

Chapter 12 Hydrology, Hydrogeology and Drainage

Figure 12.1 Surface Water Features

Figure 12.2 Groundwater Features

Figure 12.3 WER Surface Water Bodies

Figure 12.4 WER Groundwater Bodies

Figure 12.5 Risk of Flooding from Surface Water (Pluvial Flooding)

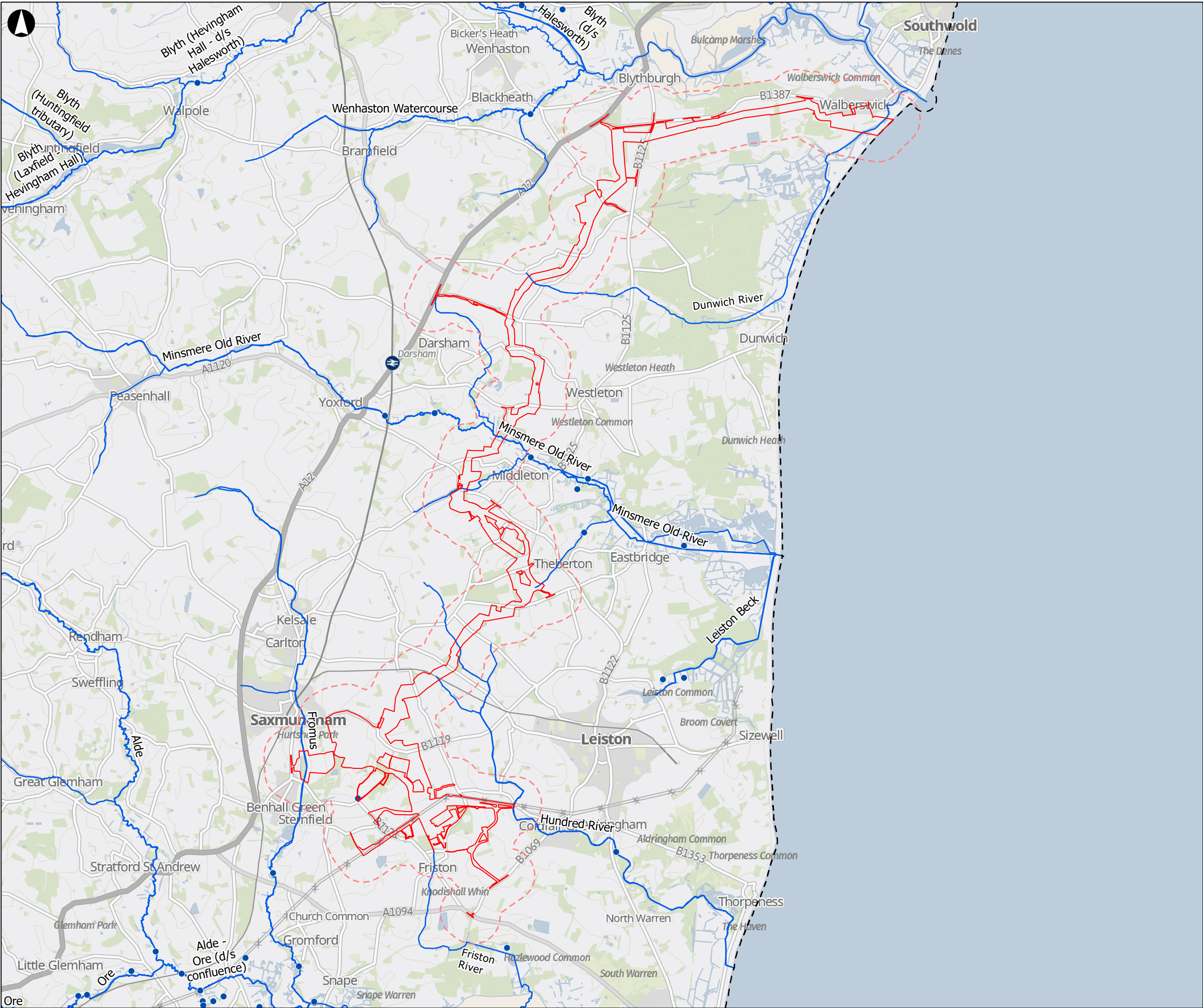
Figure 12.6a Risk of Flooding from Rivers and Seas (Fluvial Flooding) - with defences, climate change

Figure 12.6b Risk of Flooding from Rivers and Seas (Fluvial Flooding) - with defences, present day

Figure 12.7 Susceptibility to Groundwater Flooding

Figure 12.8 WER Surface Water Bodies – Watercourse naming

Figure 12.9 Groundwater Vulnerability



- Proposed Onshore Scheme Draft Order Limits
- Mean Low Water Springs
- Study Area
- Surface Water Abstraction Licenses
- Main Rivers



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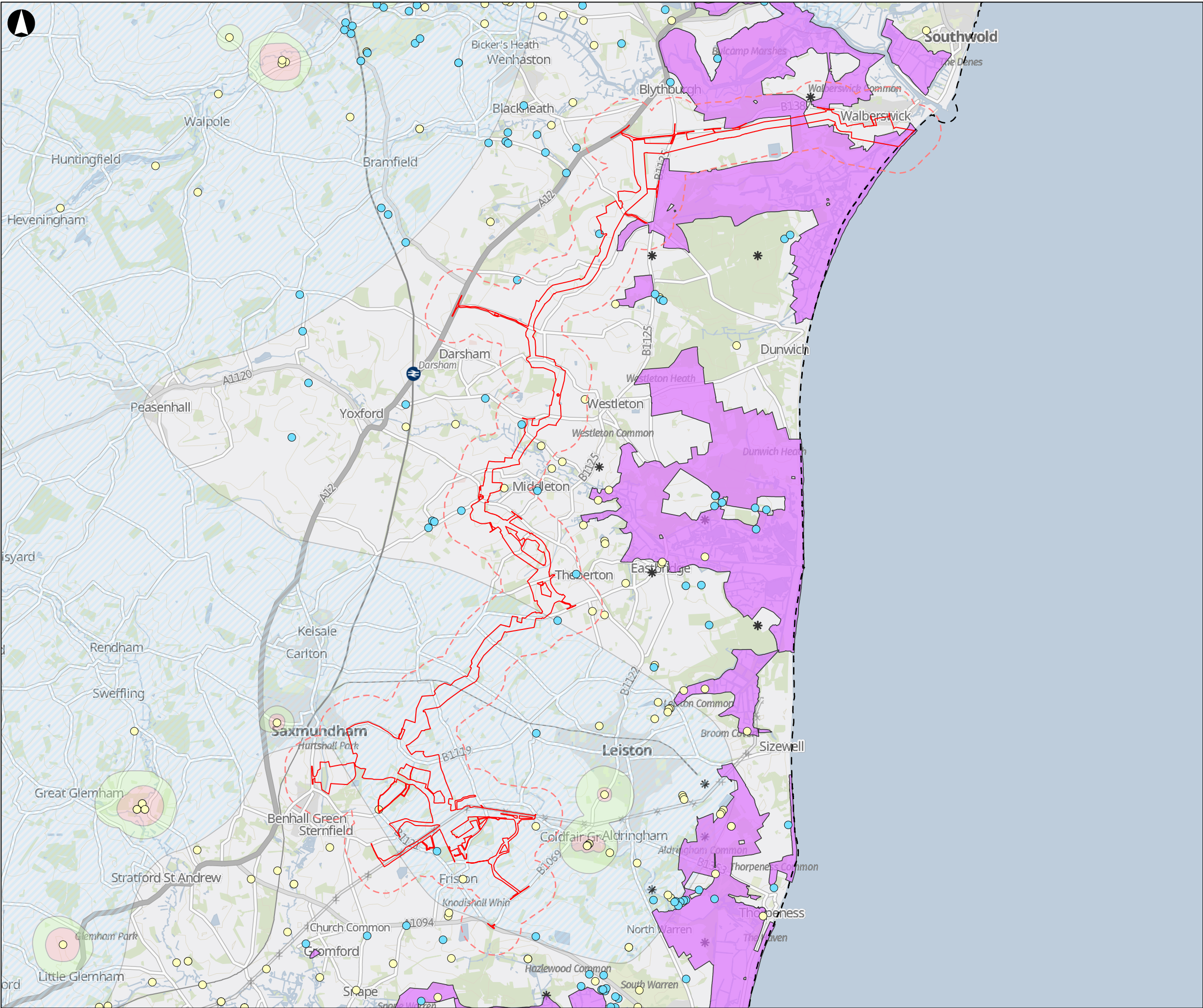
Client
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Project Name
LIONLINK

Drawing Title
Figure 12.1 Surface Water Features

Scale at A3 1:70,000	
Role Environment	
Suitability S2	
Project Number 287334-00	Rev P03
Drawing Number LLK1-ARU-DWG-ENV-00015	

A3



- Proposed Onshore Scheme
 - Draft Order Limits
 - Mean Low Water Springs
 - Study Area
 - Abstraction Licenses
 - Designated Groundwater
 - Dependent Terrestrial Ecosystems
- Source Protection Zones**
- Zone 1
 - Zone 2
 - Zone 3
- Hydrometric Monitoring Points**
- Groundwater level (observation borehole)
 - ESC Private Water Supplies



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Figure 12.2 Groundwater Features

