

One Earth Solar Farm

Volume 6.0 Environmental Statement [EN010159]

Volume 3

Figure 7.1: Study Area

Figure 7.2: Existing Watercourses

Figure 7.3: Flood Map for Planning

Figure 7.4: Existing Flood Defences

Figure 7.5: Flood Map for Planning River and Sea With Defences – Present Day 1 in 100 year (rivers) and 1 in 200 year (sea) extents

Figure 7.65: Functional Flood Plain (Flood Zone 3b)

Figure 7.76: Flood Extent from Breach Location 36 (Present Day)

Figure 7.87: Environment Agency Historic Flood Map and Drone Survey Flood Event

Figure 7.98: Environment Agency Risk of Flooding from Surface Water (2025)

Figure 7.109: Environment Agency Risk of Flooding from Surface Water with Climate Change (2025)

Figure 7.110: Environment Agency 0.3m Surface Water plus Climate Change Flood Depths (2025)

Figure 7.142: Environment Agency Risk of Flooding from Surface Water (2024)

Figure 7.132: Environment Agency Surface Water Low Risk Flood Depths (2024)

Figure 7.134: Environment Agency Flood Risk from Reservoirs

~~Figure 7.14: Summary of Freeboard Allowance and Panel Flood Depths~~

Figure 7.15: 1 in 100 Year Plus 39% Climate Change Flood Extent

Figure 7.16: 1 in 100 Year Plus 62% Climate Change Flood Extent (Maximum Credible Flood Event)

~~Figure 7.16: Flood Depths Exceeding 1.5m (Design Flood Event)~~

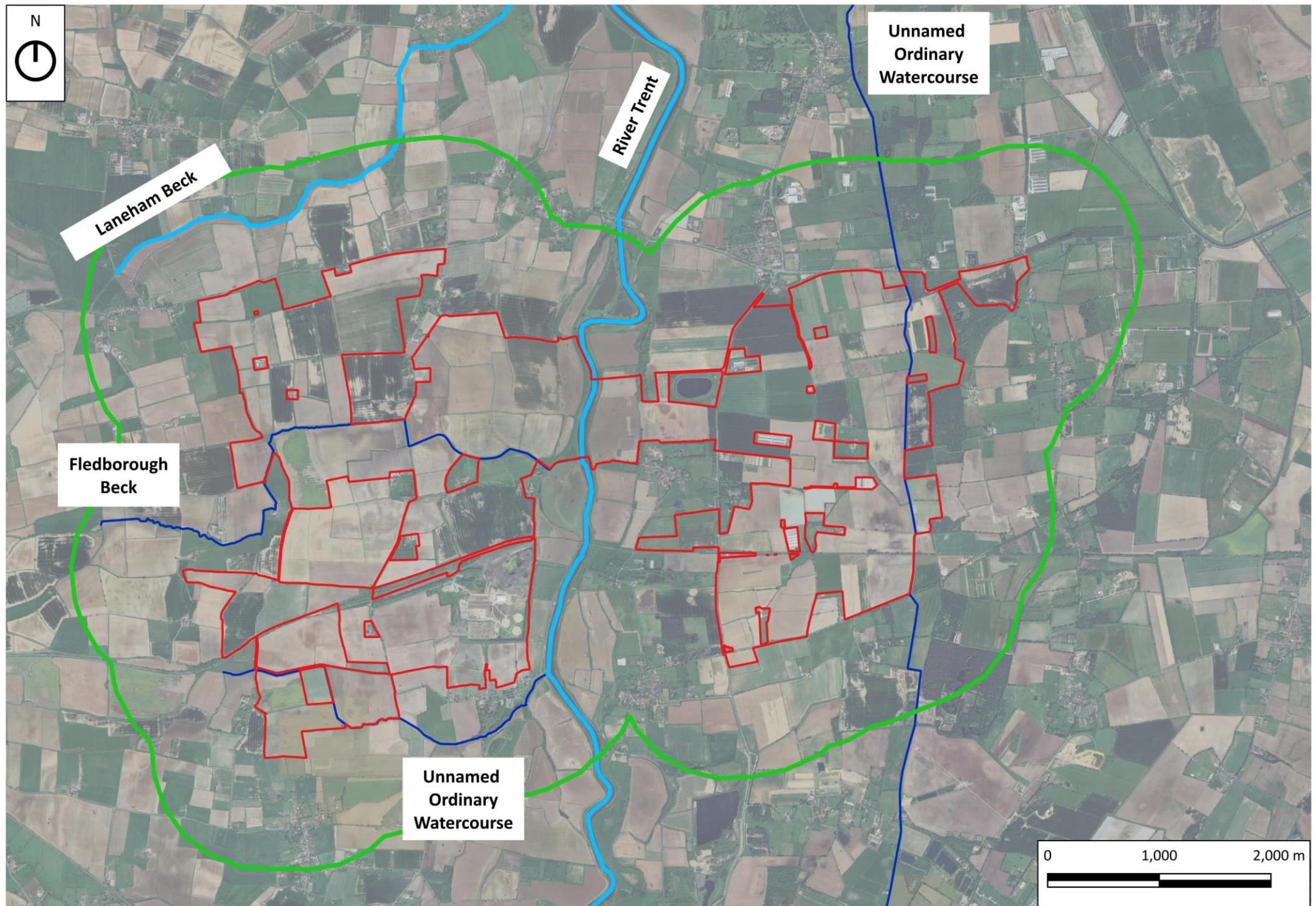
Figure 7.17: Summary of Freeboard Allowance ~~and Panel Flood Depths~~for the Design Fluvial Event

May–November 2025

Document Reference: EN010159/APP/6.20.24

Revision 032

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009
- Reg 5 (2) (a)



Google Maps (2025). Available at: <https://www.google.co.uk/maps/@53.2272889,-0.7682997,6738m/data=!3m1!1e3?entry=ttu> (Accessed 21st January 2025)



Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref: EN010159
Environmental Statement Volume 2

Drawing Title:
Figure 7.1: Study Area

Drawing Number:
EN010159/APP/6.20/7.1

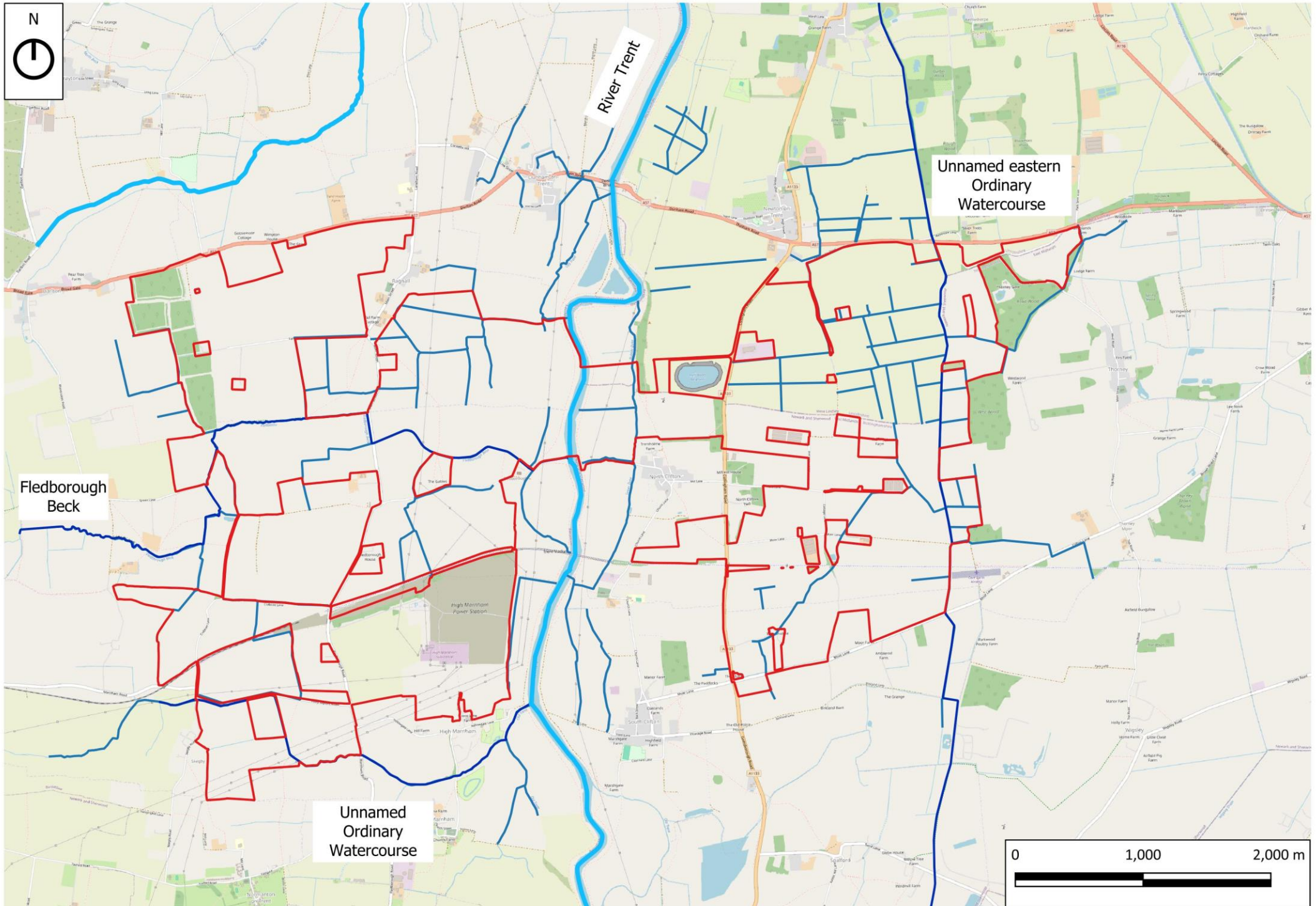
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02

