



One Earth Solar Farm

Volume 6.0 Environmental Statement [EN010159]

Volume 3

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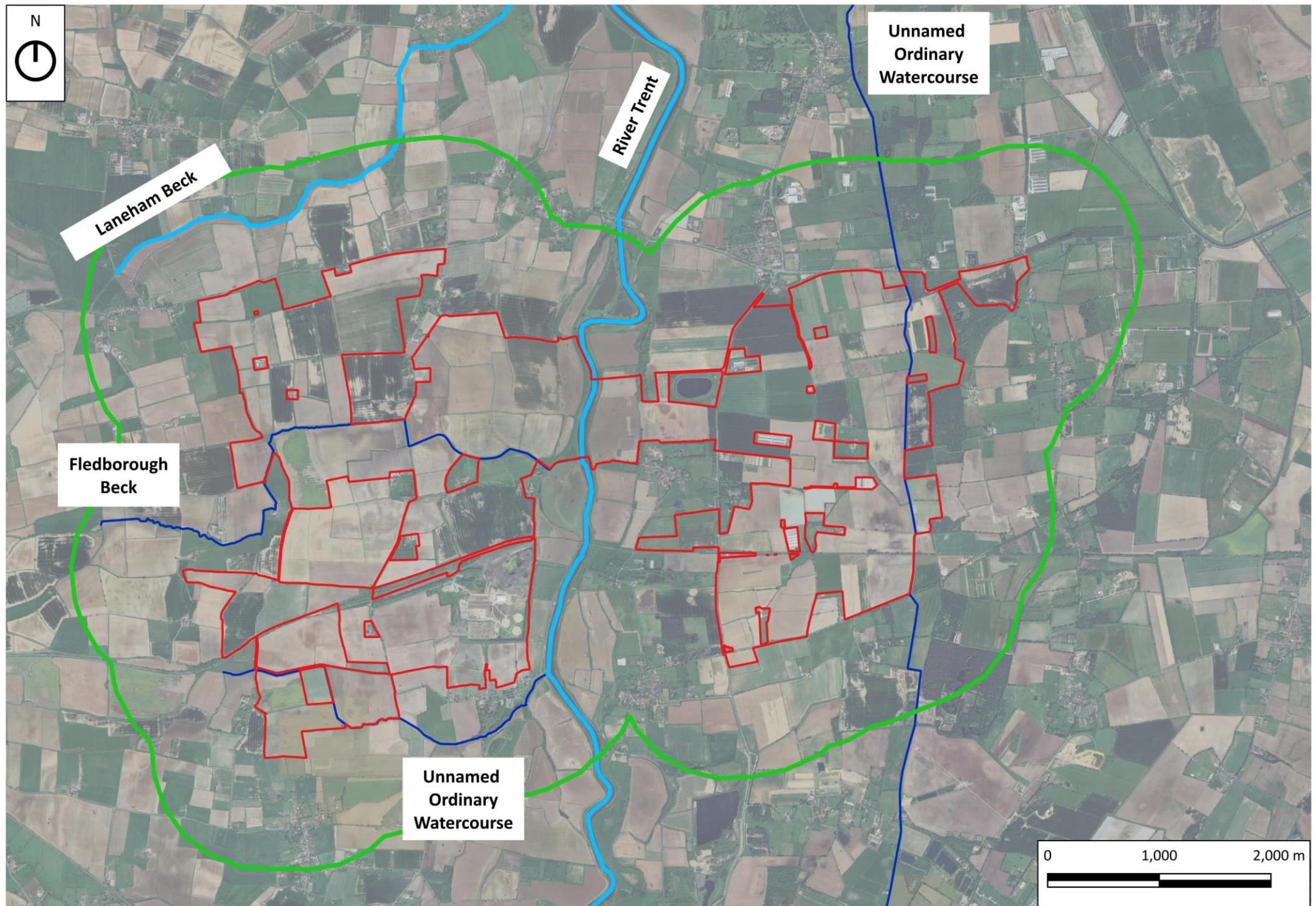
Figure 7.16: Flood Depths Exceeding 1.5m (Design Flood Event)

Figure 7.17: Summary of Freeboard Allowance and Panel Flood Depths
February 2025

Document Reference: EN010159/APP/6.20

Revision 01

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:
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Planning Inspectorate Scheme Ref: EN010159
Environmental Statement Volume 2

Drawing Title:
Figure 7.1: Study Area

Drawing Number:
EN010159/APP/6.20/7.1

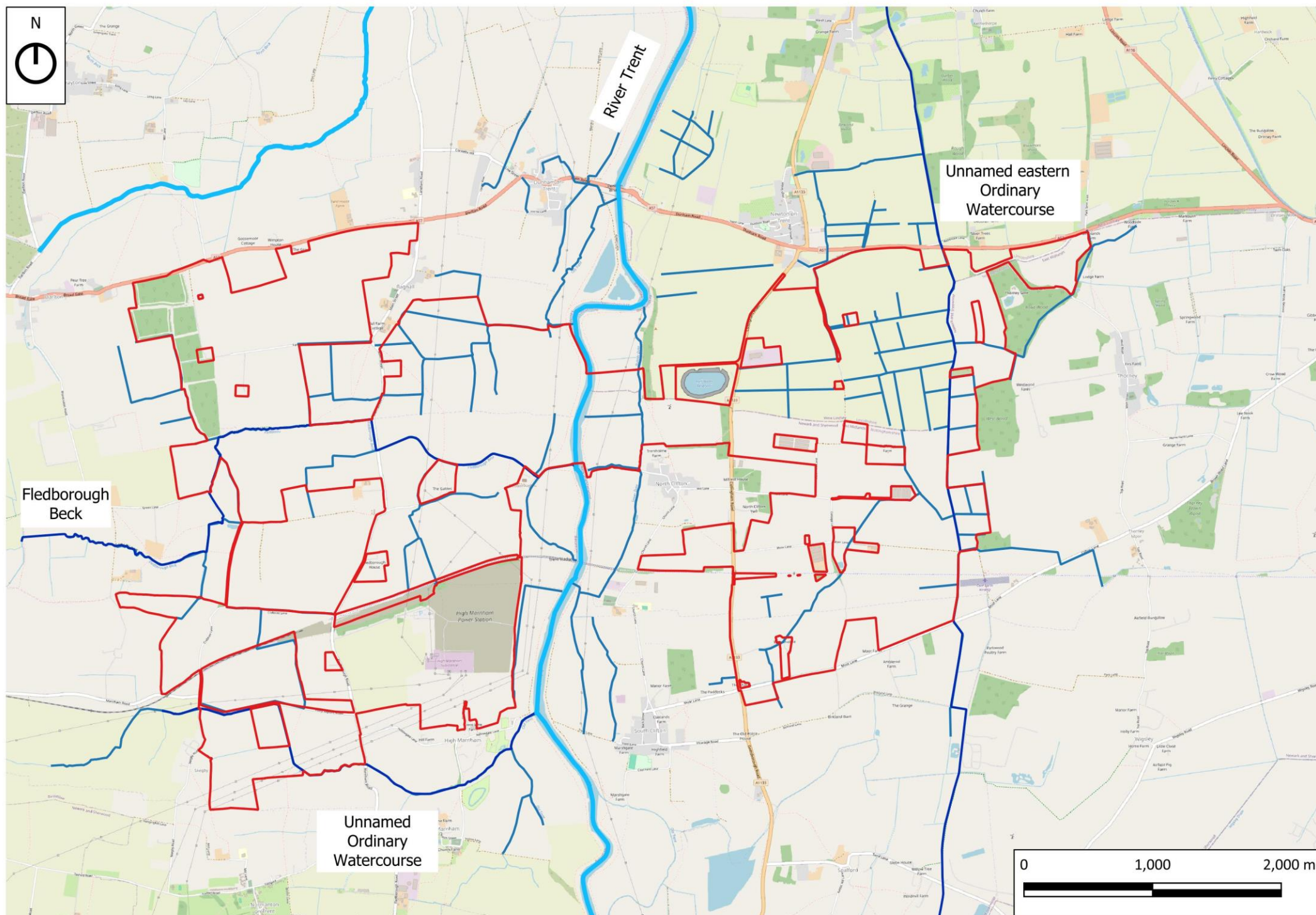
Drawn Date:
2024-11-19

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02

Legend:

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





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Drawing Title:
Figure 7.2: Existing Watercourses