Scale at A3

1:70,000

Role

Environment

Suitability

S2

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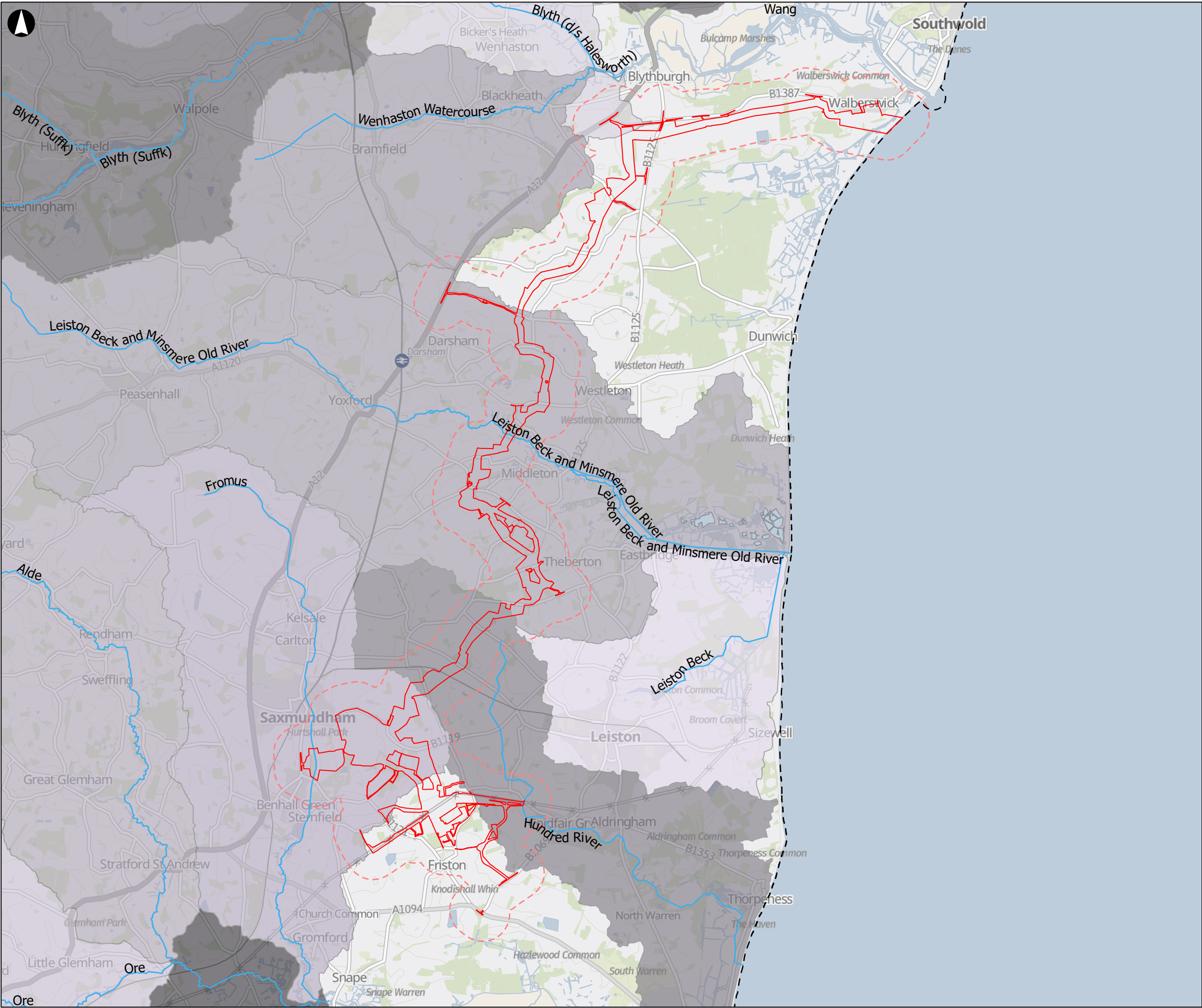
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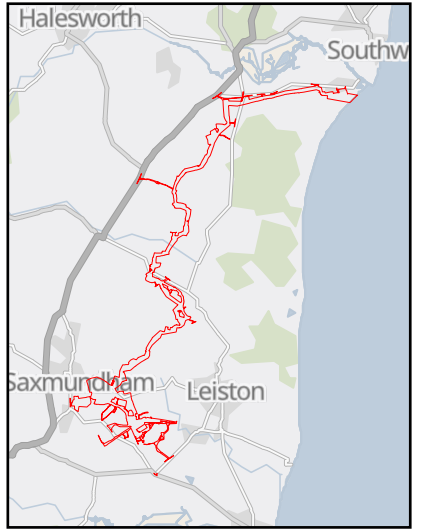
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A3



- Proposed Onshore Scheme Draft
- Order Limits
- Mean Low Water Springs
- WFD River Water Bodies Cycle 3
- Study Area
- River Water Body Catchments Cycle 3
 - Alde
 - Alde - Ore (d/s confluence)
 - Blyth (Suffk)
 - Blyth (d/s Halesworth)
 - Chediston Watercourse
 - Fromus
 - Hundred River
 - Leiston Beck
 - Leiston Beck and Minsmere Old River
 - Ore
 - Wang
 - Wenhaston Watercourse



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Drawing Title

Figure 12.3 WER Surface Water Bodies

Scale at A3

1:70,000

Role

Environment

Suitability

S2

Project Number

287334-00

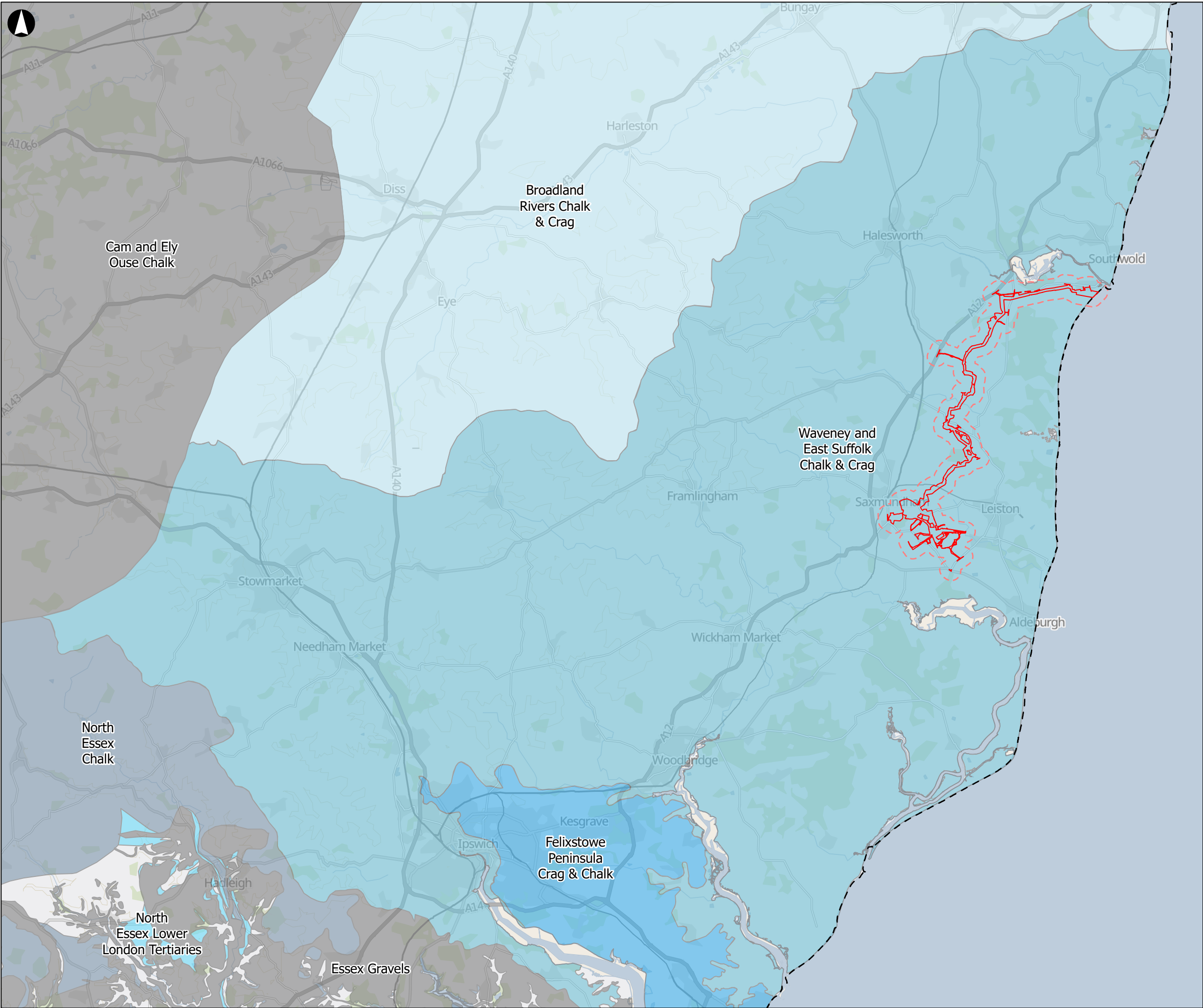
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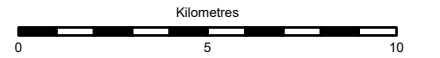