Legend:

- Site Boundary
- Study Area (1km buffer)
- Environment Agency Main River
- Ordinary Watercourses





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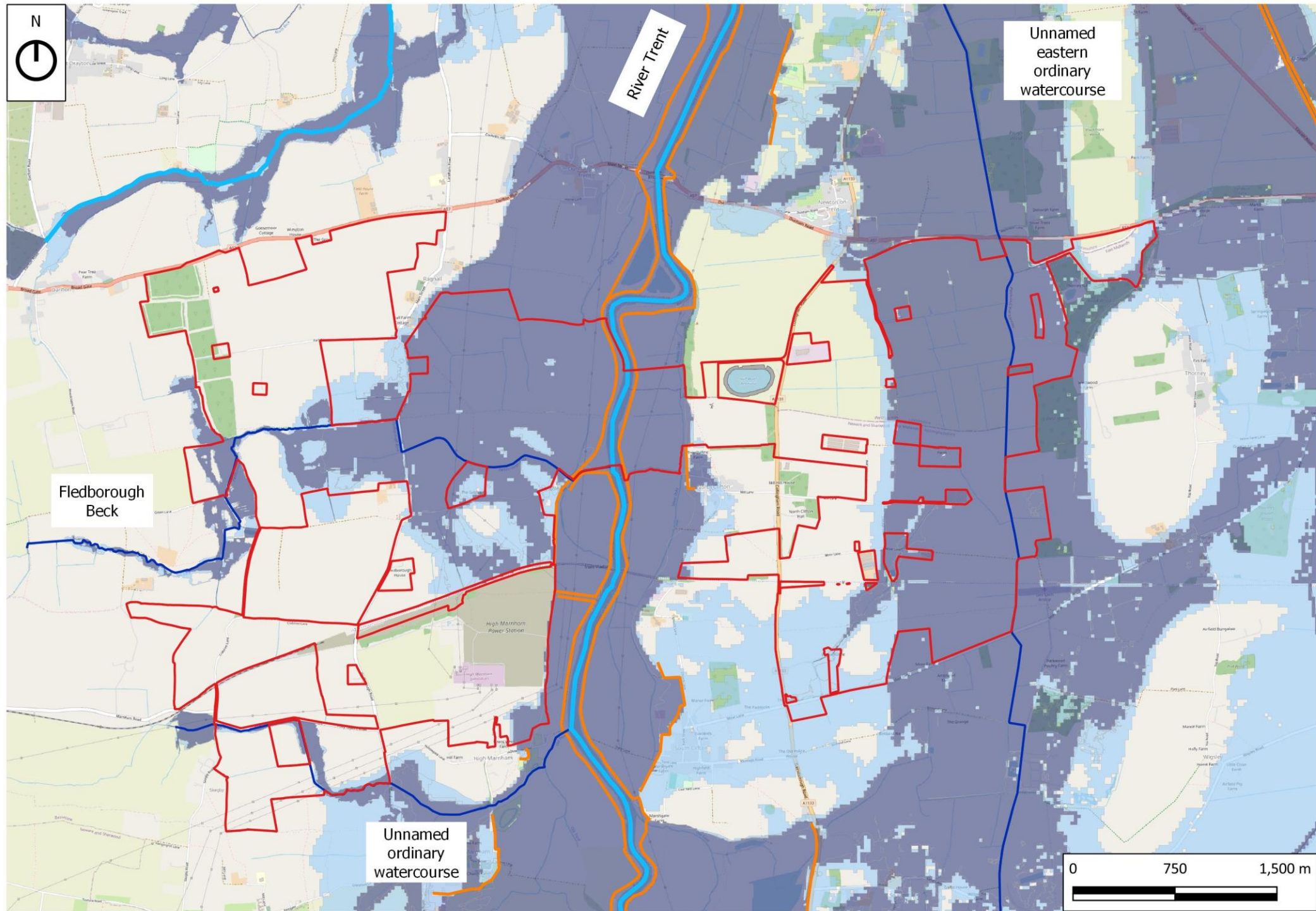


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Planning Inspectorate Scheme Ref:	EN010159
Environmental Statement Volume	2

Drawing Title:	Figure 7.2: Existing Watercourses
Drawing Number:	EN010159/APP/6.20/7.2
Rev:	02
Drawn Date:	2024-11-19

Legend:	
	Site Boundary
	Main River
	Ordinary Watercourses
	Existing Field Drains





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Drawing Title:
Figure 7.3: Flood Map for Planning

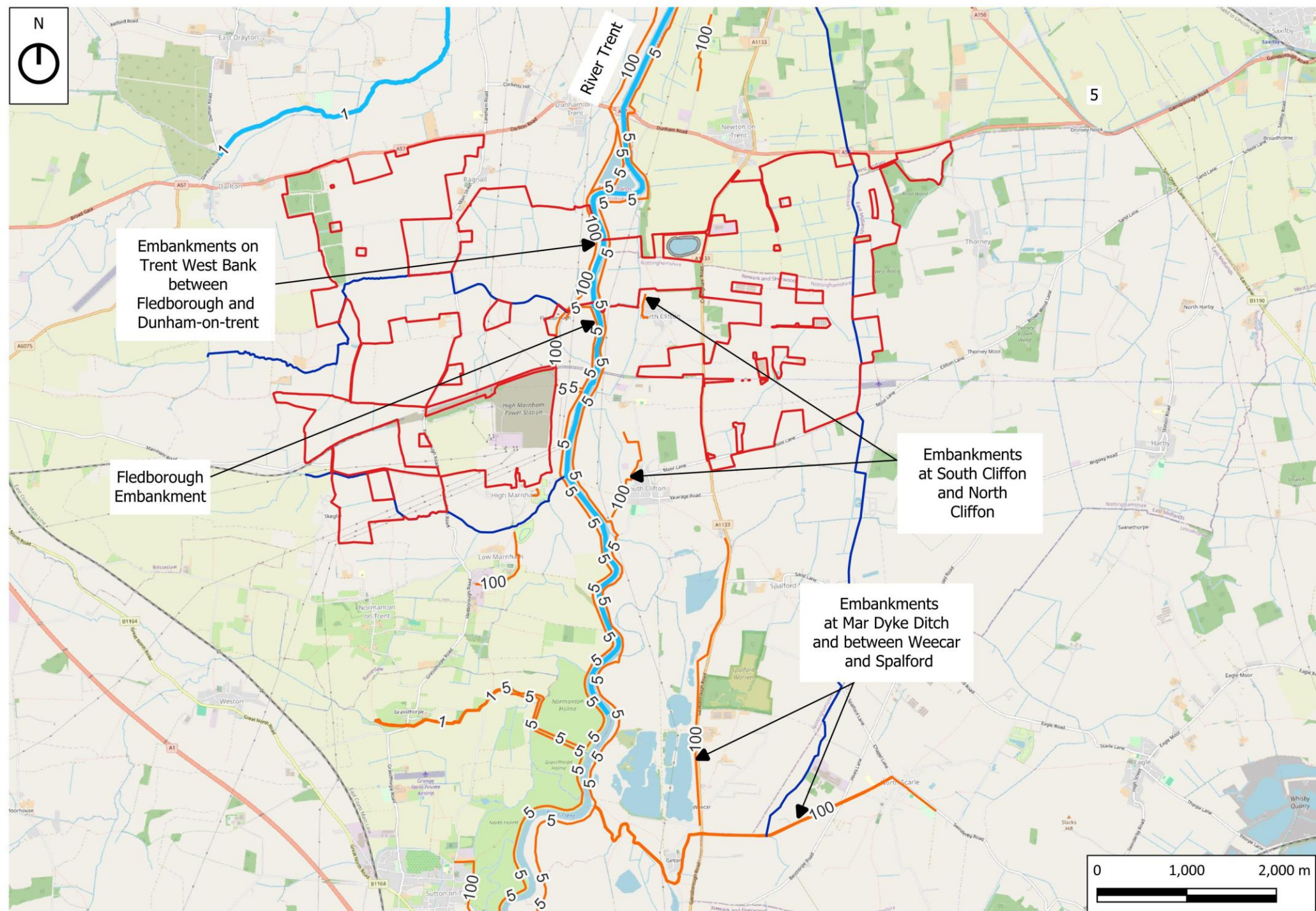
Drawing Number:
EN010159/APP/6.20/7.3

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2025-04-11

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03

- Legend:
- Site Boundary
 - Main River
 - Ordinary Watercourses
 - Flood Defences
 - Flood Map for Planning (2025)
 - Flood Zone 1
 - Flood Zone 2
 - Flood Zone 3





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Drawing Title:
Figure 7.4: Existing Flood Defences