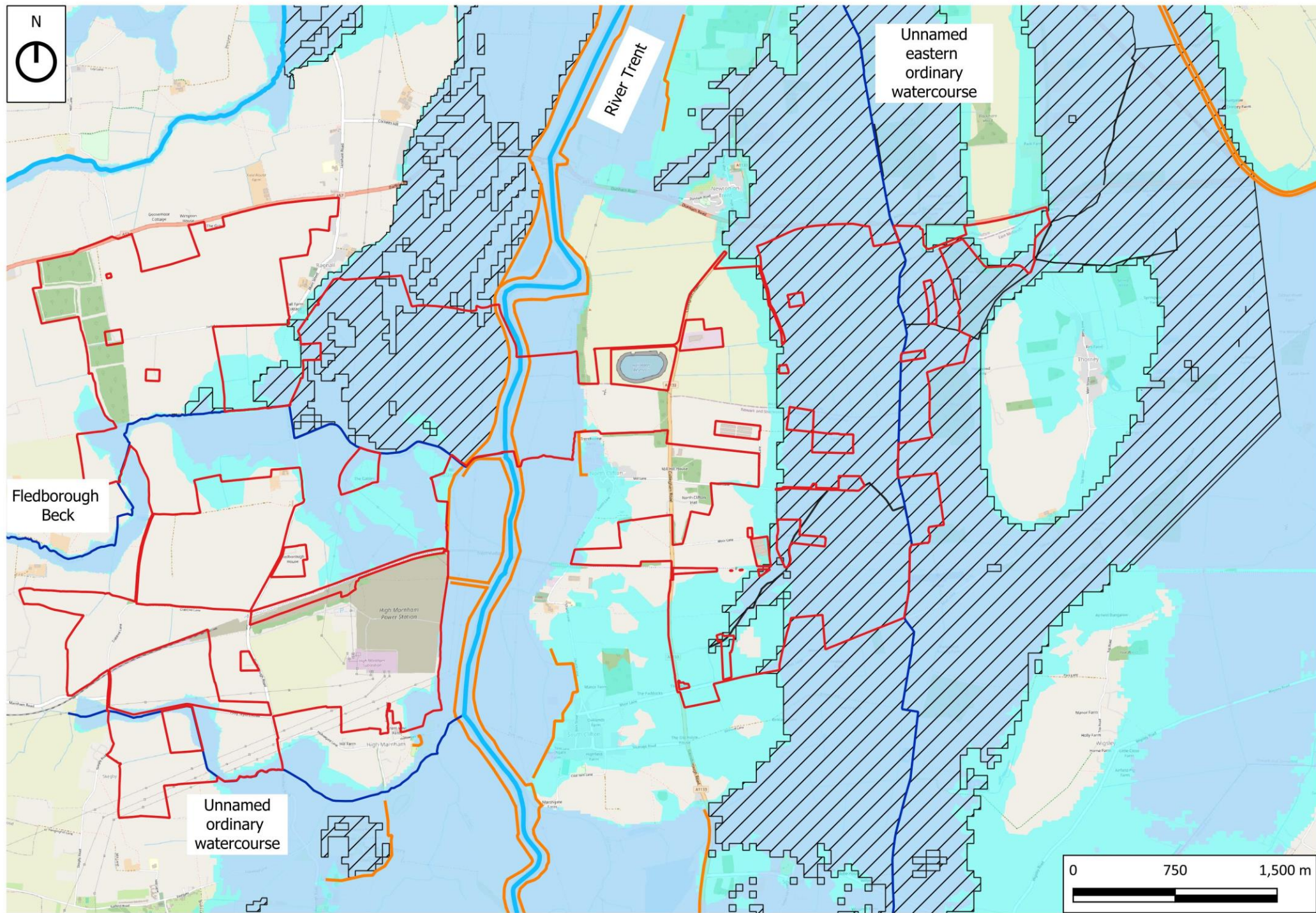
Drawing Number:
EN010159/APP/6.20/7.2

Drawn Date:
2024-11-19

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02

- Legend:
- Site Boundary
 - Main River
 - Ordinary Watercourses
 - Existing Field Drains





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Figure 7.3: Flood Map for Planning

Drawing Number:
EN010159/APP/6.20/7.3

Drawn Date:
2024-11-19

Rev:
02

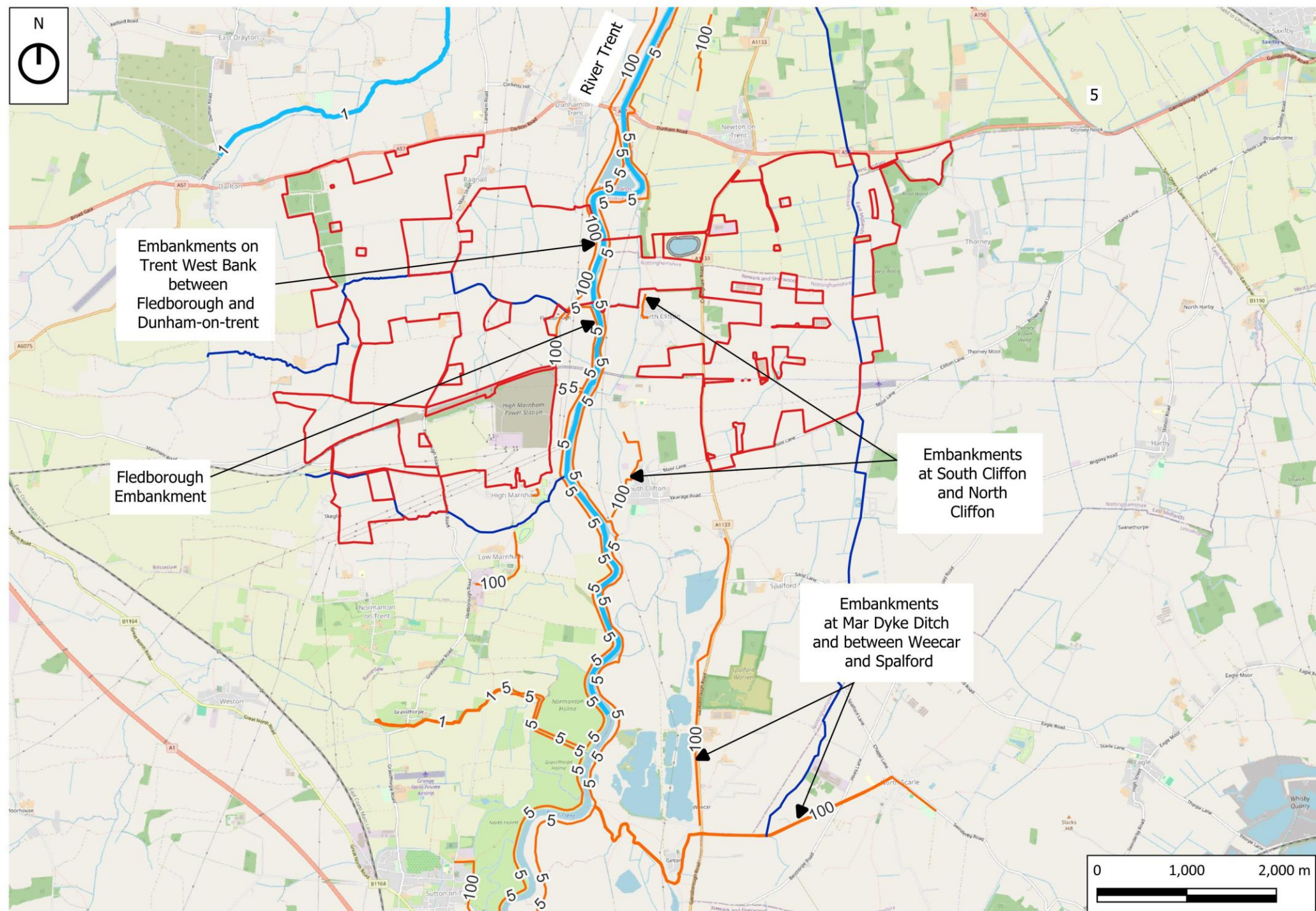
Legend:

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

Fluvial Flood Risk

- Flood Zone 1
- Flood Zone 2
- Flood Zone 3
- Reduction in Risk of Flooding





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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Environmental Statement Volume 2