- Proposed Onshore Scheme
- Draft Order Limits
- Mean Low Water Springs
- Study Area
- WFD Groundwater Bodies**
- Cycle 3**
- Broadland Rivers Chalk & Crag
- Cam and Ely Ouse Chalk
- Essex Gravels
- Felixstowe Peninsula Crag & Chalk
- North Essex Chalk
- North Essex Lower London Tertiaries
- Waveney and East Suffolk Chalk & Crag



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Drawing Title
Figure 12.4 WER Groundwater Bodies

Scale at A3

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Role

Environment

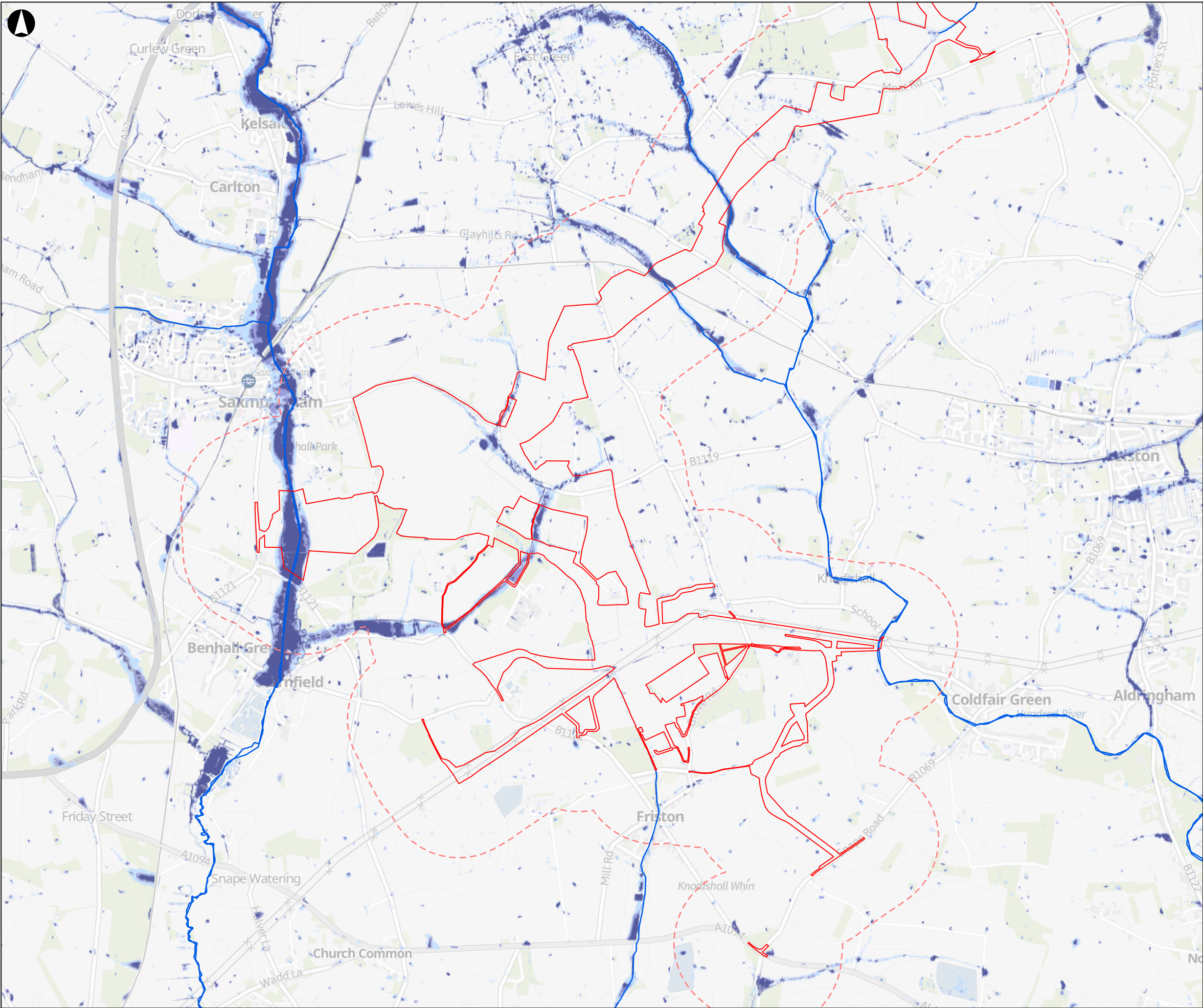
Suitability

S2

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- Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

Study Area

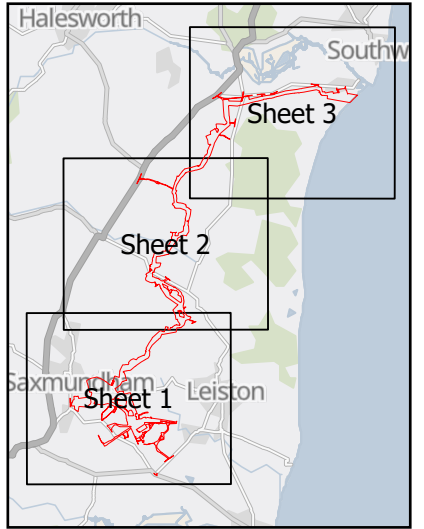
Main Rivers
- Risk of Flooding from Surface Water**

High

Medium

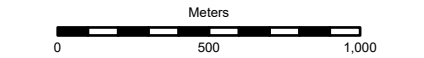
Low

Unavailable



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Figure 12.5 Risk of Flooding from Surface Water (Pluvial Flooding) - Sheet 1

Scale at A3

1:25,000

Role

Environment

Suitability

S2

Project Number

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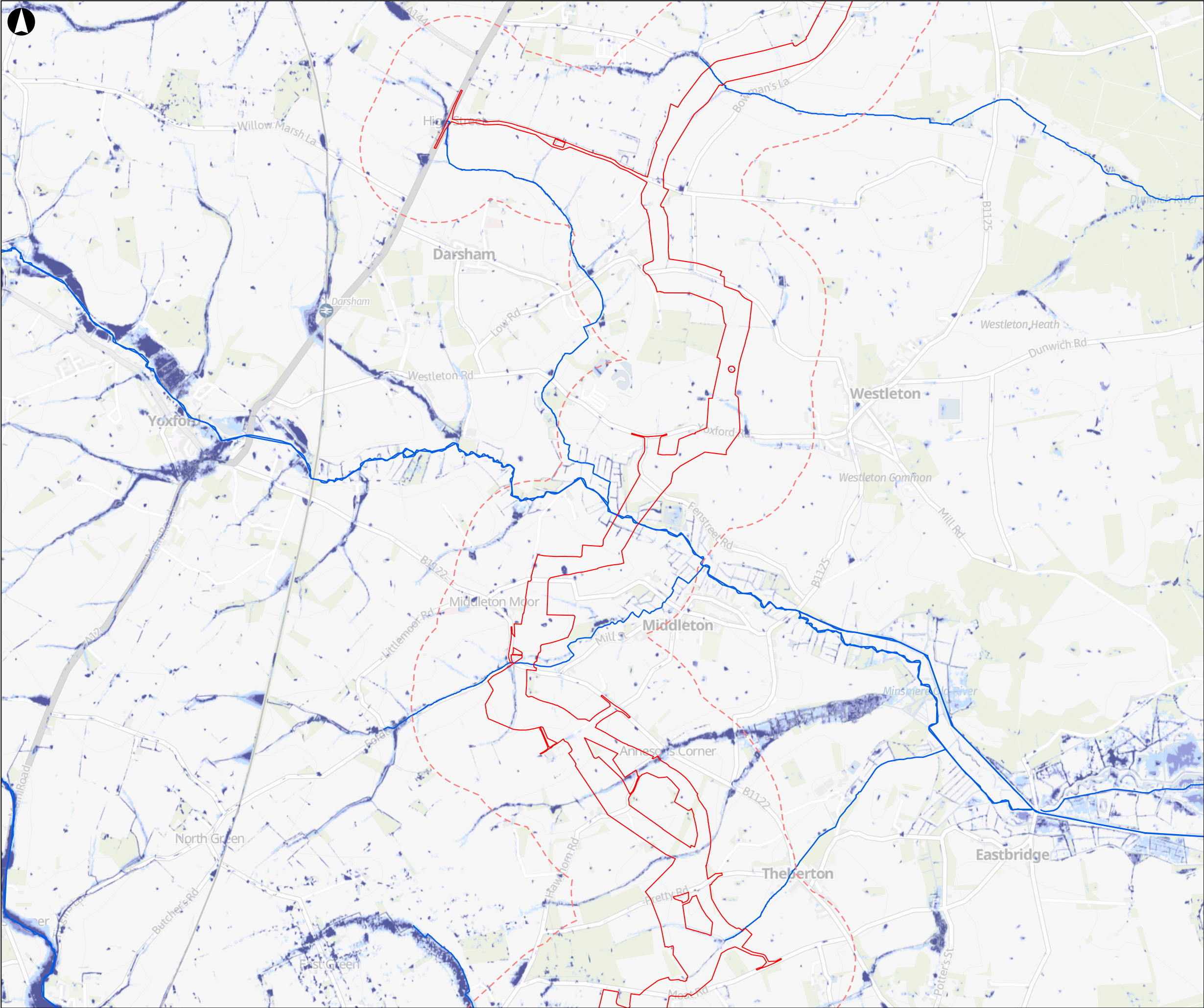
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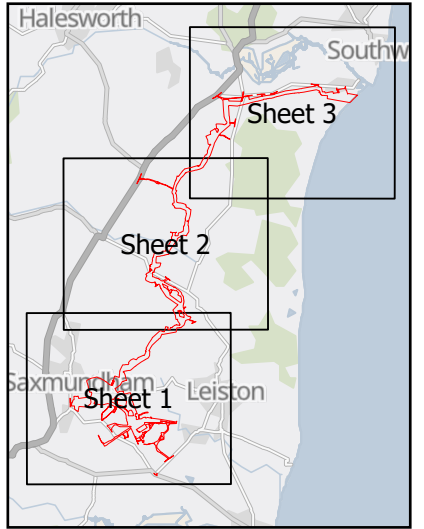
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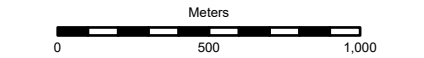