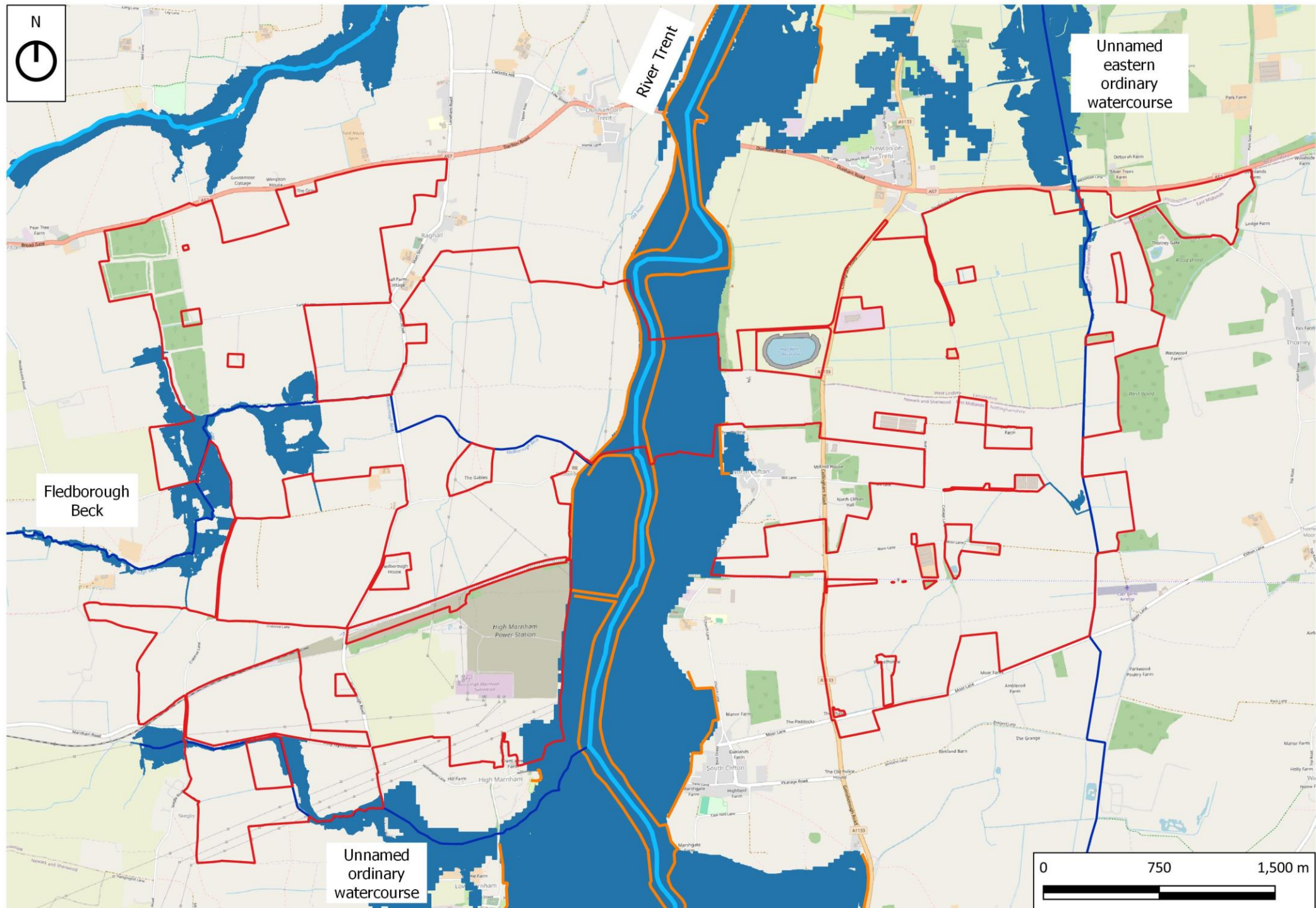
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- Legend:
- Site Boundary
 - Flood Defences and design standard of protection return period in years
 - Main River
 - Ordinary Watercourses





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Drawing Title:
Figure 7.5: FMfP River & Sea With
Defences – Present Day 1 in 100 year
(rivers) and 1 in 200 year (sea) extents

Drawing Number:
EN010159/APP/6.20/7.3

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2025-04-11

Rev:
01

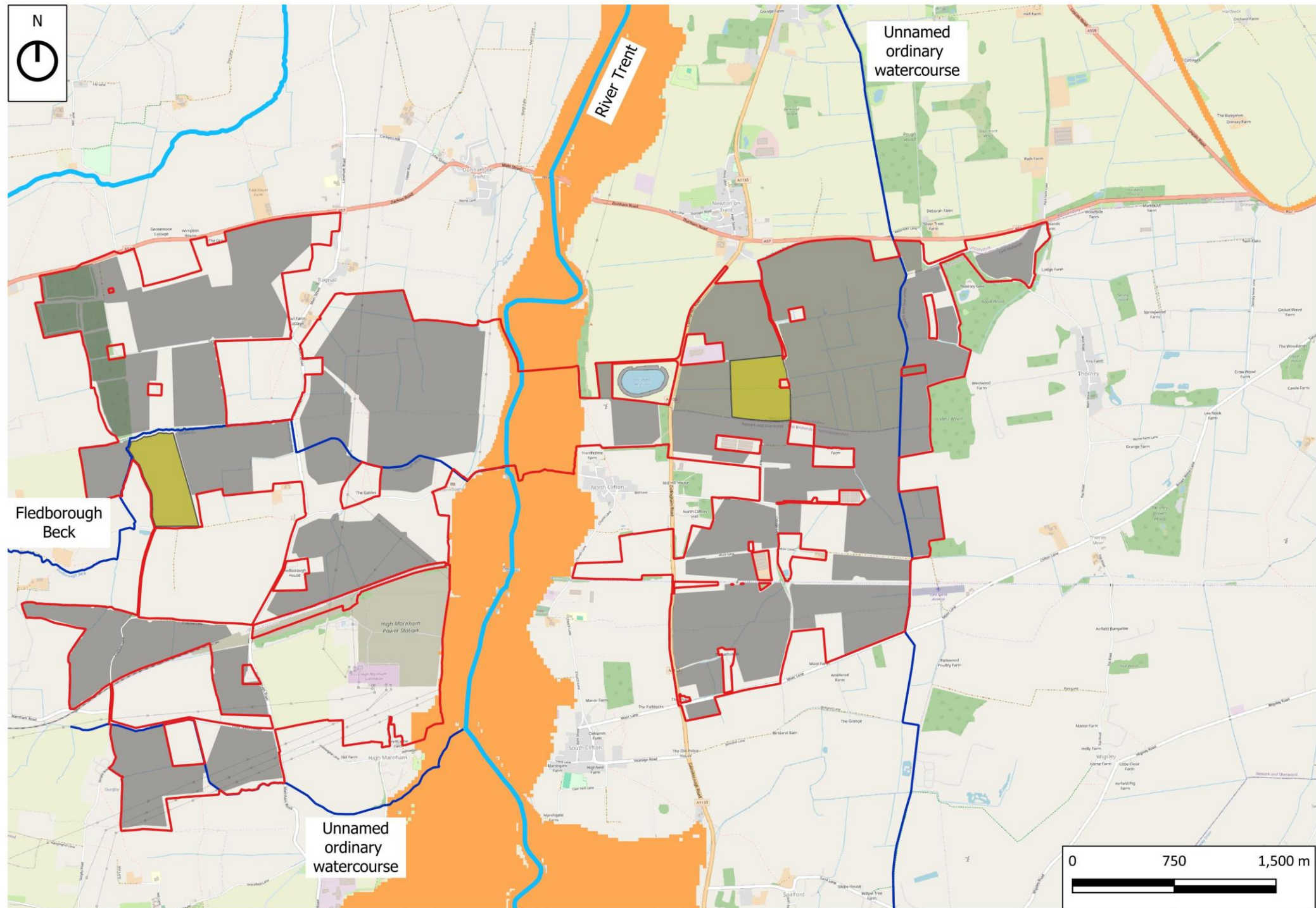
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses
- Flood Defences

Flood Map for Planning (2025)
Rivers and Sea With Defences

Rivers (100yr) and the
Sea (200yr) Defended
Flood Extent





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Drawing Title:

Figure 7.6: Functional Floodplain
(Flood Zone 3b)