Drawing Title:
Figure 7.4: Existing Flood Defences

Drawing Number:
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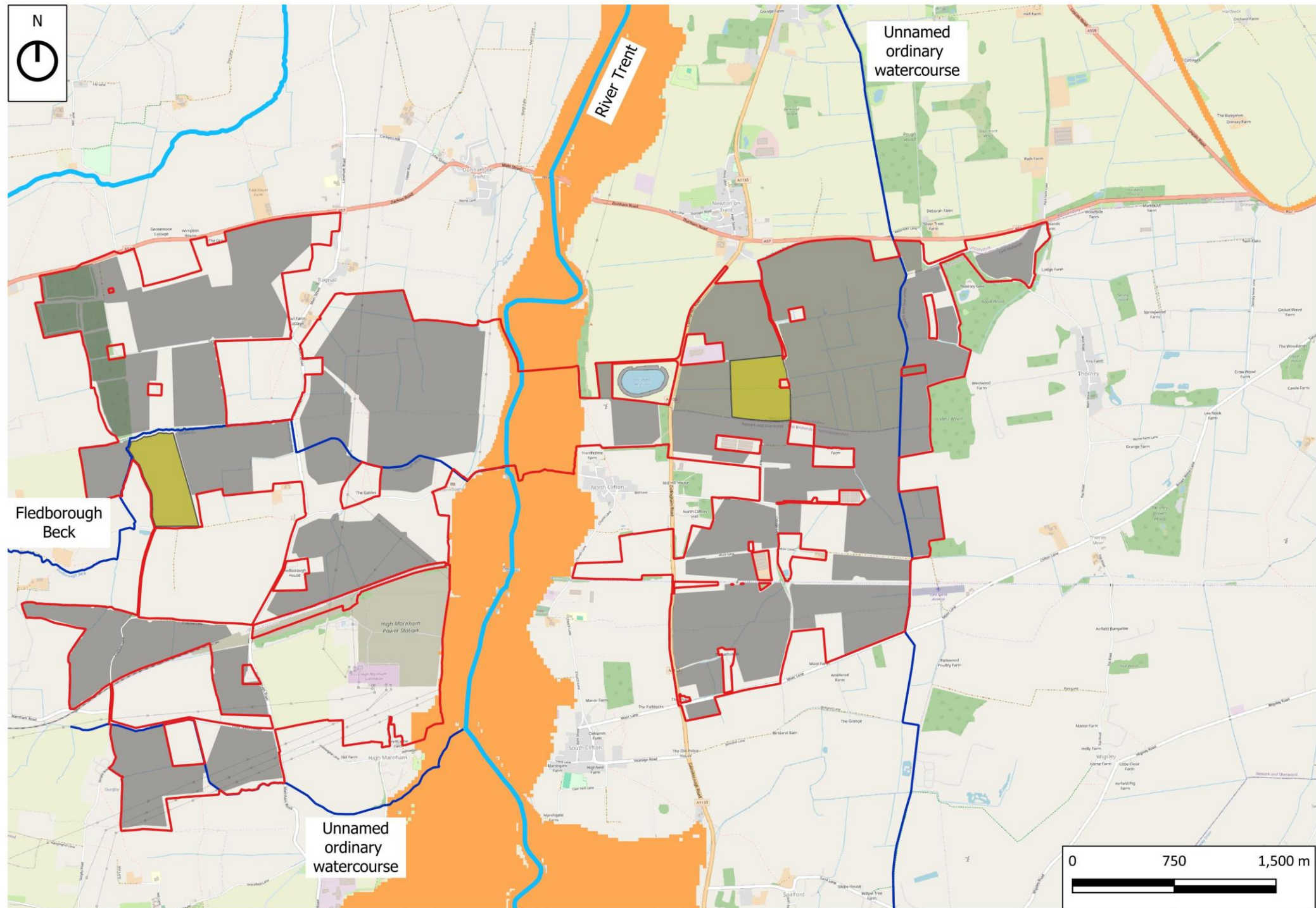
Drawn Date:
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01

Legend:

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





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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Environmental Statement Volume 2

Drawing Title:

Figure 7.5: Functional Floodplain
(Flood Zone 3b)

Drawing Number:
EN010159/APP/6.20/7.5

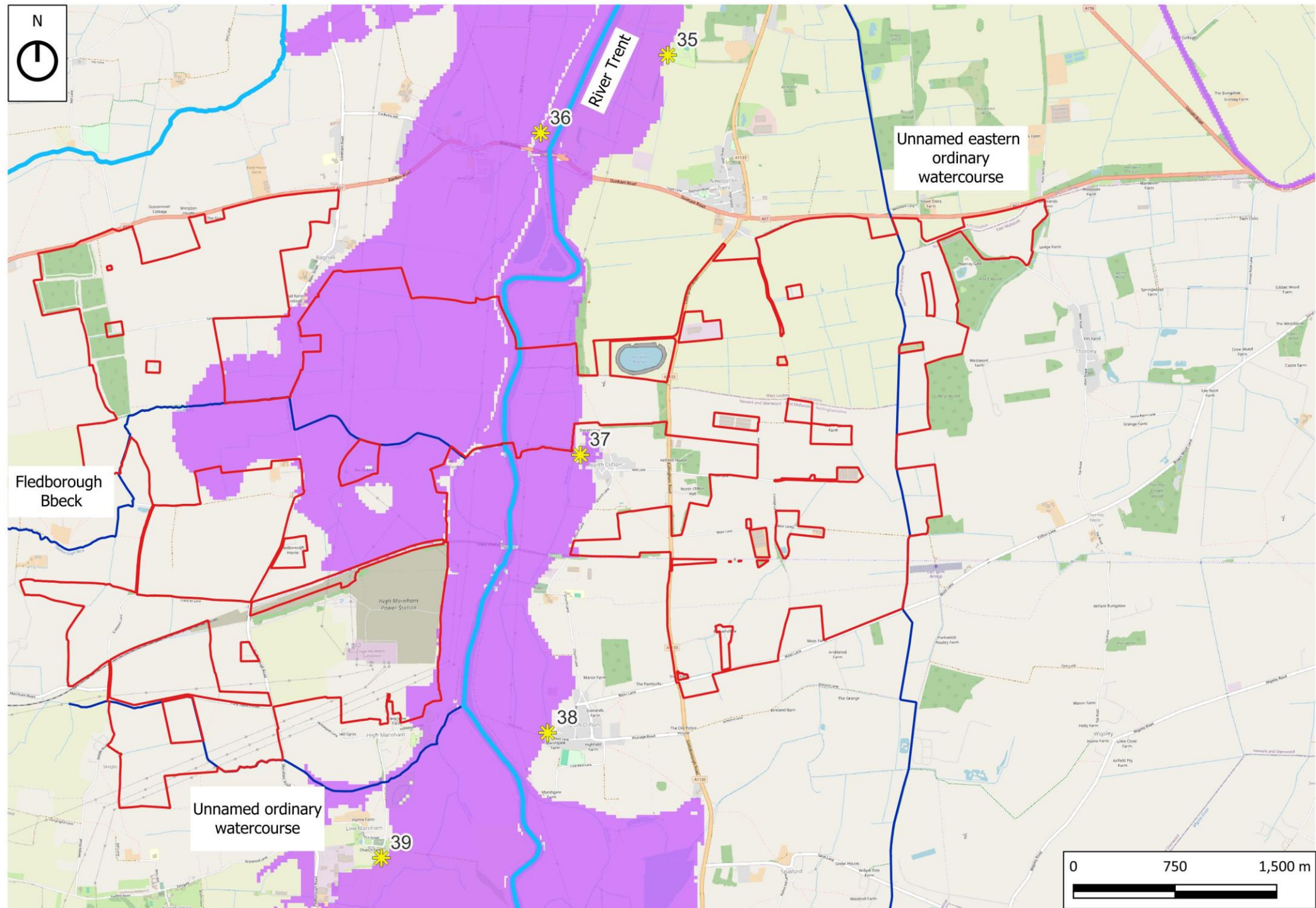
Rev:
01

Drawn Date:
2024-11-19

Legend:

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





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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Environmental Statement Volume 2

Drawing Title:

Figure 7.6: Flood Extent from
Breach Location 36 (Present Day)