- Proposed Onshore Scheme Draft Order Limits
- Mean Low Water Springs
- Study Area
- Main Rivers
- Risk of Flooding from Surface Water**
- High
 - Medium
 - Low
 - Unavailable



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Figure 12.5 Risk of Flooding from Surface Water (Pluvial Flooding) - Sheet 2

Scale at A3

1:25,000

Role

Environment

Suitability

S2

Project Number

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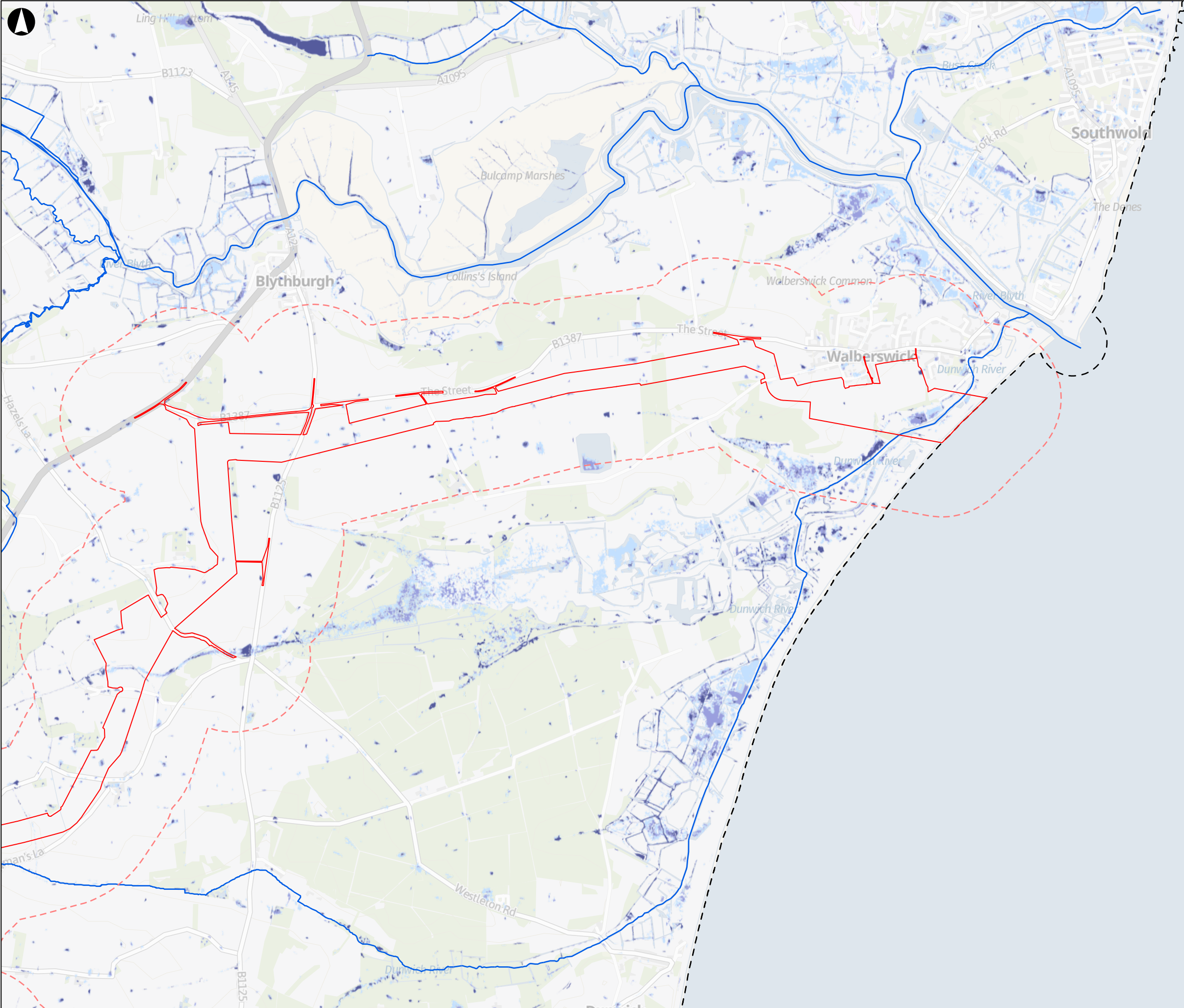
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- Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

Study Area

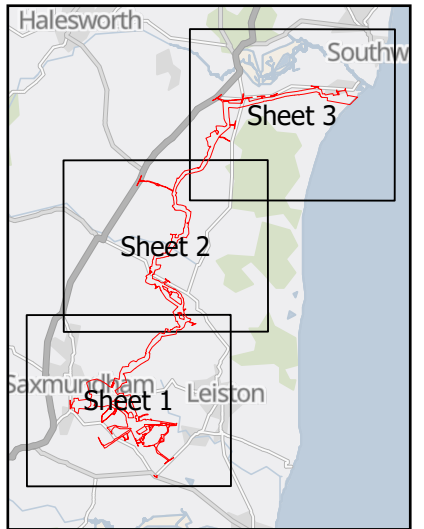
Main Rivers
- Risk of Flooding from Surface Water**

High

Medium

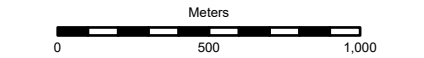
Low

Unavailable



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Figure 12.5 Risk of Flooding from Surface Water (Pluvial Flooding) - Sheet 3

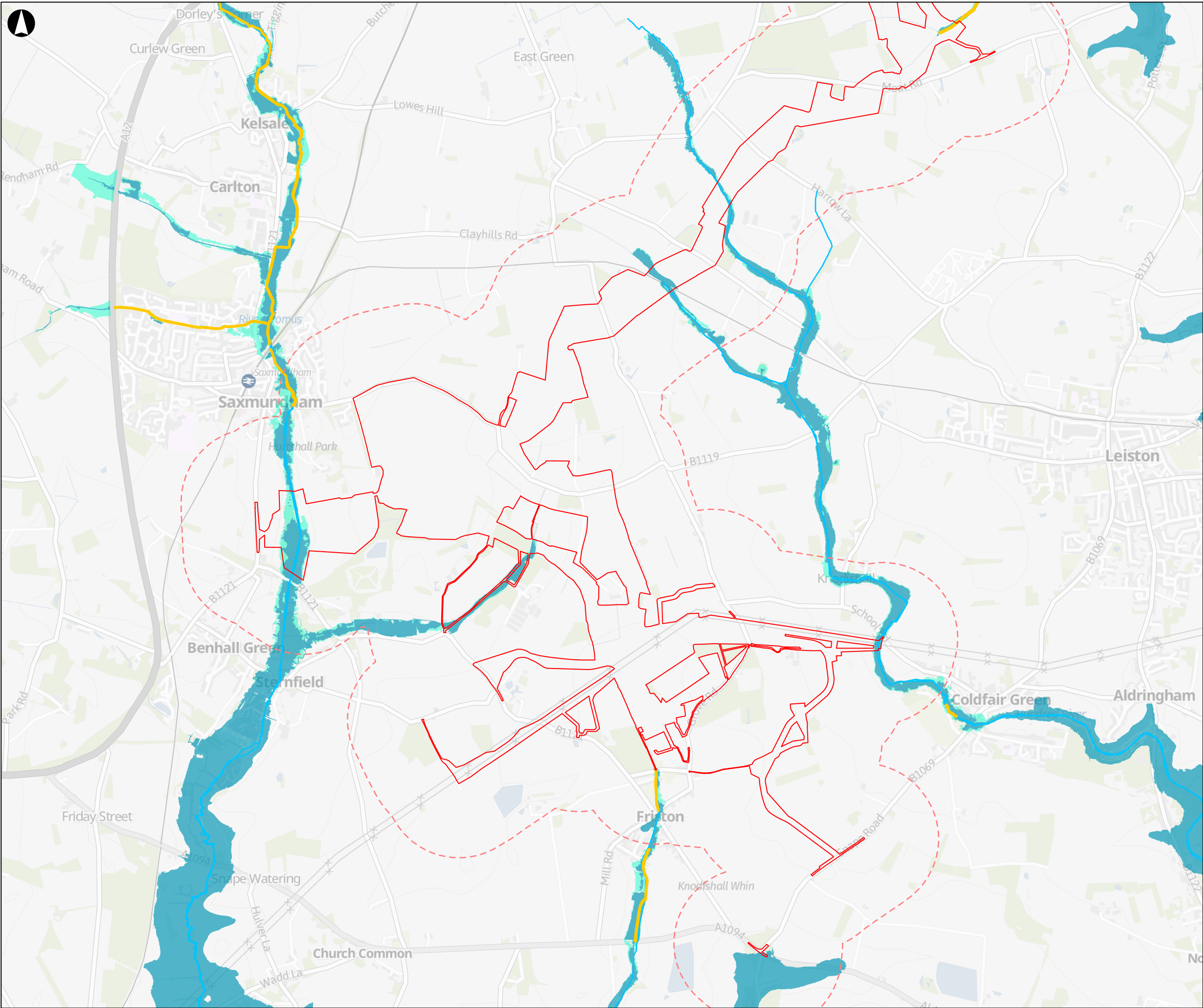
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Role
Environment