Drawing Number:
EN010159/APP/6.20/7.5

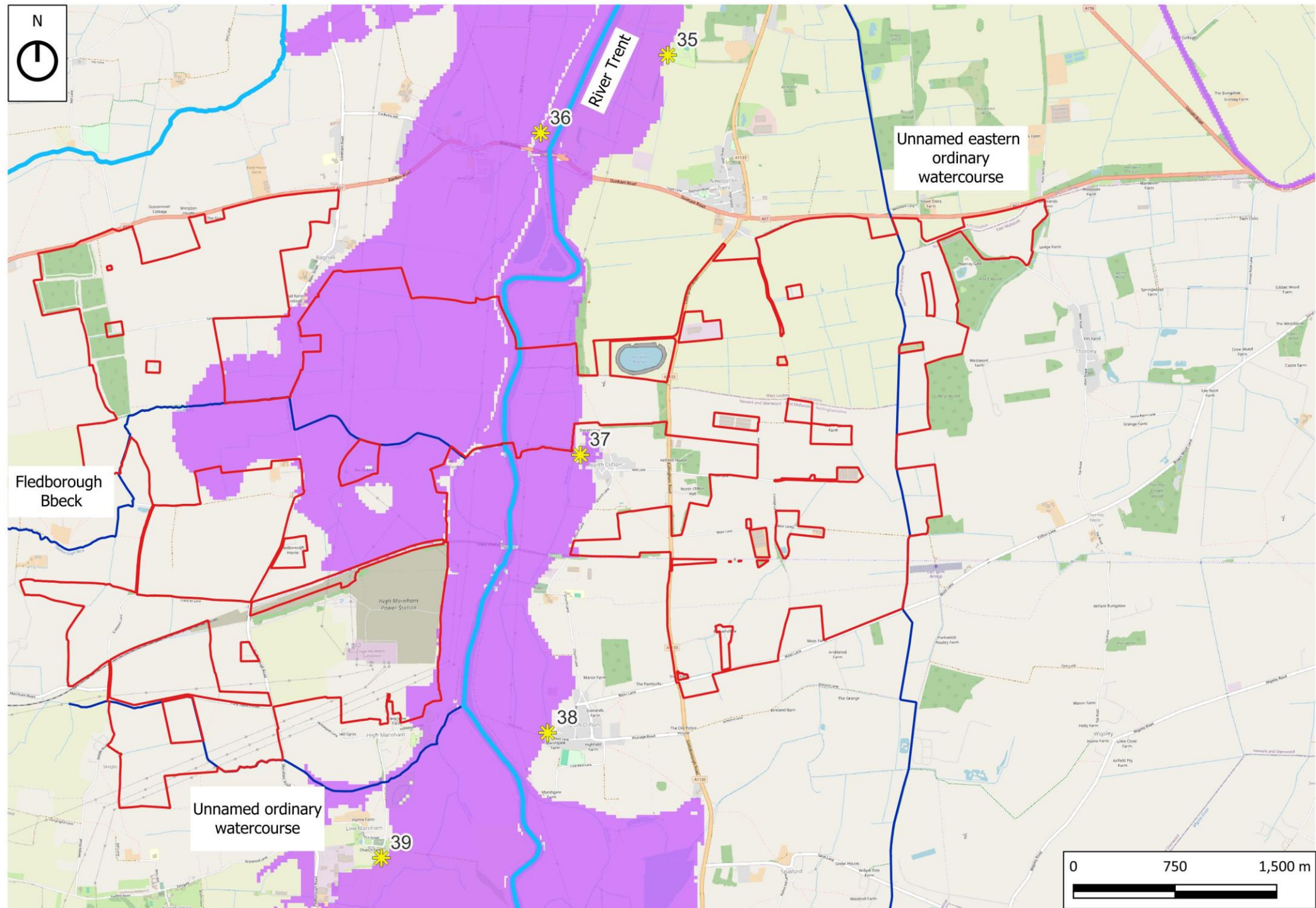
Rev:
01

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Legend:

- Site Boundary
- Main River
- Ordinary Watercourses
- Proposed Solar Panels
- Proposes BESS and Substations
- Defended Scenario**
- 1 in 30 year Flood Extents
(Functional Floodplain)





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Drawing Title:
Figure 7.7: Flood Extent from Breach Location 36 (Present Day)

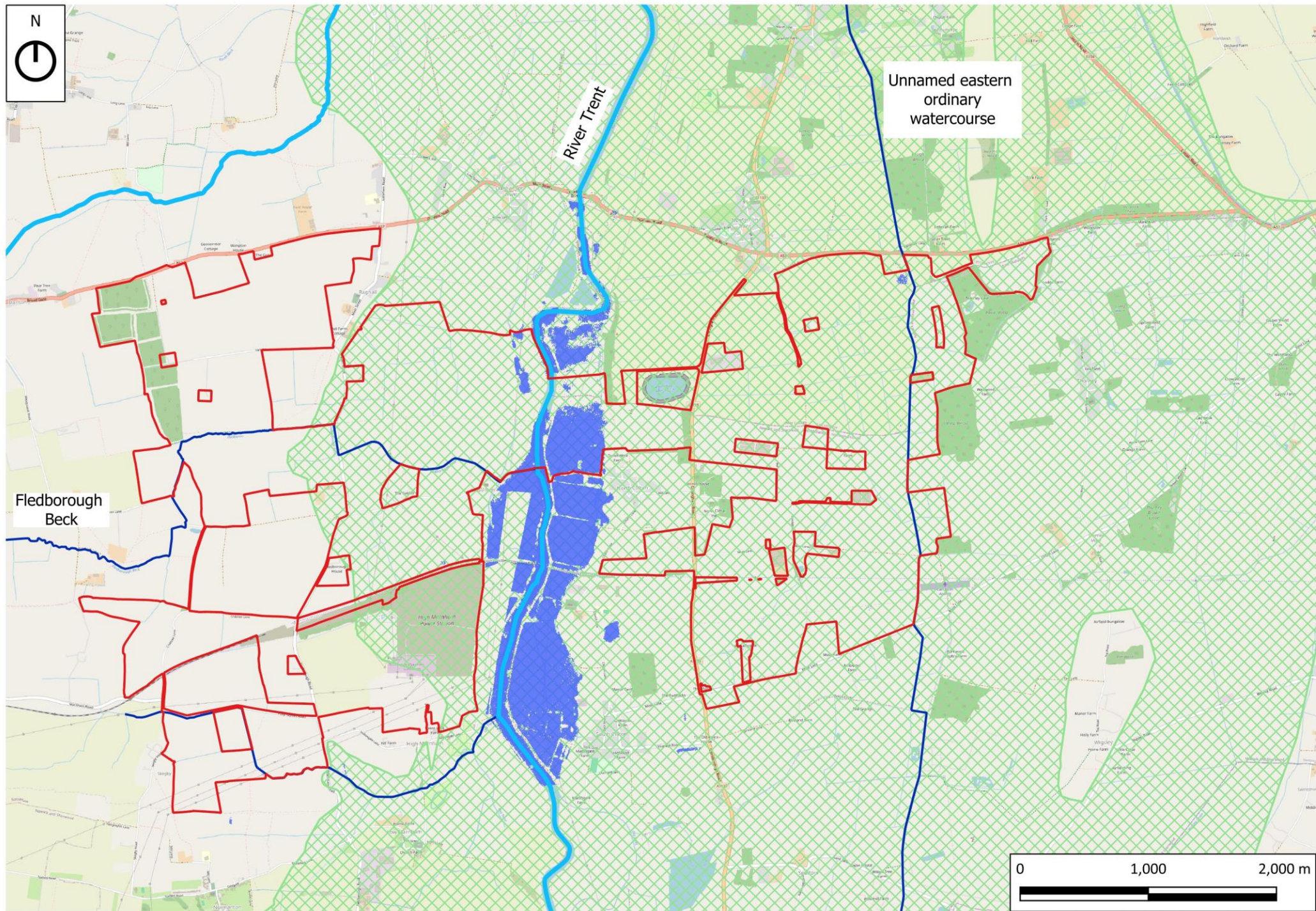
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02

- Legend:
- Site Boundary
 - Main River
 - Ordinary Watercourses
 - ✱ Breach Locations
 - Breach 36 Extents (1 in 100 year)





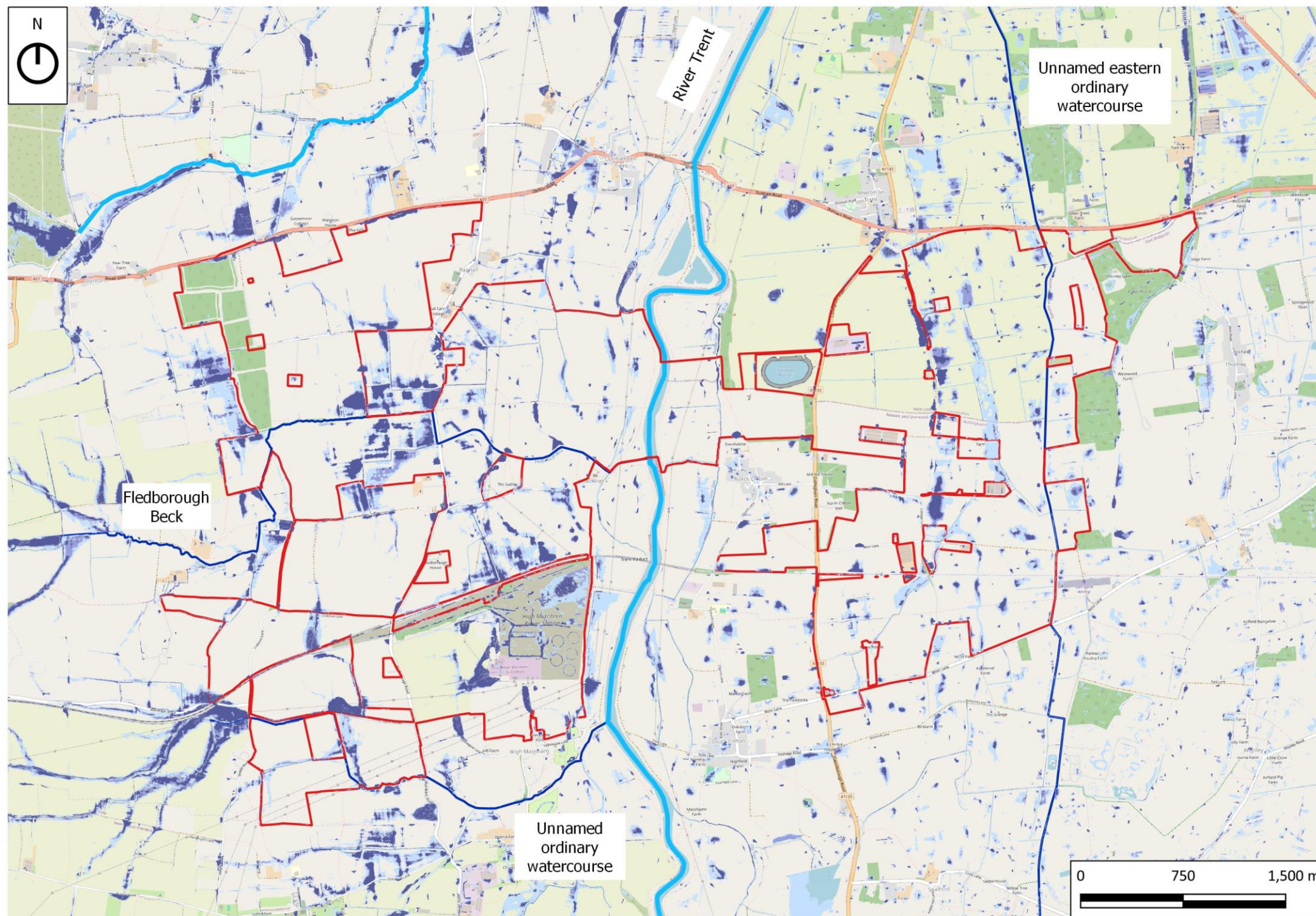
Google Maps (2025). Available at: <https://www.google.co.uk/maps/@53.2272889,-0.7682997,6738m/data=!3m1!1e3?entry=ttu> (Accessed 21st January 2025)