Drawing Number:
EN010159/APP/6.20/7.6

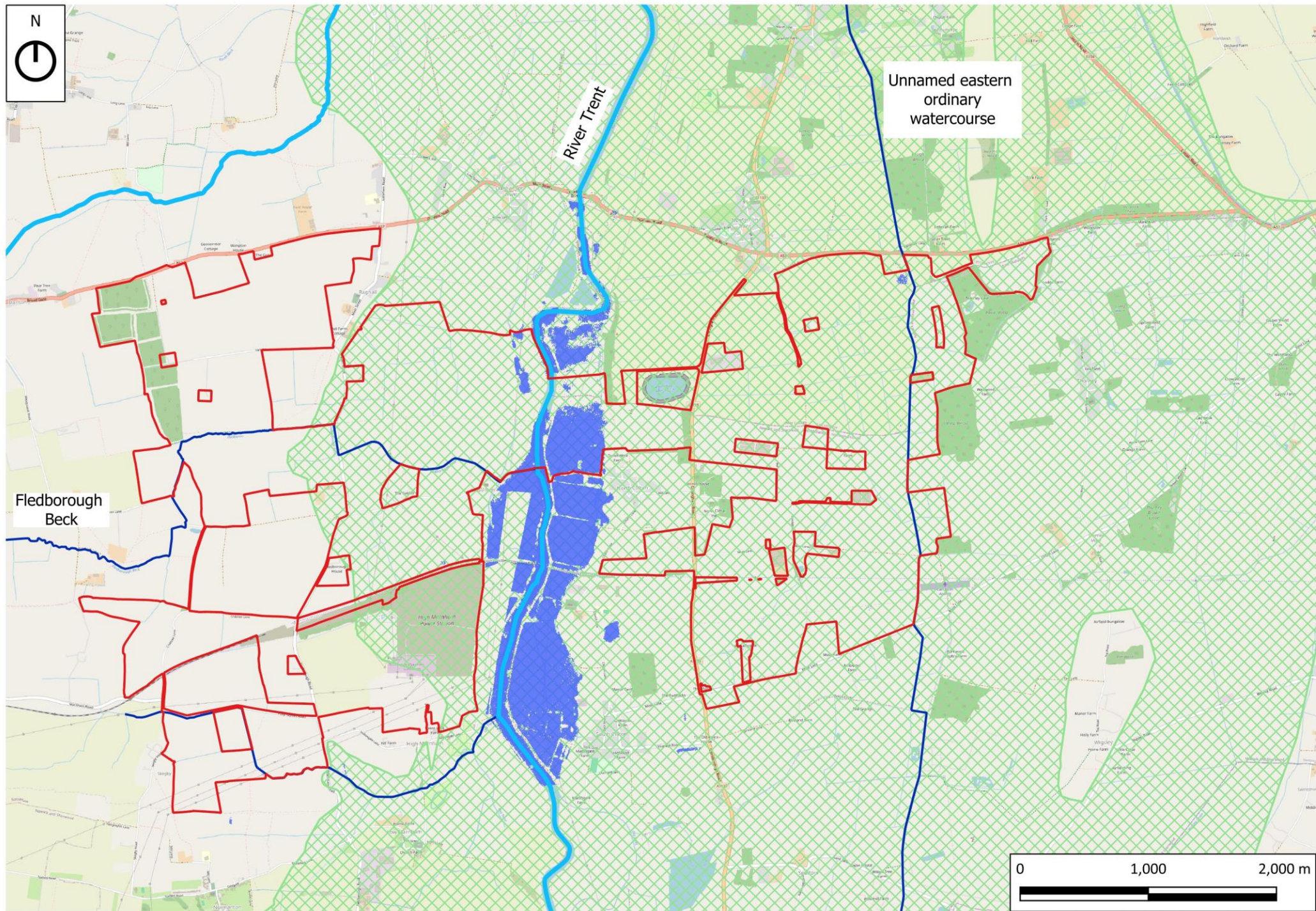
Drawn Date:
2024-11-19

Rev:
02

Legend:

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



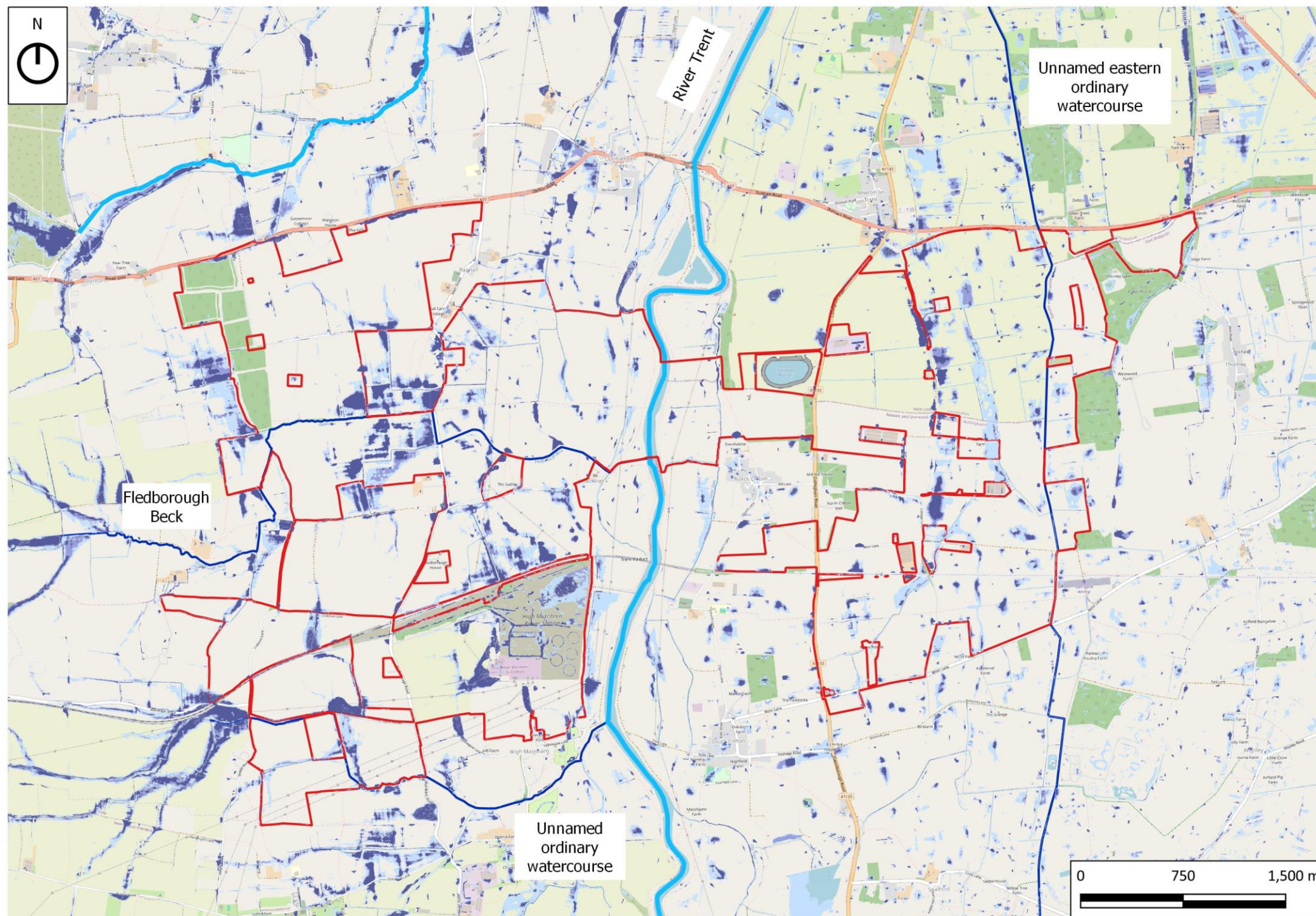


Google Maps (2025). Available at: <https://www.google.co.uk/maps/@53.2272889,-0.7682997,6738m/data=!3m1!1e3?entry=ttu> (Accessed 21st January 2025)

Client:	One Earth Solar Farm Ltd	
Project:	One Earth Solar Farm	
Planning Inspectorate Scheme Ref:EN010159	Drawing Title: Figure 7.7: 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:	<div></div> Site Boundary
	<div></div> Main River
	<div></div> Ordinary Watercourses
Historic Flood Extents	
	<div></div> Historic Flood Map
	<div></div> Drone Survey Flood Event (2024-01-09)





Google Maps (2025). Available at: <https://www.google.co.uk/maps/@53.2272889,-0.7682997,6738m/data=!3m1!1e3?entry=ttu> (Accessed 10 FEBRUARY 2025)



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Project:
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Environmental Statement Volume 2

Drawing Title:
**Figure 7.8: Environment Agency Risk
of Flooding from Surface Water
(2025)**

Drawing Number:
EN010159/APP/6.20/7.8

Drawn Date:
2025-02-10

Rev:
03

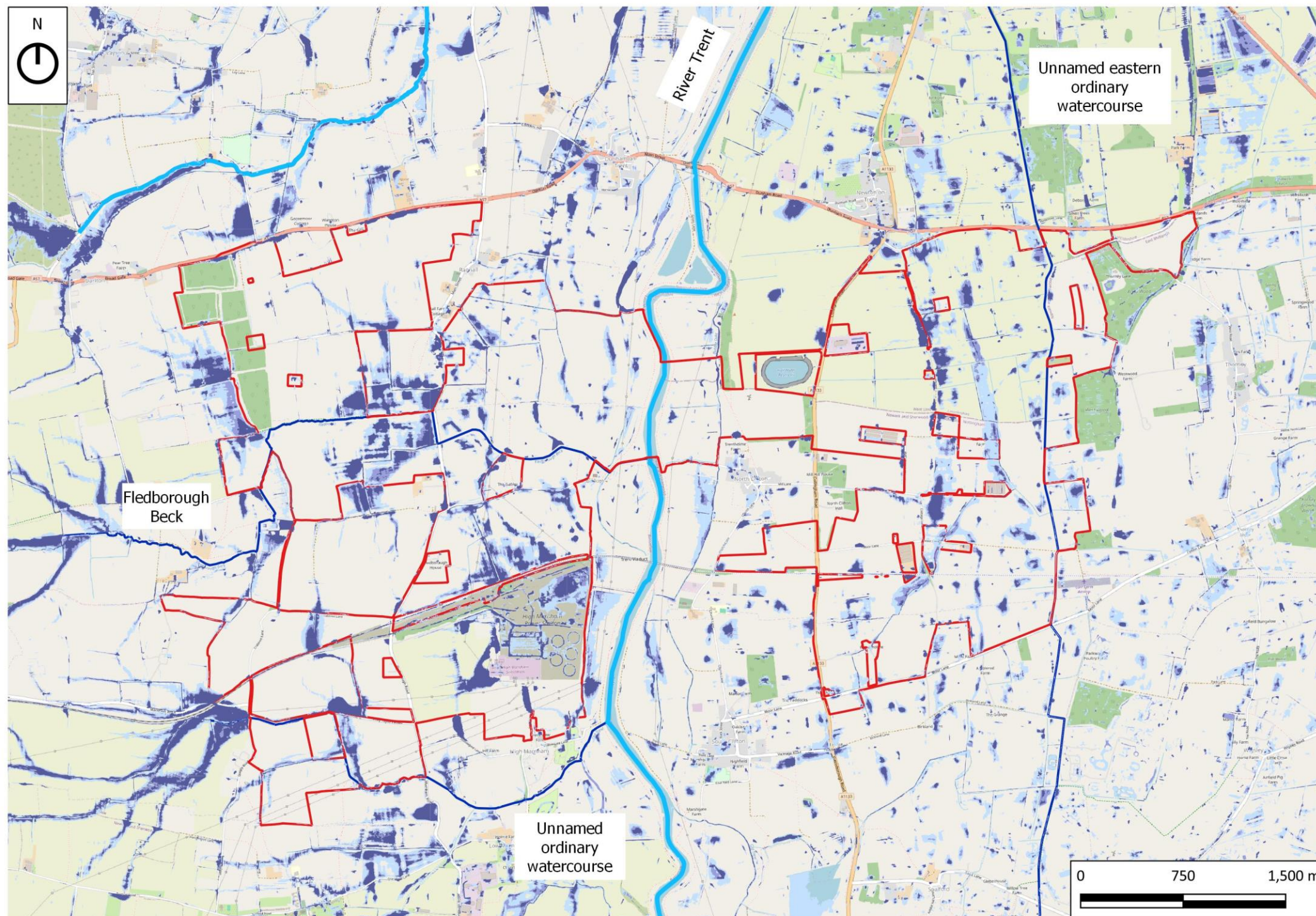
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Pluvial Flood Risk