Suitability
S2

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- Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

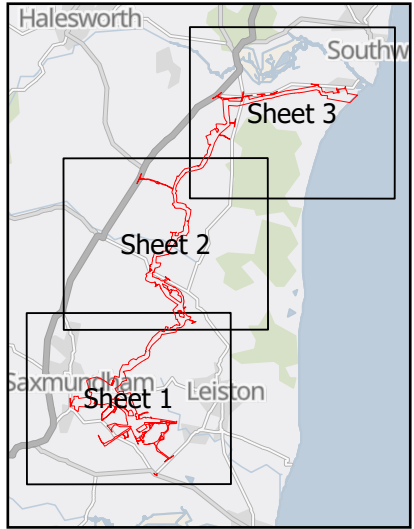
Study Area

Main Rivers

AIMS Spatial Flood Defences
- Defended Climate Change Flood Risk

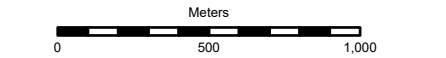
Flood Risk - 1 in 200 years

Flood Risk - 1 in 1000 years



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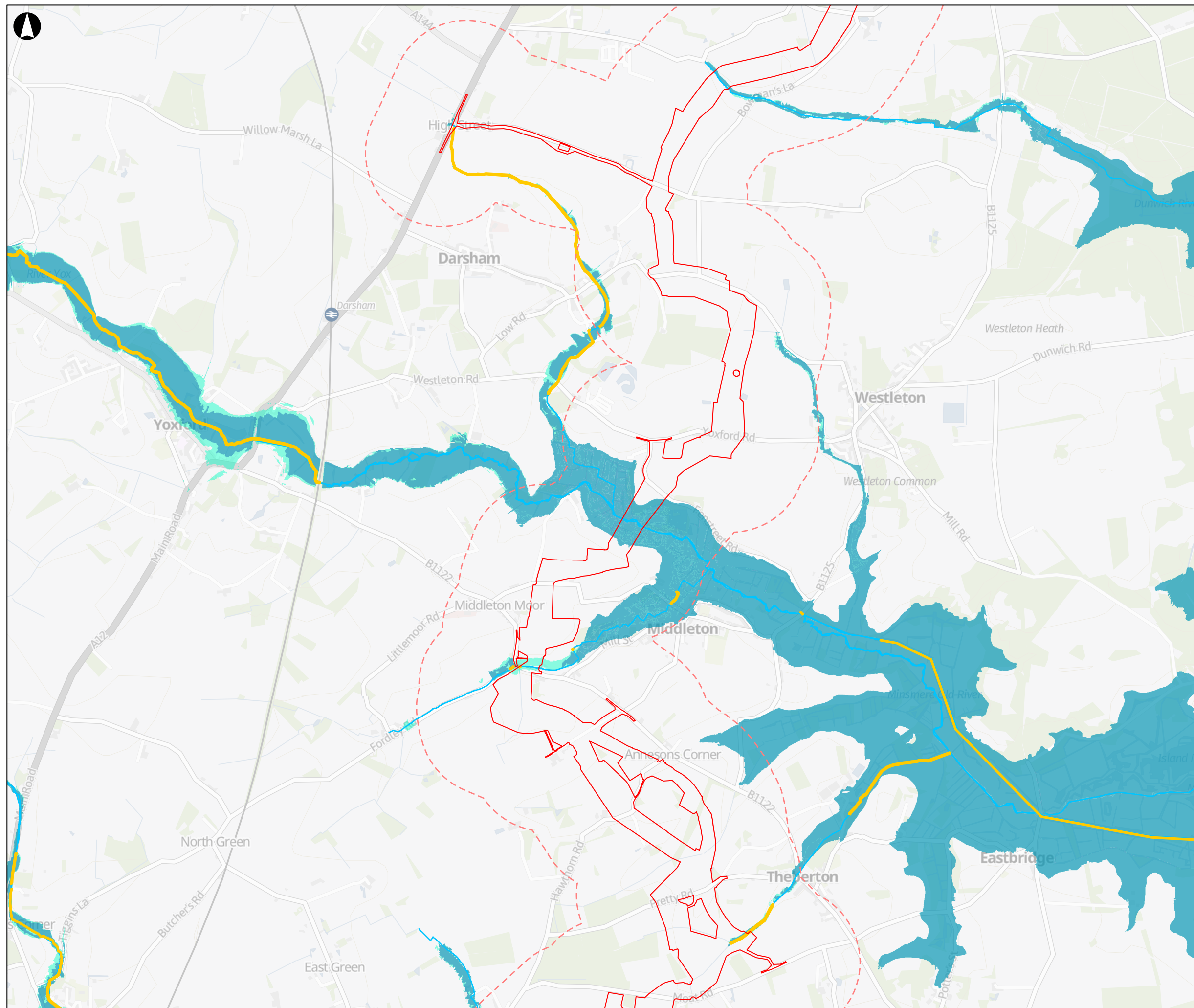
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

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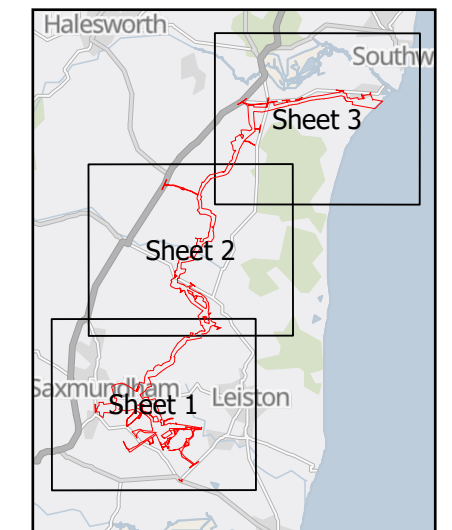
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Environment
Suitability
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A3

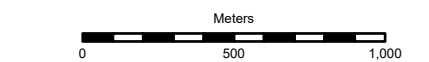


-  Proposed Onshore Scheme Draft Order Limits
 Mean Low Water Springs
 Study Area
 Main Rivers
 AIMS Spatial Flood Defences
- Defended Climate Change Flood Risk
 Flood Risk - 1 in 200 years
 Flood Risk - 1 in 1000 years



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Figure 12.6a Risk of Flooding from Rivers and Seas (Fluvial Flooding) - with defences, climate change - Sheet 2

Scale at A3

1:25,000

1.23	Role
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Environment

Suitability

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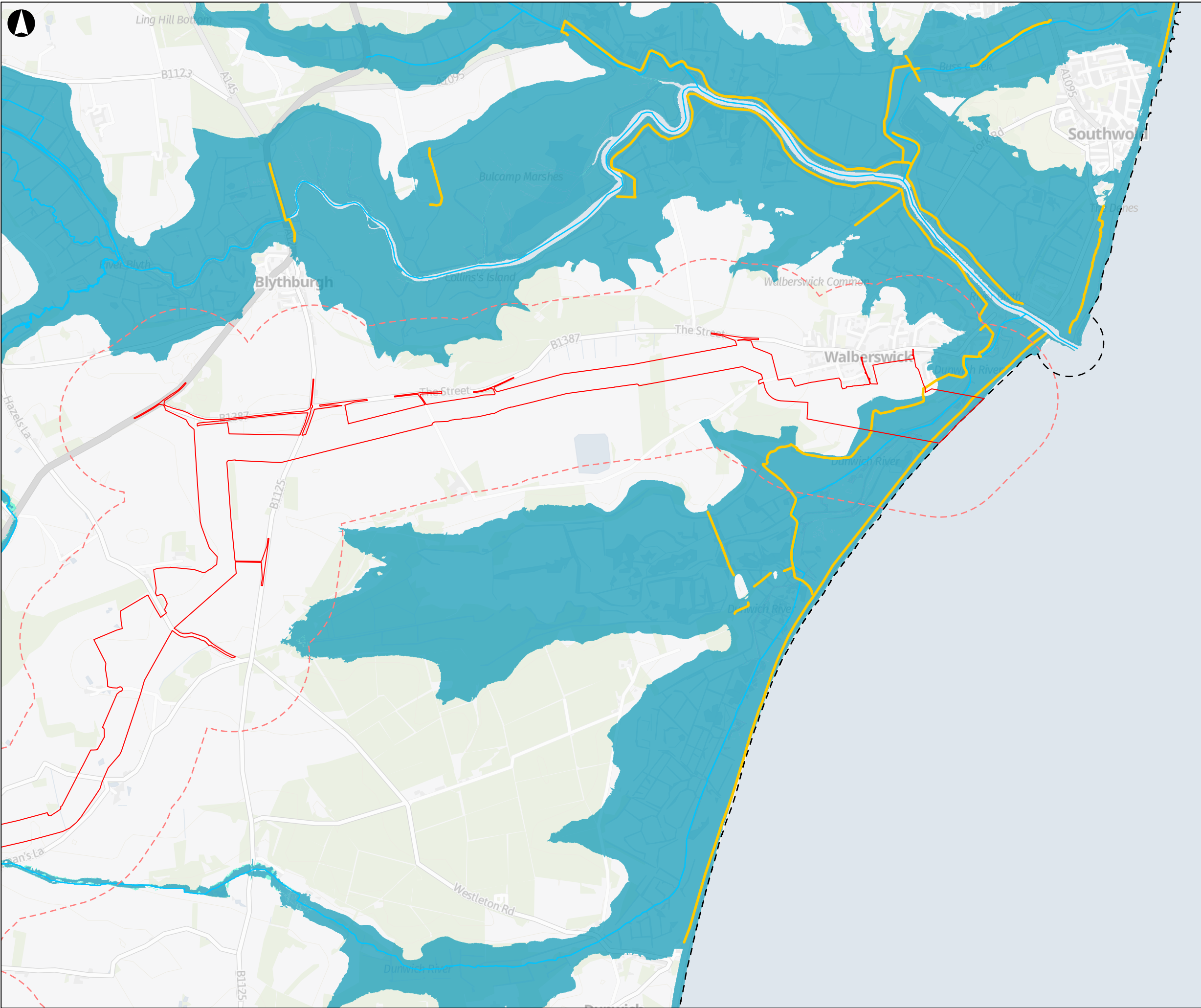
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Drawing Number