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Planning Inspectorate Scheme Ref:EN010159	Drawing Title: Figure 7.8: Environment Agency Historic Flood Map and Drone Survey Flood Event		
Environmental Statement Volume 2	Drawing Number: EN010159/APP/6.20/7.7	Rev: 02	
	Drawn Date: 2024-11-19		

Legend:	
	Site Boundary
	Main River
	Ordinary Watercourses
Historic Flood Extents	
	Historic Flood Map
	Drone Survey Flood Event (2024-01-09)





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Environmental Statement Volume 2

Drawing Title:
Figure 7.9: Environment Agency Risk
of Flooding from Surface Water
(2025)

Drawing Number:
EN010159/APP/6.20/7.8

Drawn Date:
2025-02-10

Rev:
03

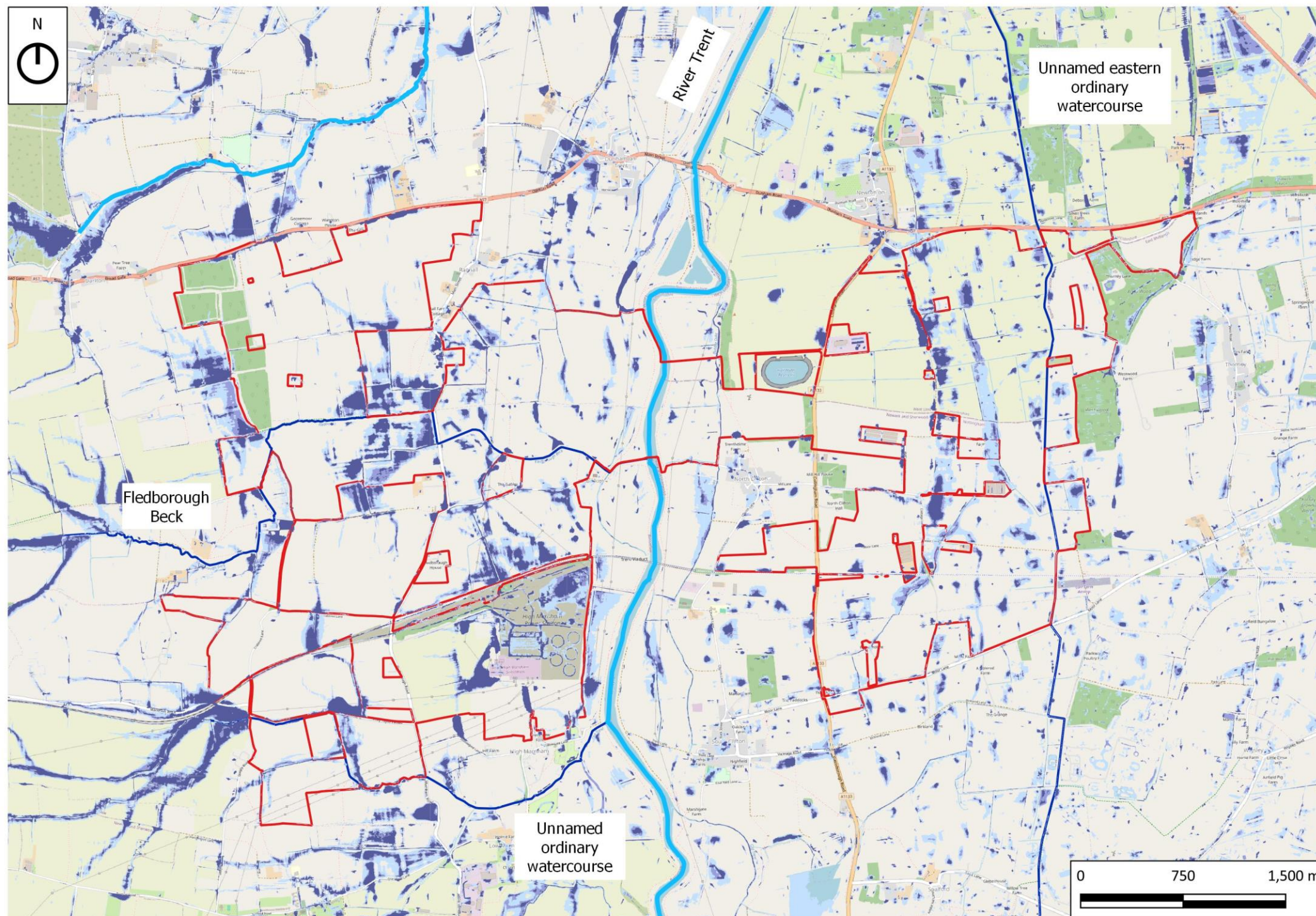
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Pluvial Flood Risk

- High Risk
- Medium Risk
- Low Risk
- Very Low Risk





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Drawing Title:
Figure 7.10: EA Risk of Flooding from
Surface Water with Climate Change
(2025)

Drawing Number:
EN010159/APP/6.20/7.9

Drawn Date:
2025-02-10

Rev:
01

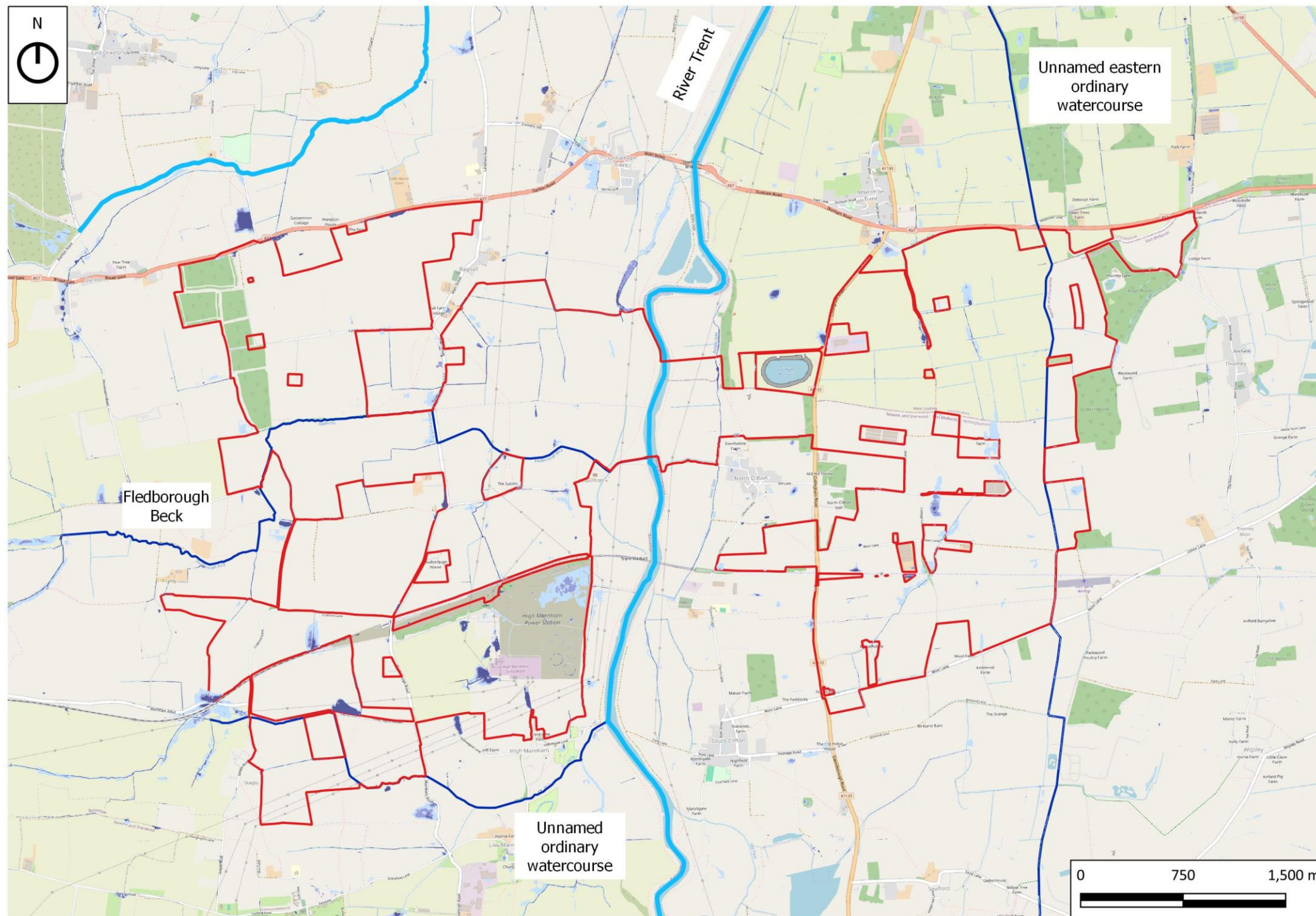
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Pluvial Flood Risk