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





Google Maps (2025). Available at: <https://www.google.co.uk/maps/@53.2272889,-0.7682997,6738m/data=!3m1!1e3?entry=ttu> (Accessed 10 FEBRUARY 2025)



Client:
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Project:
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Environmental Statement Volume 2

Drawing Title:
Figure 7.9: 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

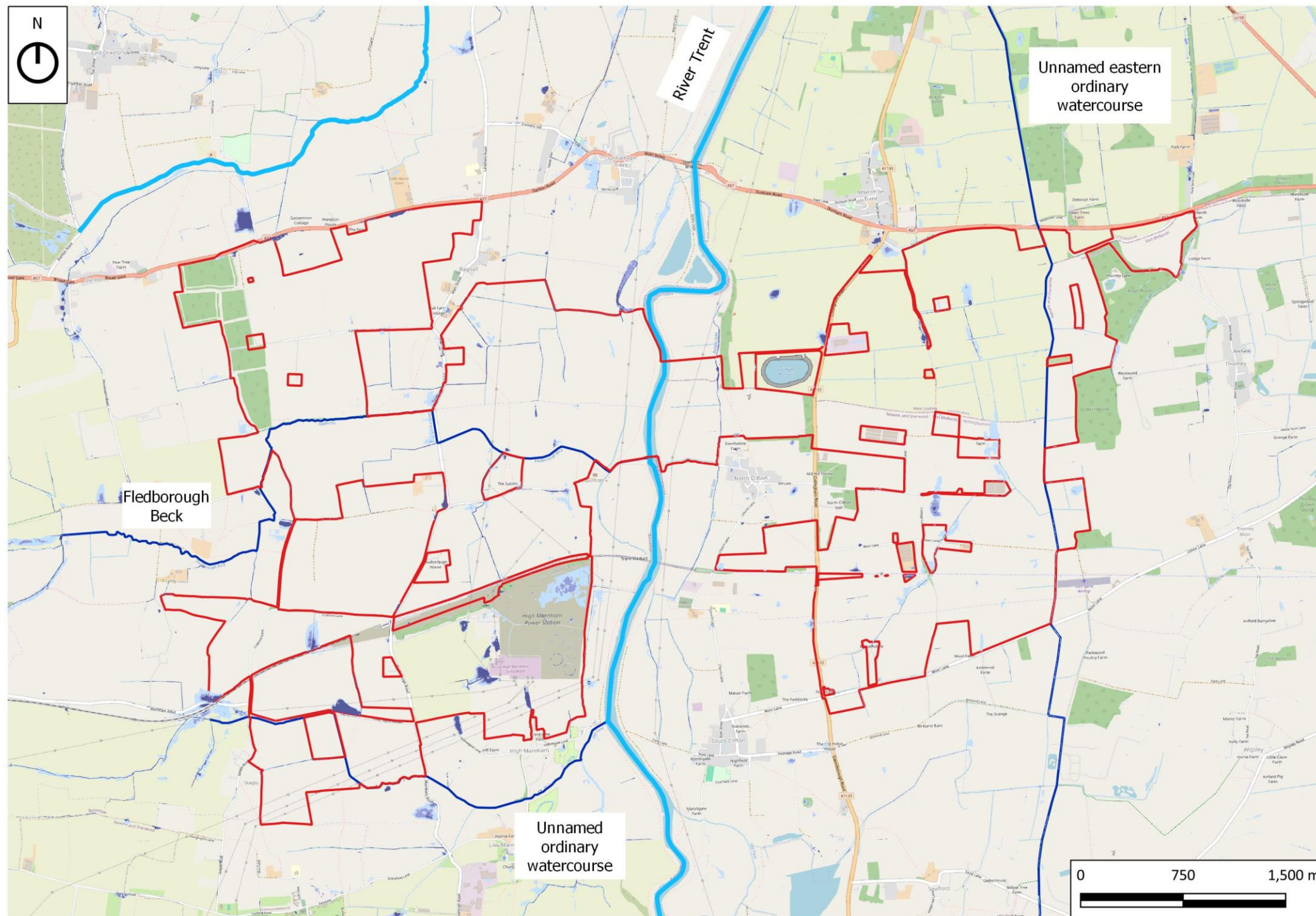
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Pluvial Flood Risk

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





Google Maps (2025). Available at: <https://www.google.co.uk/maps/@53.2272889,-0.7682997,6738m/data=!3m1!1e3?entry=ttu> (Accessed 10 FEBRUARY 2025)



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Planning Inspectorate Scheme Ref: EN010159
Environmental Statement Volume 2

Drawing Title:
Figure 7.10: EA 0.3m Surface Water
Plus Climate Change Flood Depths
(2025)

Drawing Number:
EN010159/APP/6.20/7.10

Drawn Date:
2025-02-10

Rev:
01

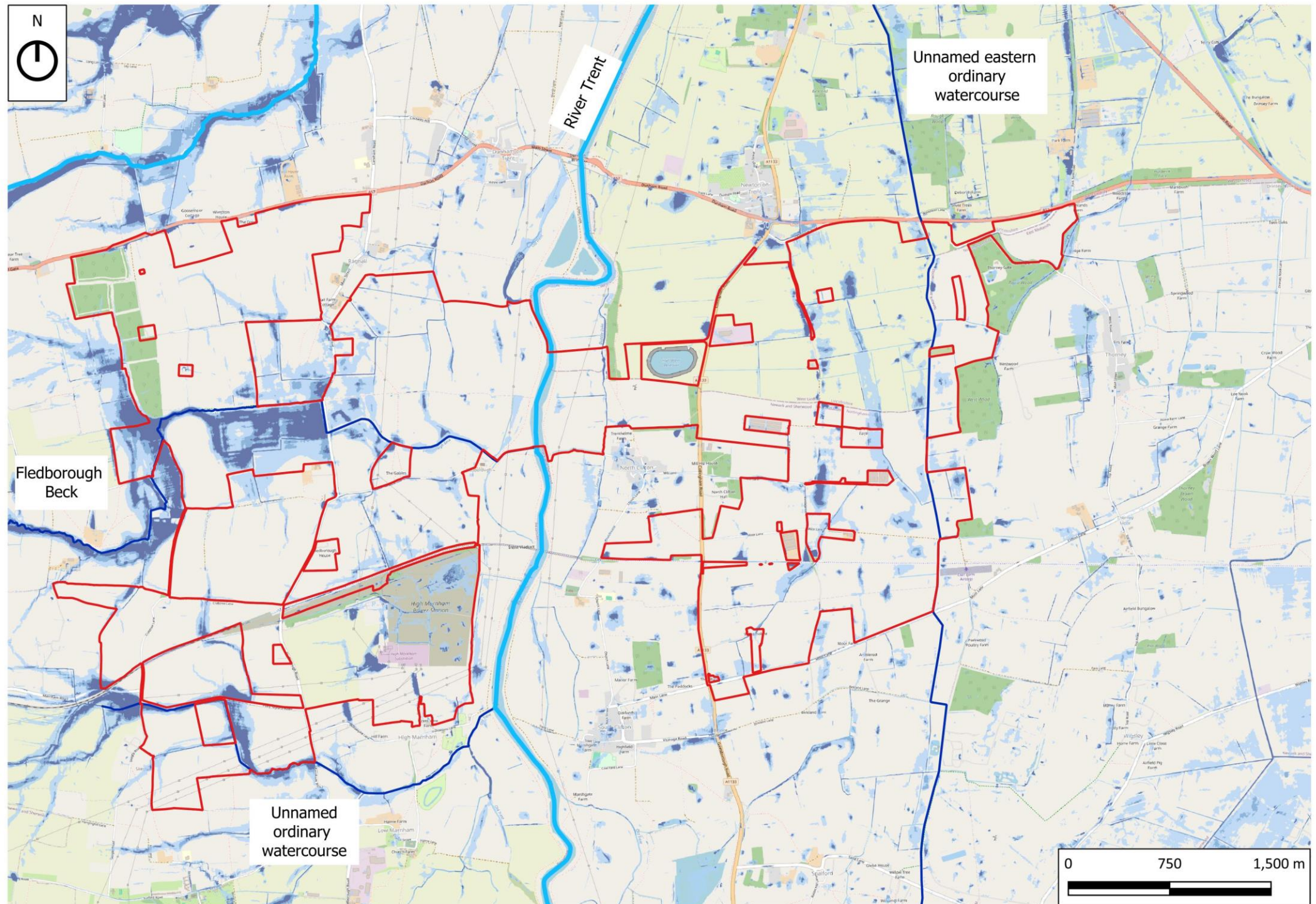
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