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- Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

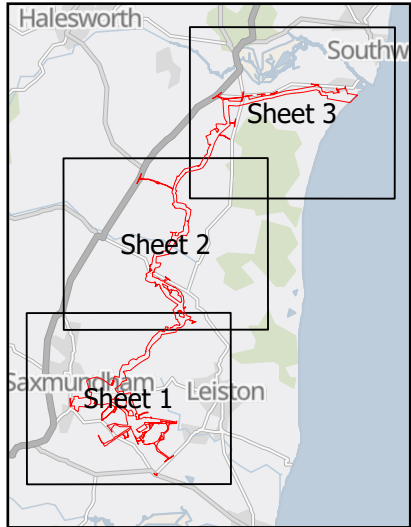
Study Area

Main Rivers

AIMS Spatial Flood Defences
- Defended Climate Change Flood Risk

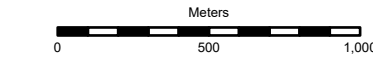
Flood Risk - 1 in 200 years

Flood Risk - 1 in 1000 years



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Figure 12.6a Risk of Flooding from Rivers and Seas (Fluvial Flooding) - with defences, climate change - Sheet 3

Scale at A3

1:25,000

Role

Environment

Suitability

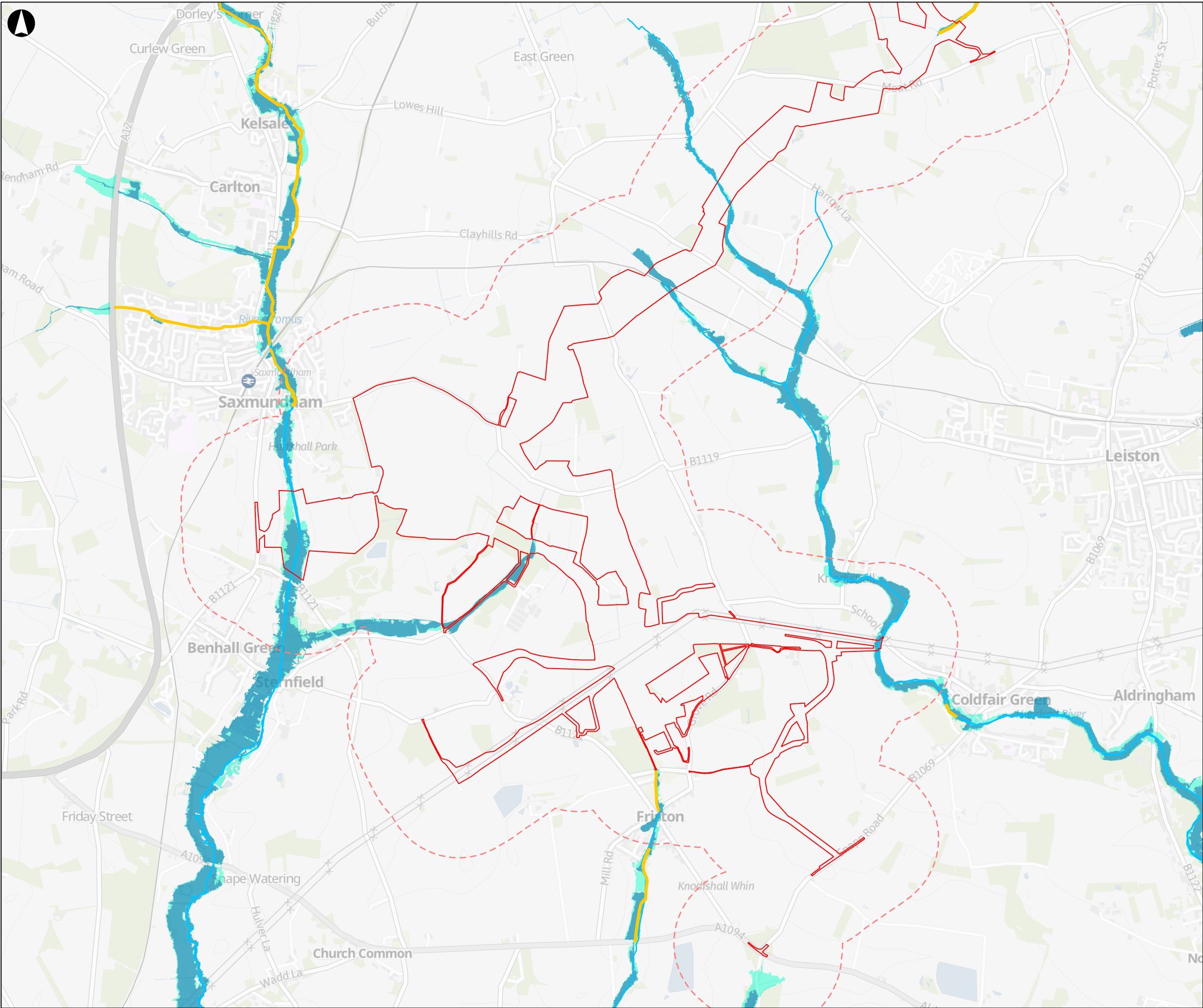
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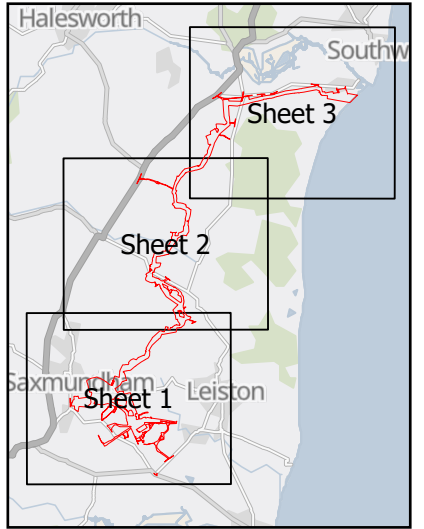
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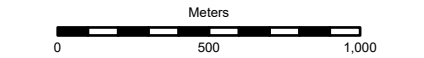


- Proposed Onshore Scheme Draft Order Limits
- Mean Low Water Springs
- Study Area
- Main Rivers
- AIMS Spatial Flood Defences
- Defended Present Day Flood Risk
- Flood Risk - 1 in 200 years
- Flood Risk - 1 in 1000 years



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Figure 12.6b Risk of Flooding from Rivers and Seas (Fluvial Flooding) - with defences, present day - Sheet 1