- High Risk
- Medium Risk
- Low Risk
- Very Low Risk





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Environmental Statement Volume 2

Drawing Title:
Figure 7.11: EA 0.3m Surface Water
Plus Climate Change Flood Depths
(2025)

Drawing Number:
EN010159/APP/6.20/7.10

Drawn Date:
2025-02-10

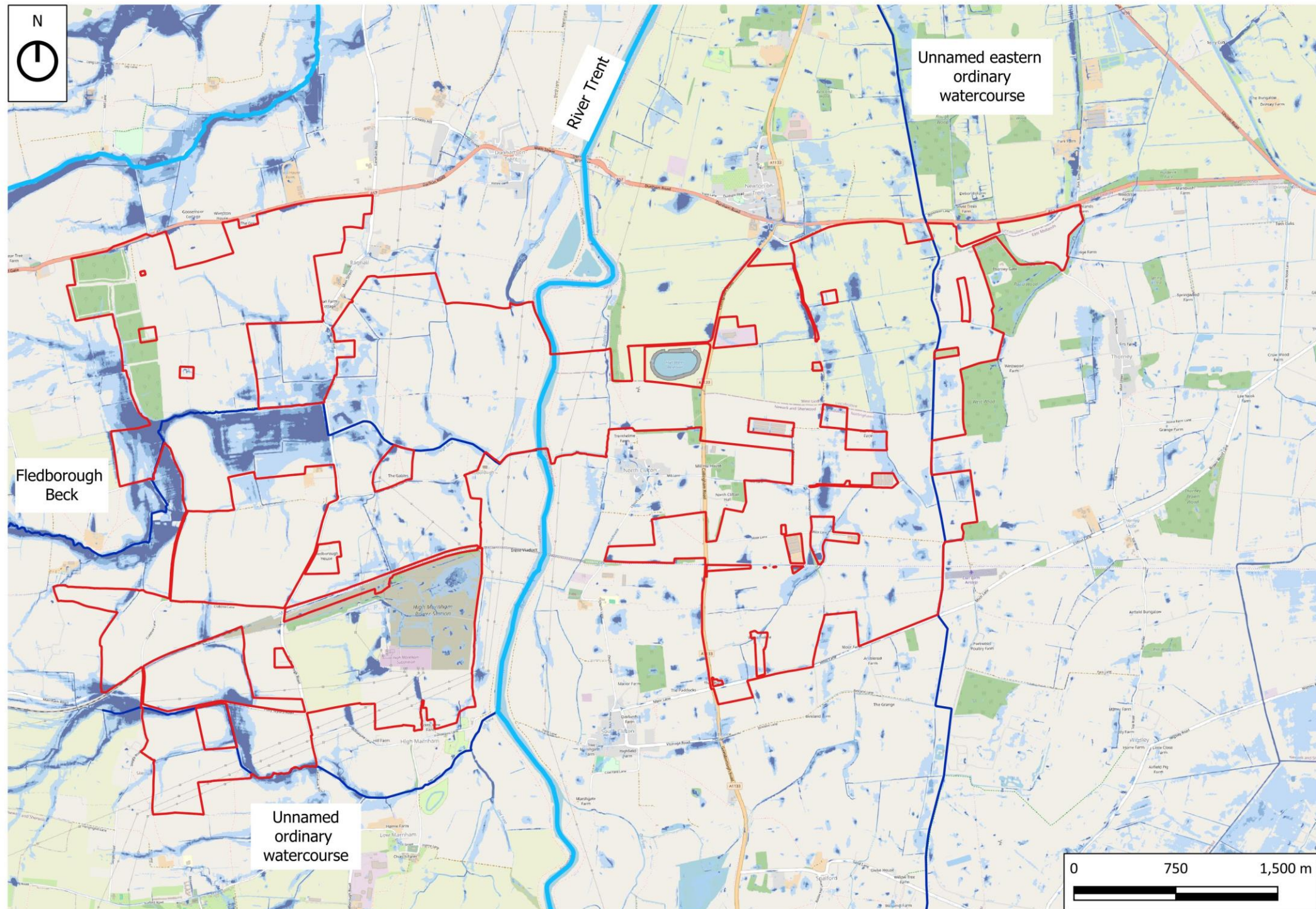
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Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

- 0.3m Flood Depth
- High Risk
 - Medium Risk
 - Low Risk
 - Very Low Risk





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Drawing Title:
Figure 7.12: Environment Agency
Risk of Flooding from Surface Water
(2024)

Drawing Number:
EN010159/APP/6.20/7.11

Rev:
02

Drawn Date:
2024-11-19

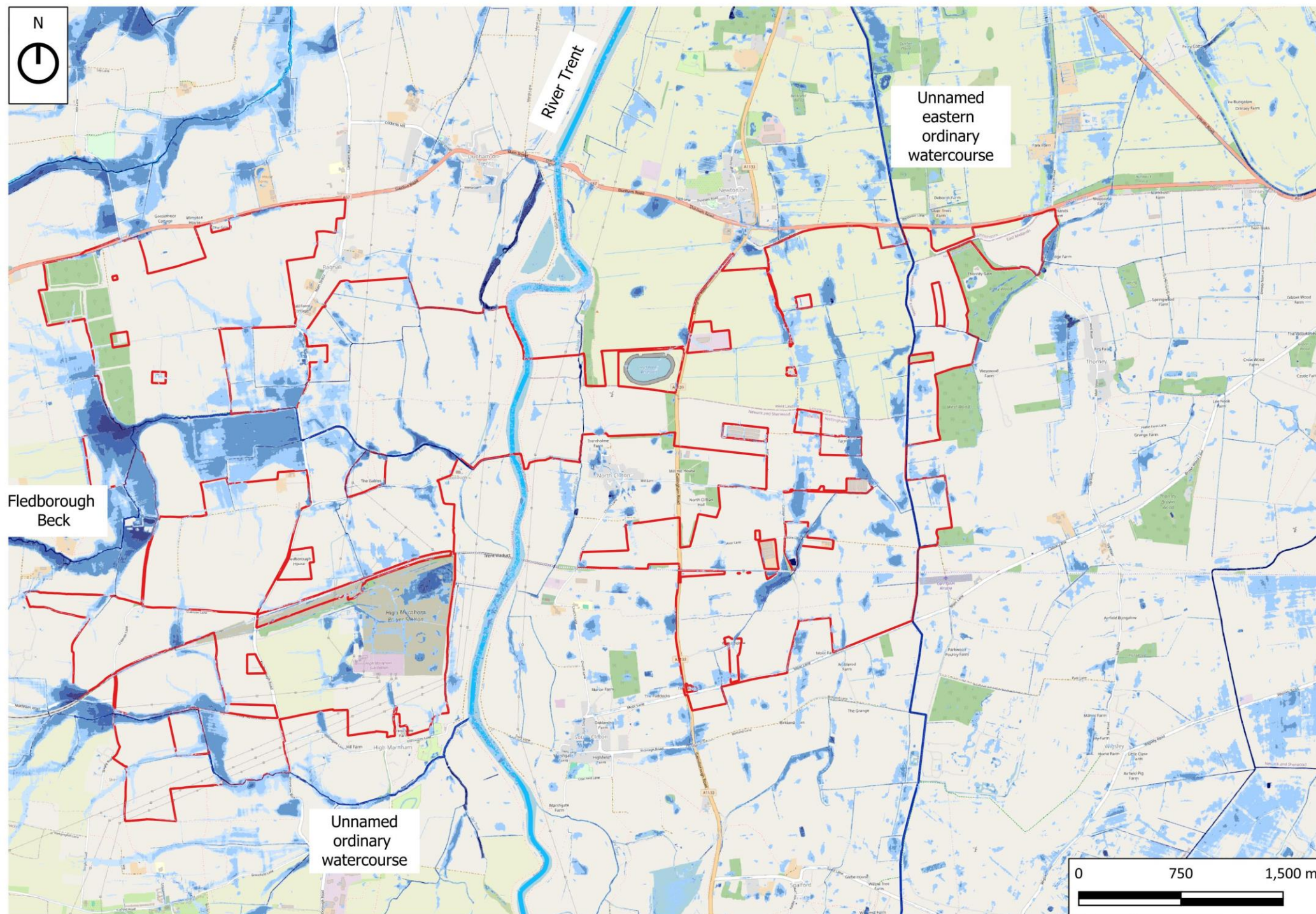
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Pluvial Flood Risk