0.3m Flood Depth

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





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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Drawing Title:
**Figure 7.11: Environment Agency
Risk of Flooding from Surface Water
(2024)**

Drawing Number:
EN010159/APP/6.20/7.11

Drawn Date:
2024-11-19

Rev:
02

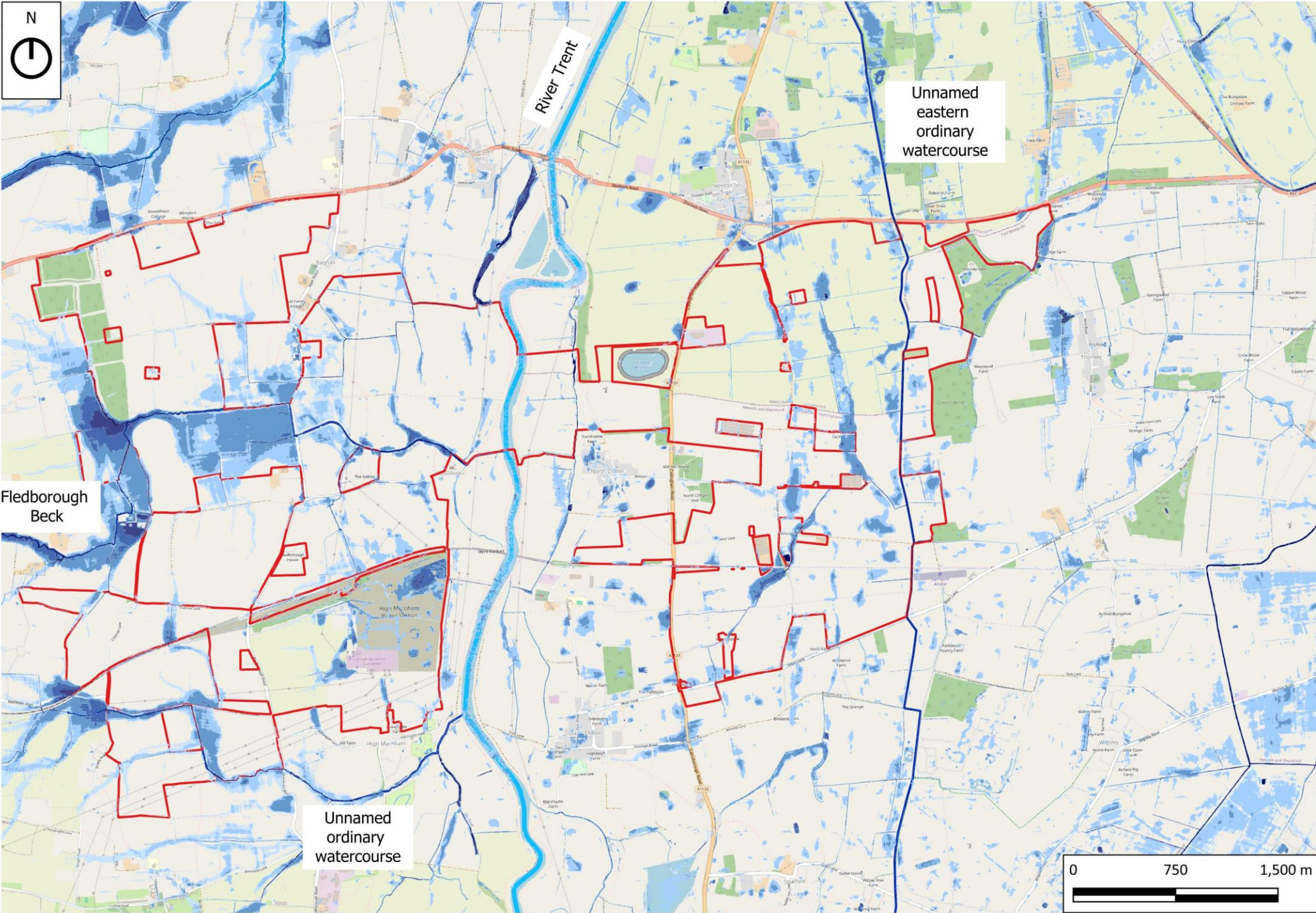
Legend:

- Site Boundary
- Main River
- Ordinary Watercourses

Pluvial Flood Risk

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





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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Drawing Title:
Figure 7.12: Environment Agency
Surface Water Low Risk Flood
Depths (2024)

Drawing Number:
EN010159/APP/6.20/7.12

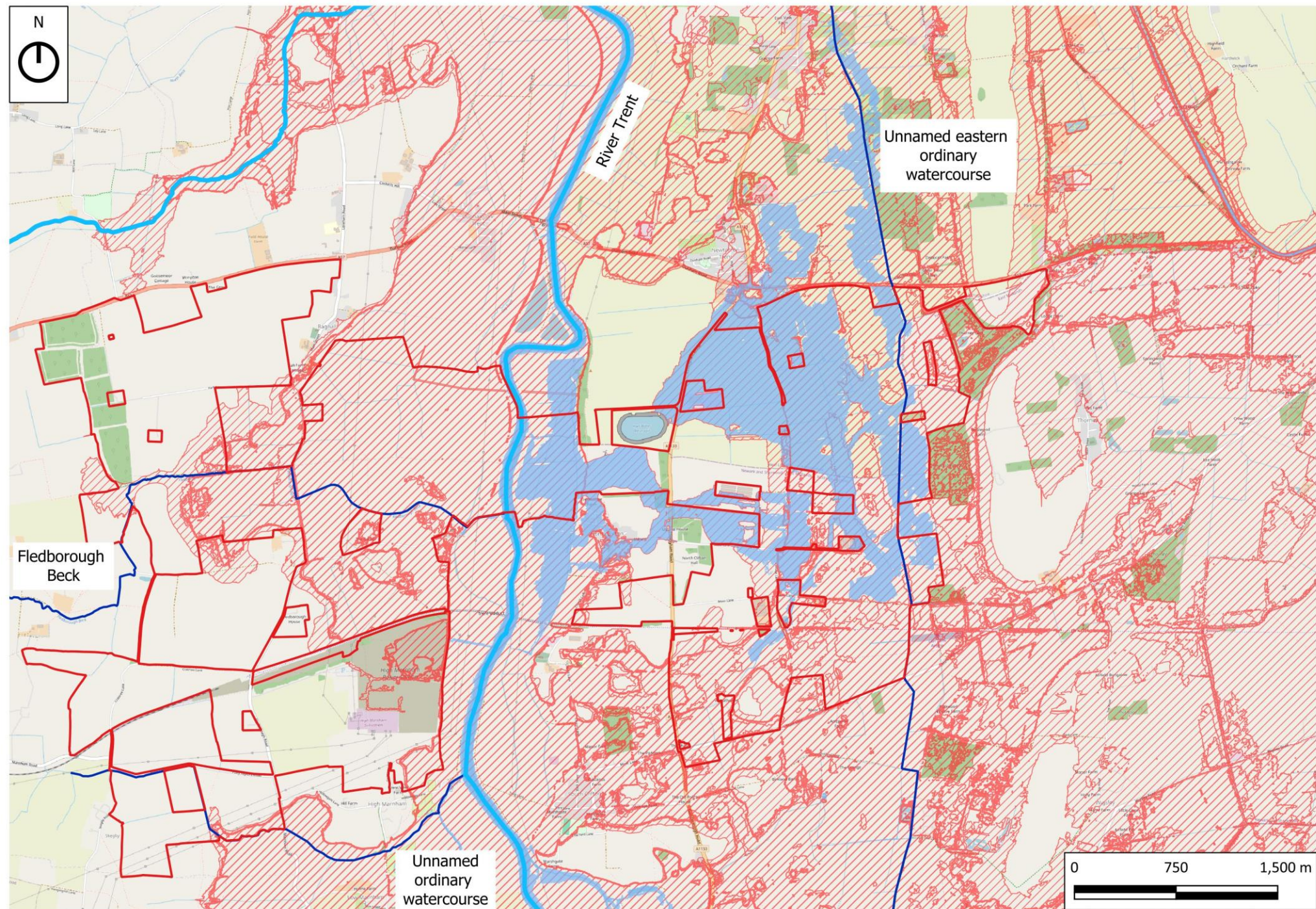
Drawn Date:
2024-11-19

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





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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Drawing Title:

Figure 7.13: Environment Agency
Flood Risk from Reservoirs

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EN010159/APP/6.20/7.13

Rev:
02

Drawn Date:
2024-11-19

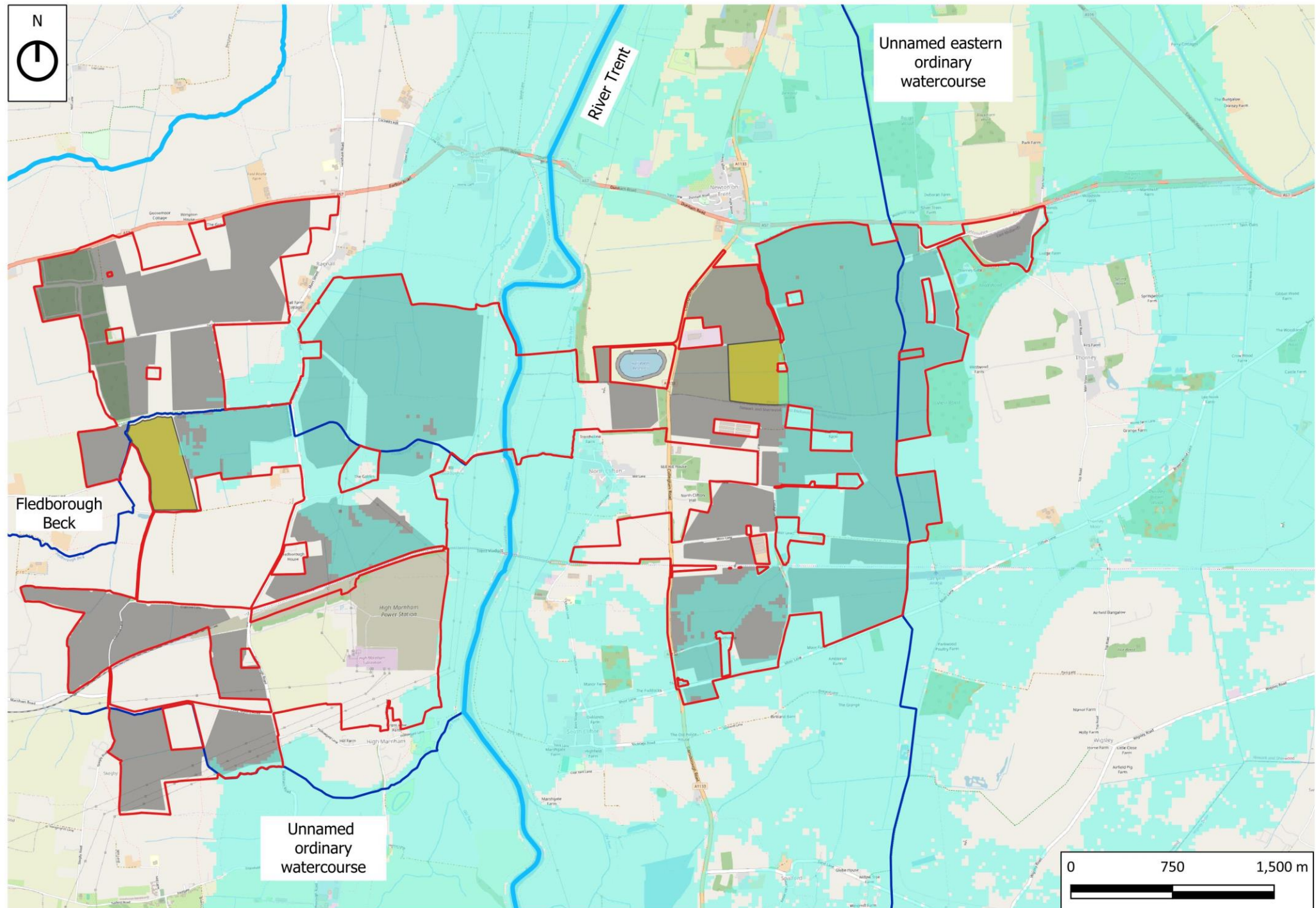
Legend:

- 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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Drawing Title:
Figure 7.14: 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

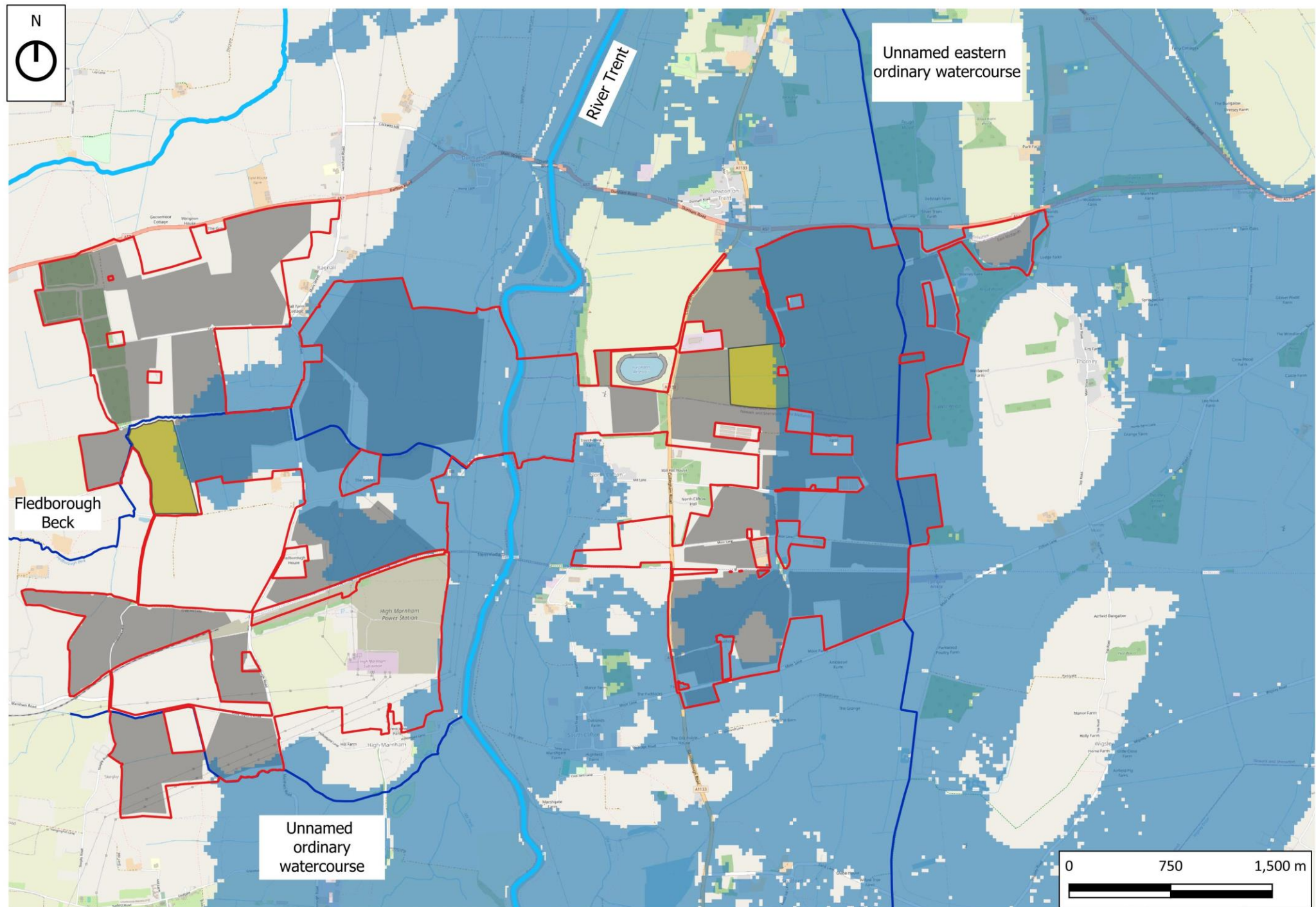
Legend:

- 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





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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Environmental Statement Volume 2

Drawing Title:
Figure 7.15: 1 in 100 Year Plus 62% Climate Change
Flood Extent (Maximum Credible Flood Event)