Scale at A3

1:25,000

Role

Environment

Suitability

S2

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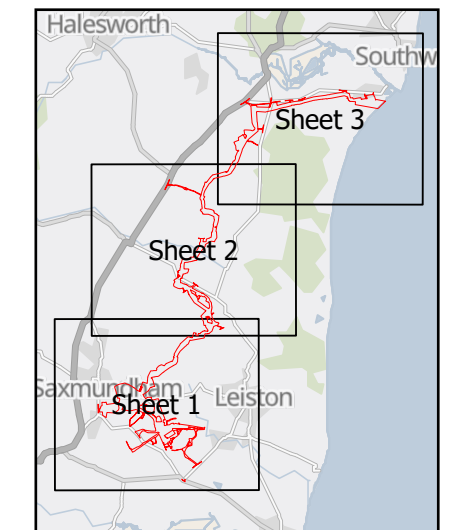
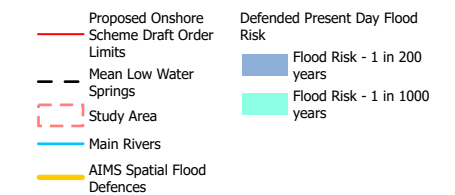
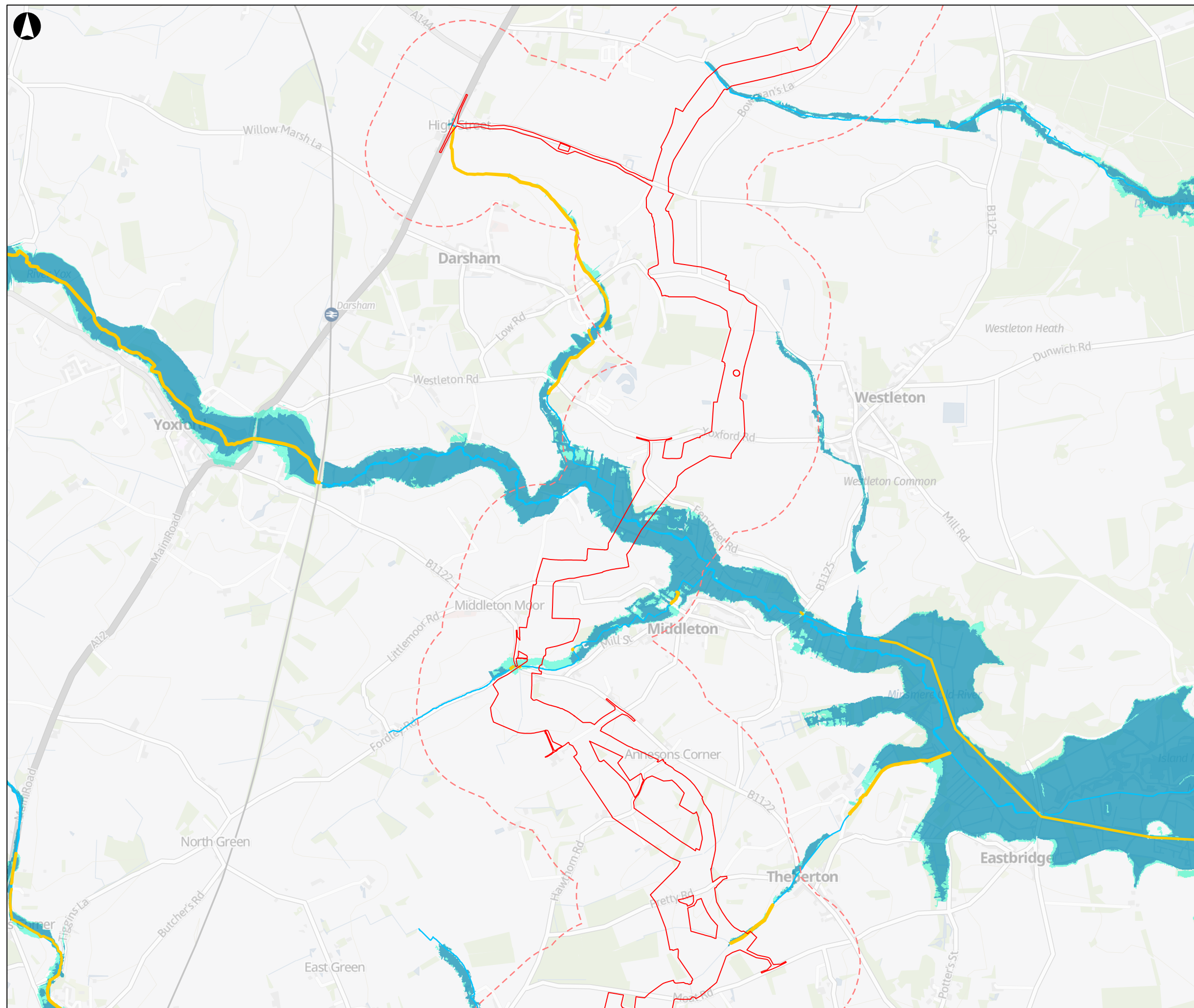
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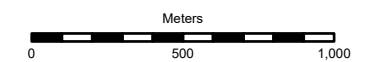
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Drawing Title

Figure 12.6b Risk of Flooding from Rivers and Seas (Fluvial Flooding) - with defences, present day - Sheet 2

Scale at A3

1:25,000

1.20	Role
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Environment

Suitability

S2

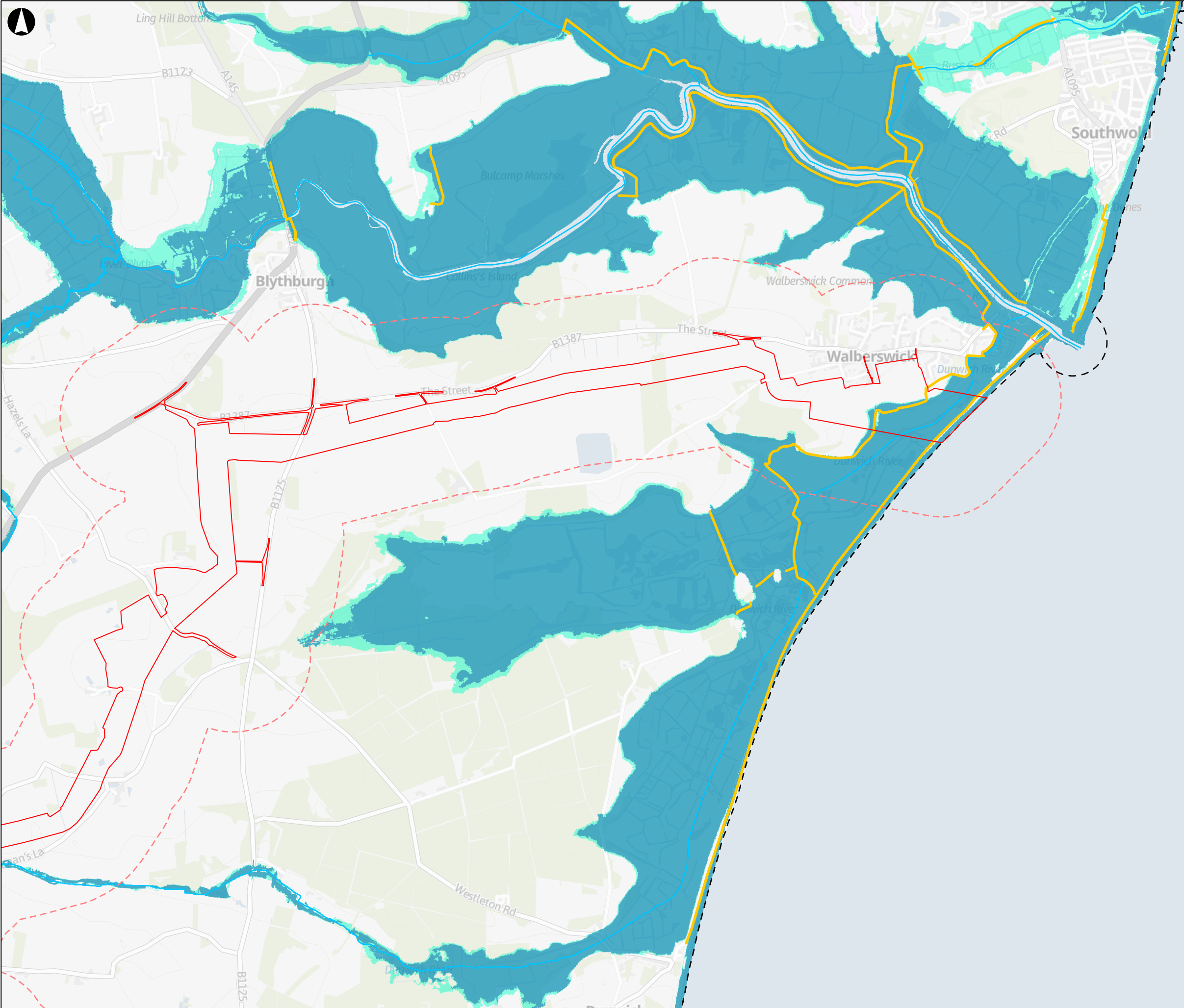
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Mean Low Water Springs

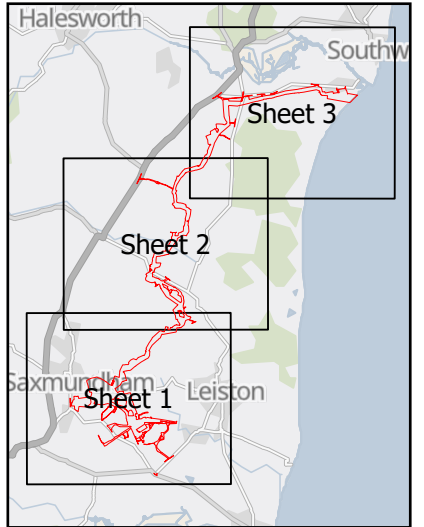
Study Area

Main Rivers

AIMS Spatial Flood Defences
- Defended Present Day Flood Risk

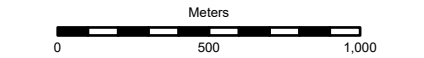
Flood Risk - 1 in 200 years

Flood Risk - 1 in 1000 years



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Figure 12.6b Risk of Flooding from Rivers and Seas (Fluvial Flooding) - with defences, present day - Sheet 3