- High Risk
- Medium Risk
- Low Risk
- Very Low Risk





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Drawing Title:
Figure 7.13: Environment Agency
Surface Water Low Risk Flood
Depths (2024)

Drawing Number:
EN010159/APP/6.20/7.12

Drawn Date:
2024-11-19

Rev:
02

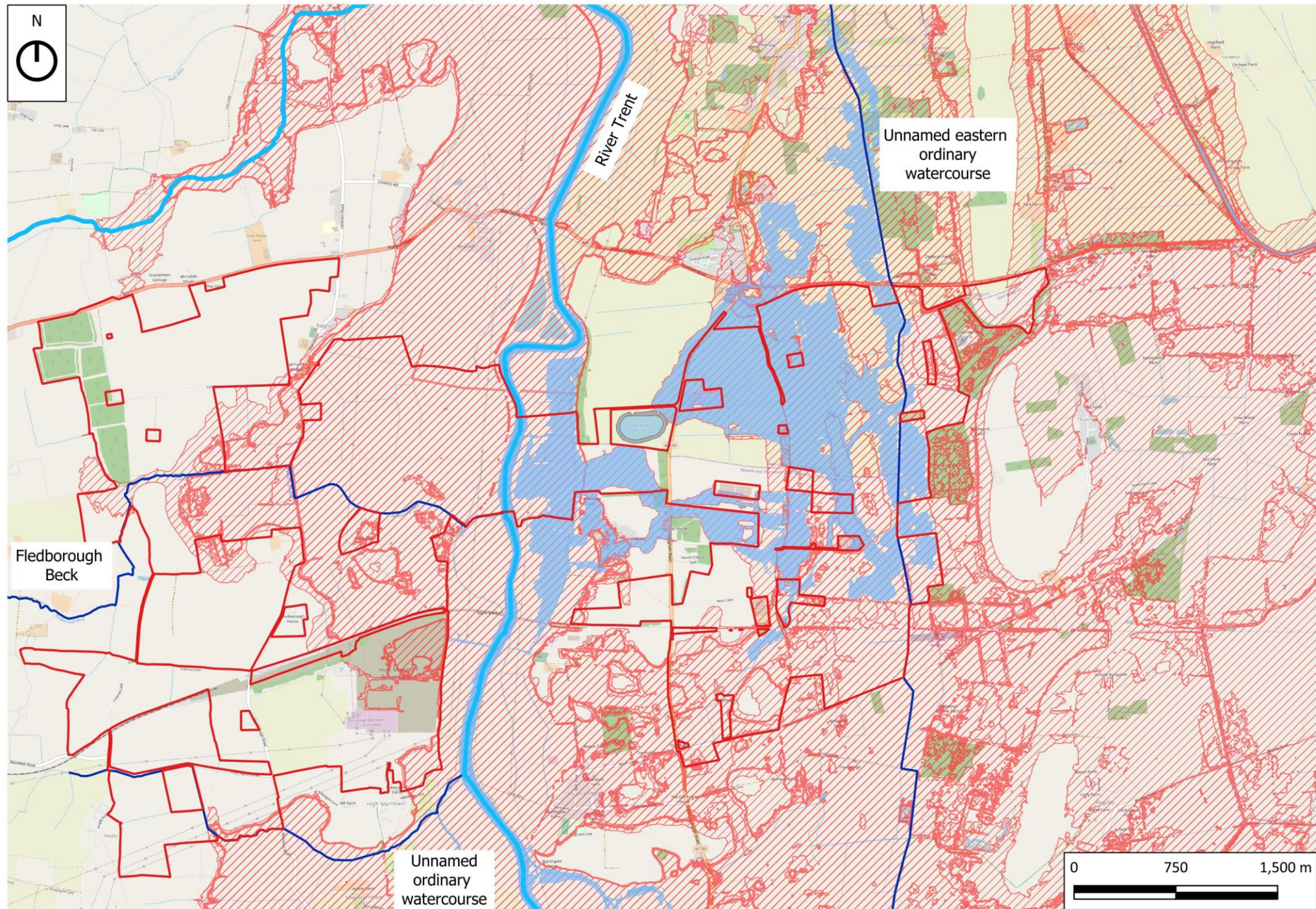
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Low Flood Risk - Depth

- Below 150mm
- 150mm to 300mm
- 300mm to 600mm
- 600mm to 900mm
- 900mm to 1200mm
- Over 1200mm





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Drawing Title:

Figure 7.14: Environment Agency
Flood Risk from Reservoirs

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EN010159/APP/6.20/7.13

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02

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2024-11-19

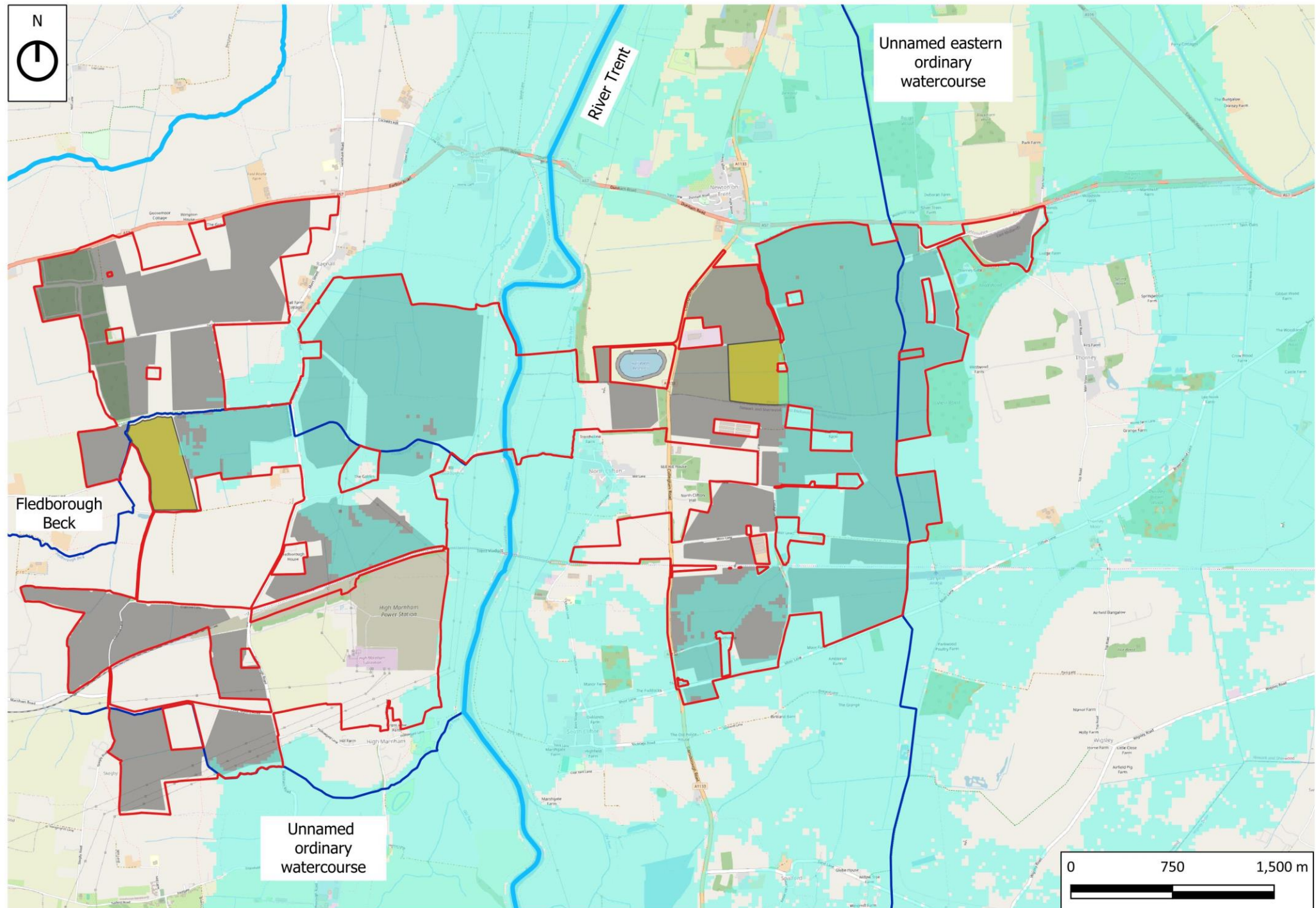
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Reservoirs Flood Risk

- When river levels are normal
- When there is also flooding from rivers





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Environmental Statement Volume 2

Drawing Title:
Figure 7.15: 1 in 100 Year Plus 39%
Climate Change Flood Extent (Design
Flood Event)