Drawing Number:
EN010159/APP/6.20/7.15

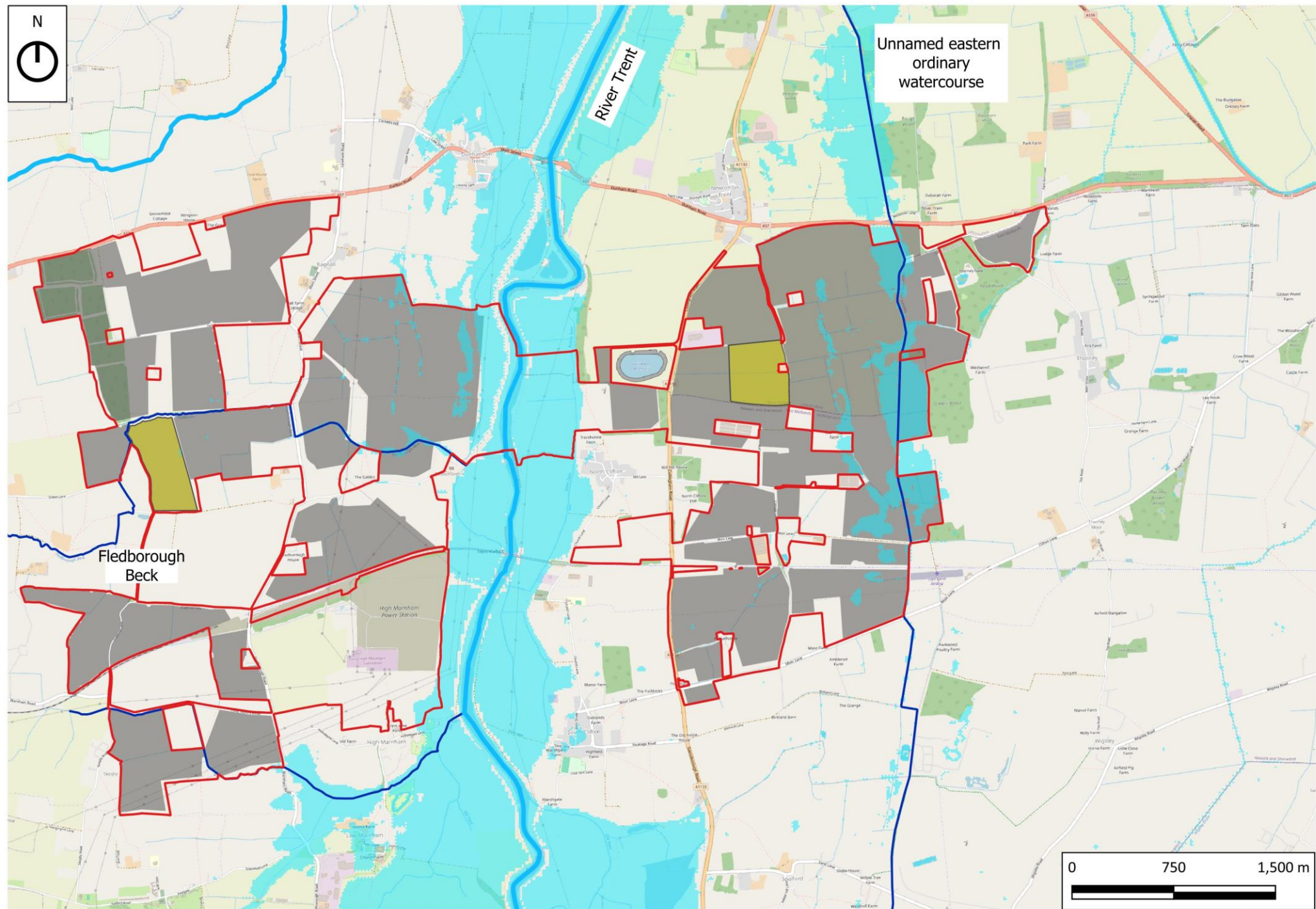
Drawn Date:
2024-11-19

Rev:
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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)





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
Environmental Statement Volume 2

Drawing Title:
Figure 7.16: Flood Depths greater than 1.5m (Design Flood Event)

Drawing Number:
EN010159/APP/6.20/7.16

Drawn Date:
2024-09-03

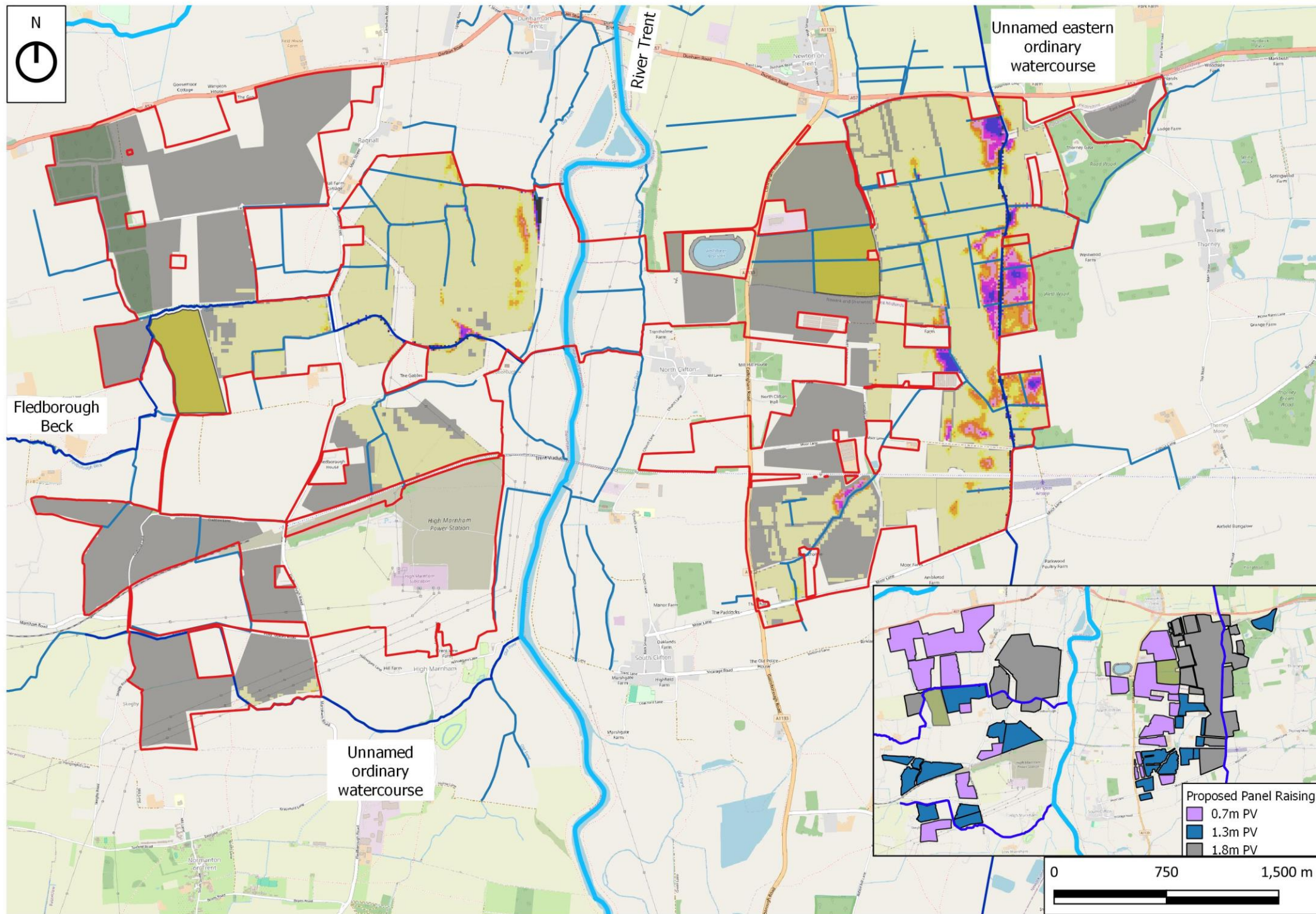
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01

Legend:

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

Design Flood Event Depth
 1 in 100 plus 39%
(Depth over 1.50m)





Google Maps (2024). Available at: <https://www.google.co.uk/maps/@53.2272889,-0.7682997,6738m/data=!3m1!1e3?entry=ttu> (Accessed 05 APRIL 2024)



Client:
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Environmental Statement Volume 2

Drawing Title:
Figure 7.17: Summary of Freeboard Allowance and Panel Flood Depths

Drawing Number:
EN010159/APP/6.20/7.17

Drawn Date:
2024-11-19

Rev:
02

Legend:

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

Summary of Freeboard Allowance and Panel Raising

- 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 $0.0 - 0.1\text{m}$ Provided
- Panels Flooded by $0.2\text{m} - 0.3\text{m}$
- Panels Flooded by $0.3\text{m} - 0.6\text{m}$
- Panels Flooded by $0.0\text{m} - 0.1\text{m}$
- Panels Flooded by $0.1\text{m} - 0.2\text{m}$
- Panels Flooded $> 0.6\text{m}$