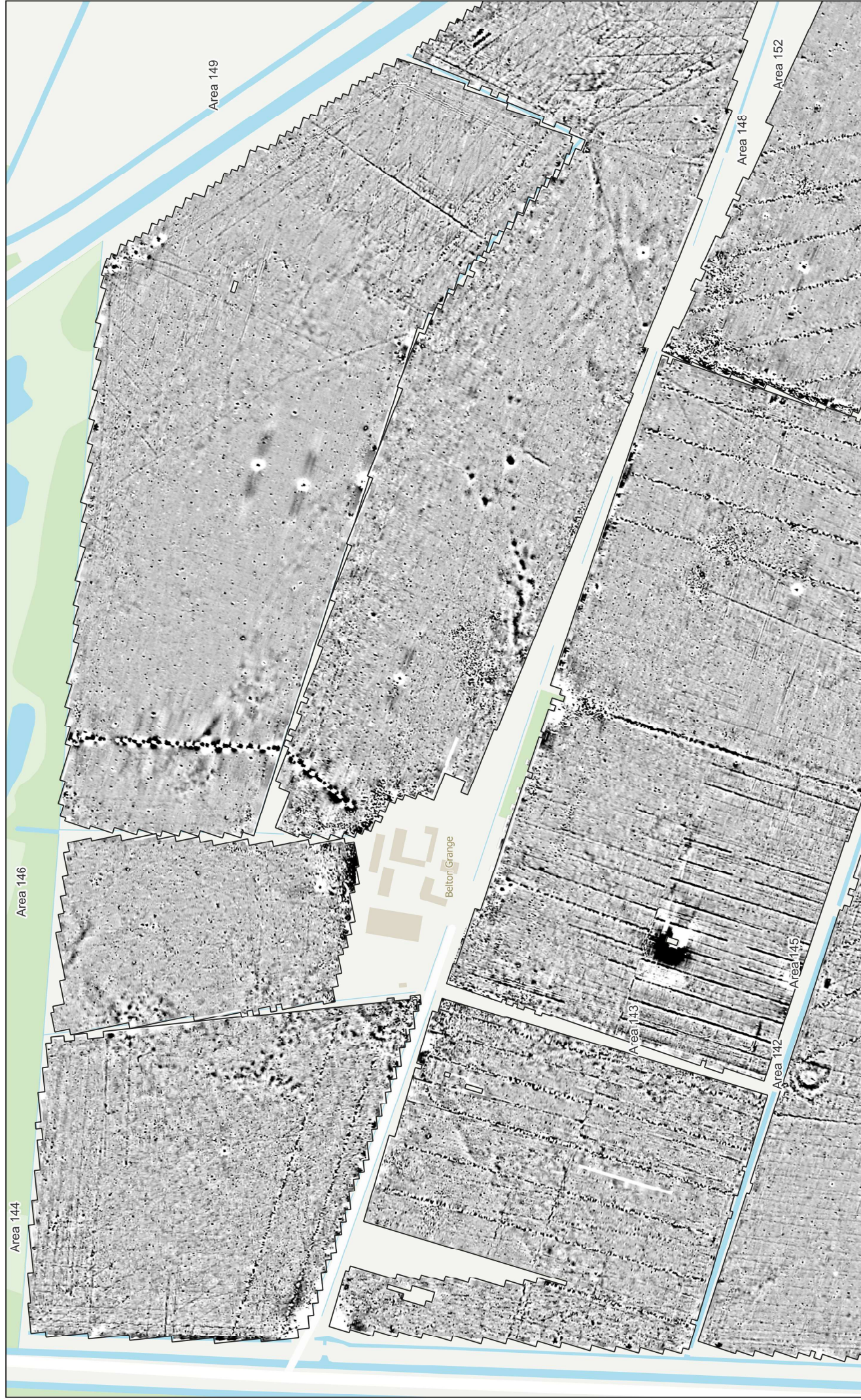
N

0 50 100 150 m

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

■ Natural (Spread)
■ Undetermined (Strong)
■ Undetermined (Weak)
■ Magnetic Disturbance
■ Ferrous/Debris (Spread)

— Agricultural (Trend)
--- Service
— Drainage Feature



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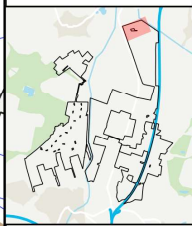


MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
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Figure 180 - Magnetic Gradient (Areas 142, 143, 144, 145, 146, 148, 149 &
152)

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
 North Lincolnshire
 Figure 181 - Magnetic Interpretation (Areas 142, 143, 144, 145, 146, 148, 149
 & 152)
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Agricultural (Strong)
 Agricultural (Weak)
 Agricultural (Spread)
 Natural (Weak)
 Natural (Spread)

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

Service
 Drainage Feature
 Ferrous (Spike)

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

Figure 182 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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