Drawing Number:
EN010159/APP/6.20/7.14

Drawn Date:
2024-11-19

Rev:
02

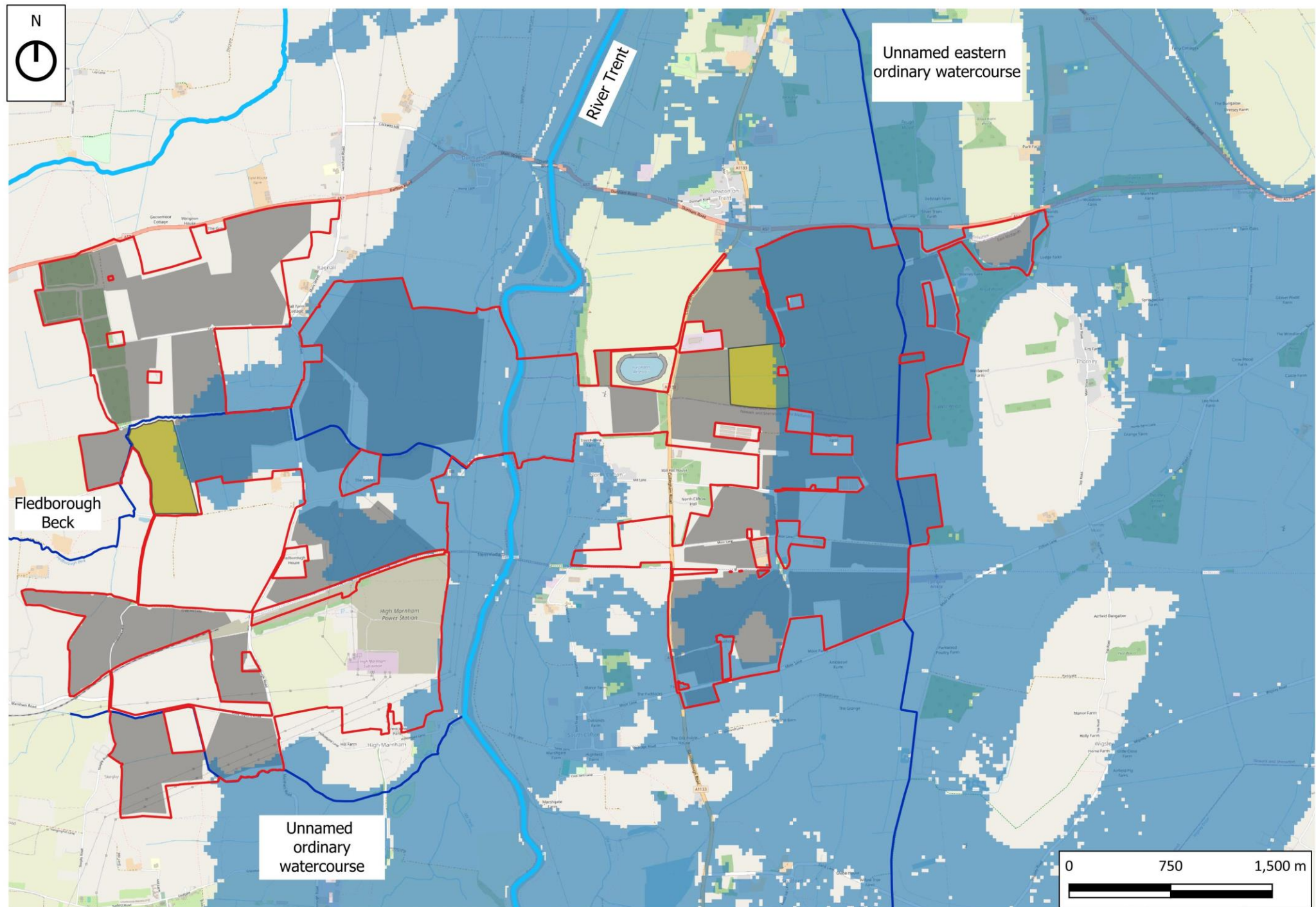
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses
- Proposed Solar Panels
- Proposes BESS and Substations

**1 in 100 year plus 39% design defended
Flood Extents**

1 in 100 year
plus 39% Flood Extent





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Planning Inspectorate Scheme Ref: EN010159
Environmental Statement Volume 2

Drawing Title:
Figure 7.16: 1 in 100 Year Plus 62% Climate Change
Flood Extent (Maximum Credible Flood
Event)

Drawing Number:
EN010159/APP/6.20/7.15

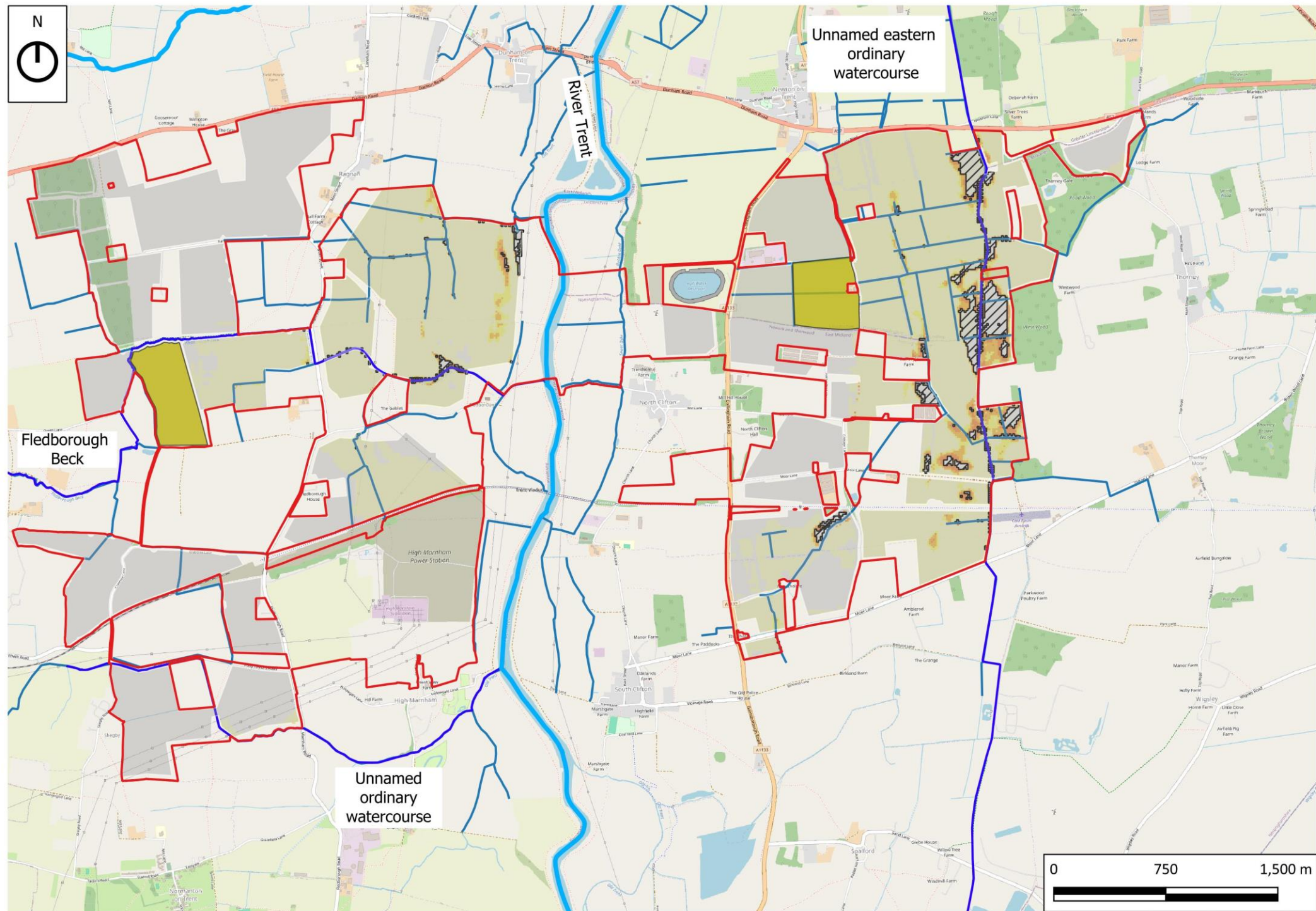
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02

Legend:

- Key**
- Site Boundary
 - Main River
 - Ordinary Watercourses
 - Proposed Solar Panels
 - Proposes BESS and Substations
 - 1 in 100 Year Plus 62% CC
Flood Extent (Maximum Credible
Flood Extent)





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Environmental Statement Volume 2

Drawing Title:
Figure 7.17: Summary of Freeboard Allowance for the Design Fluvial Event

Drawing Number:
EN010159/APP/6.20/7.17

Drawn Date:
2025-09-26

Rev:
01

Legend:

- Site Boundary
- Main River
- Ordinary Watercourses
- Existing Field Drains
- Proposed Solar Panels
- Proposes BESS and Substations

Summary of Freeboard Allowance

- Freeboard $\geq 0.3\text{m}$ Provided
- Freeboard $0.2\text{m} - 0.3\text{m}$ Provided
- Freeboard $0.1\text{m} - 0.2\text{m}$ Provided
- Freeboard $\leq 0.1\text{m}$ Provided
- Areas where Bottom Panel Heights likely to be raised above minimum values (as set out in Height Parameter Plan), to ensure panels are not submerged during the design flood event





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