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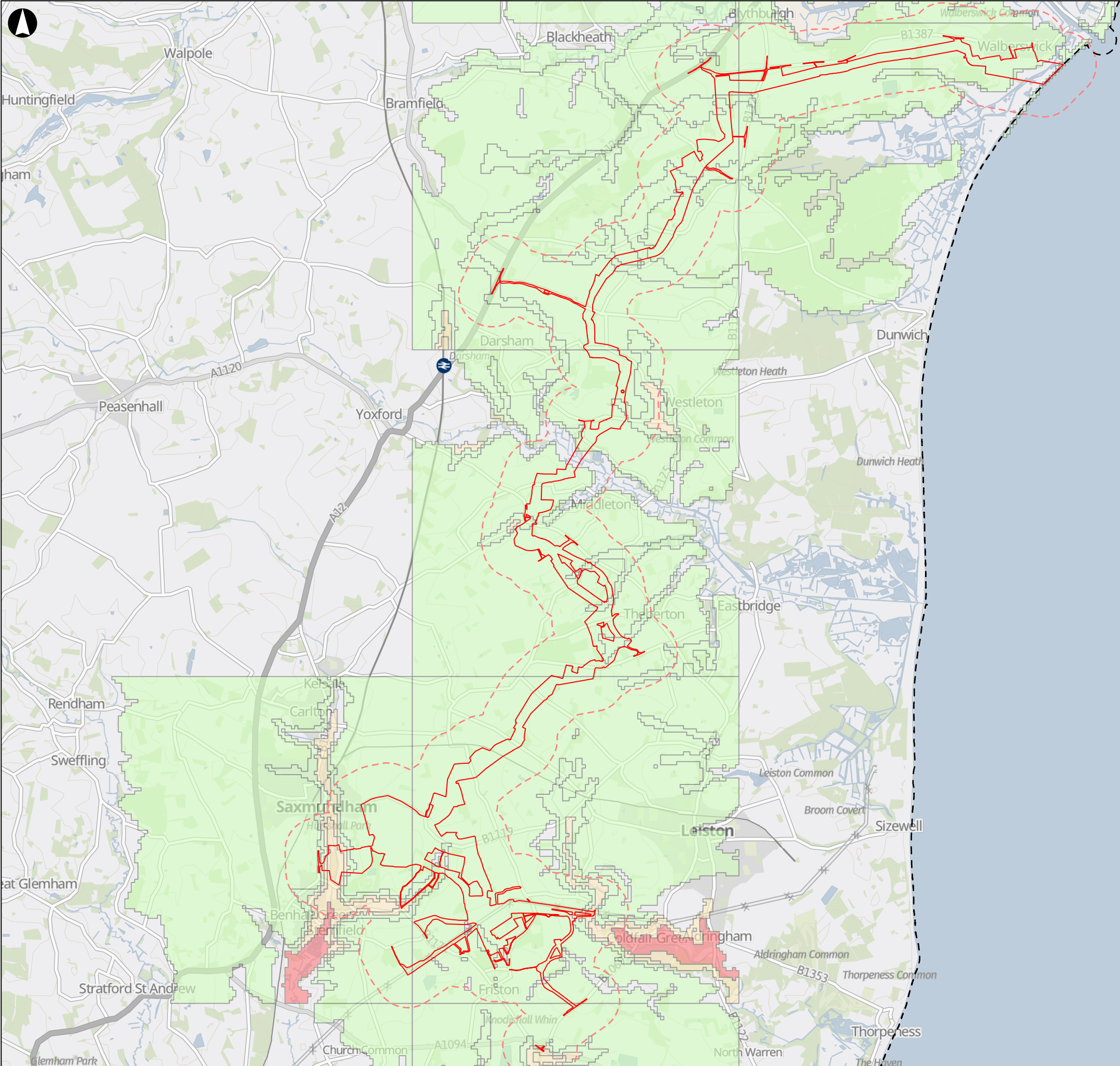
Role
Environment

Suitability
S2

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A3



- Proposed Onshore Scheme Draft Order Limits
- Mean Low Water Springs
- Study Area
- BGS Groundwater Flooding**
- Limited potential for groundwater flooding to occur
- Potential for groundwater flooding of property situated below ground level
- Potential for groundwater flooding to occur at surface



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Drawing Title

Figure 12.7 Susceptibility to Groundwater Flooding

Scale at A3

1:60,000

Role

Environment

Suitability

S2

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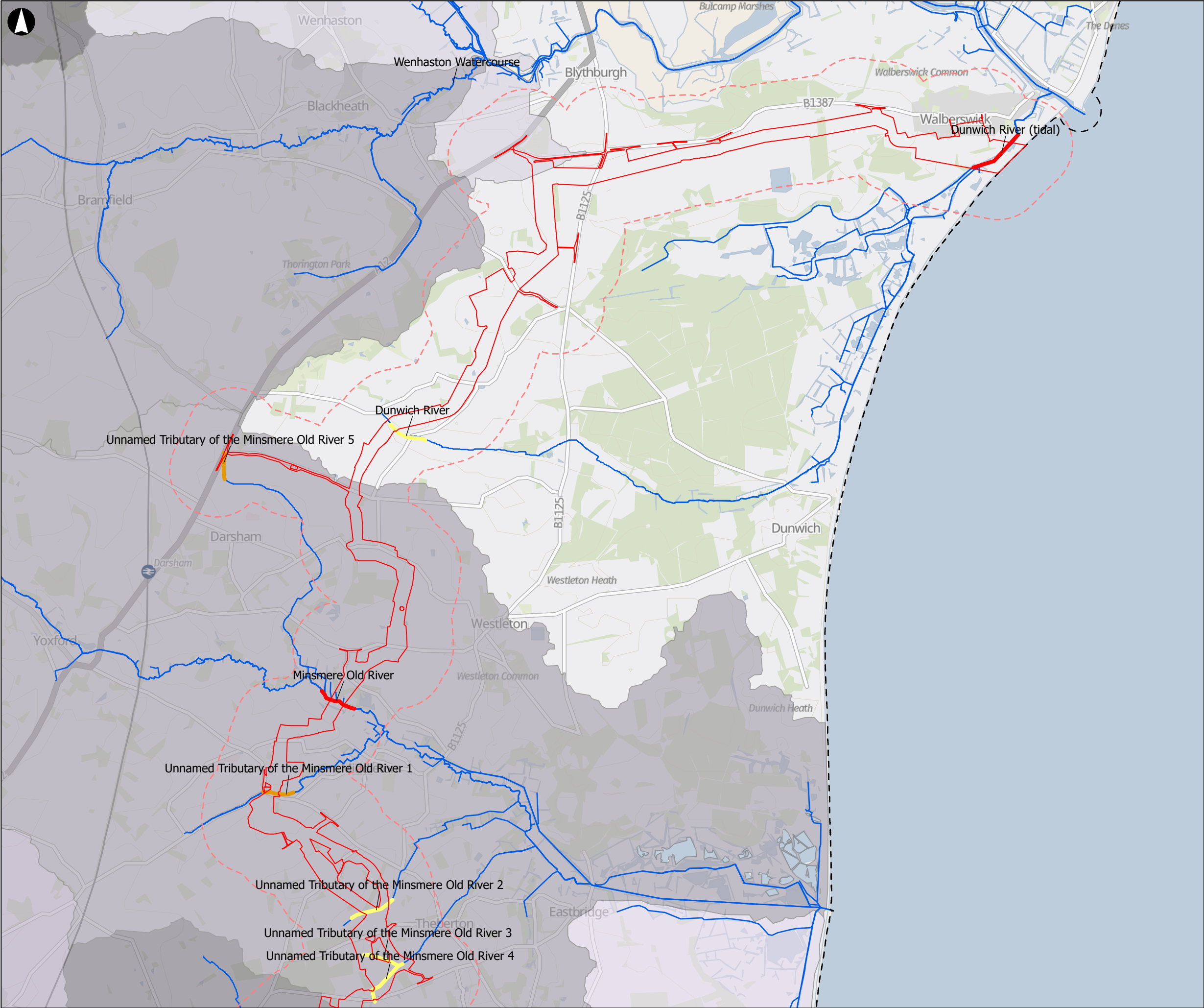
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A3



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Mean Low Water Springs

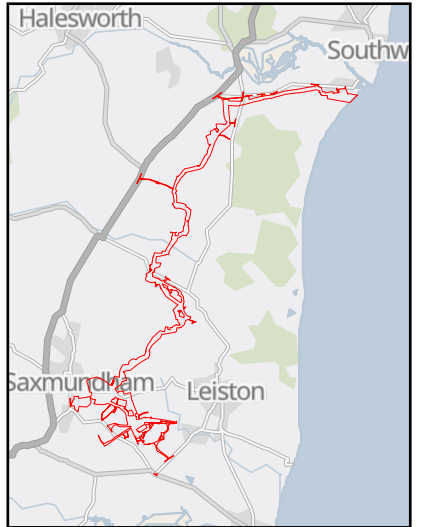
Study Area

OS Open Rivers
- Receptor Value

High Value

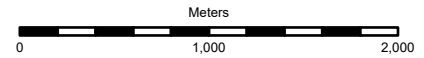
Moderate Value

Low Value



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Figure 12.8 WER Surface Water Bodies - Watercourse naming - Dunwich River and Minismere Old River - Sheet 1

Scale at A3
1:40,000

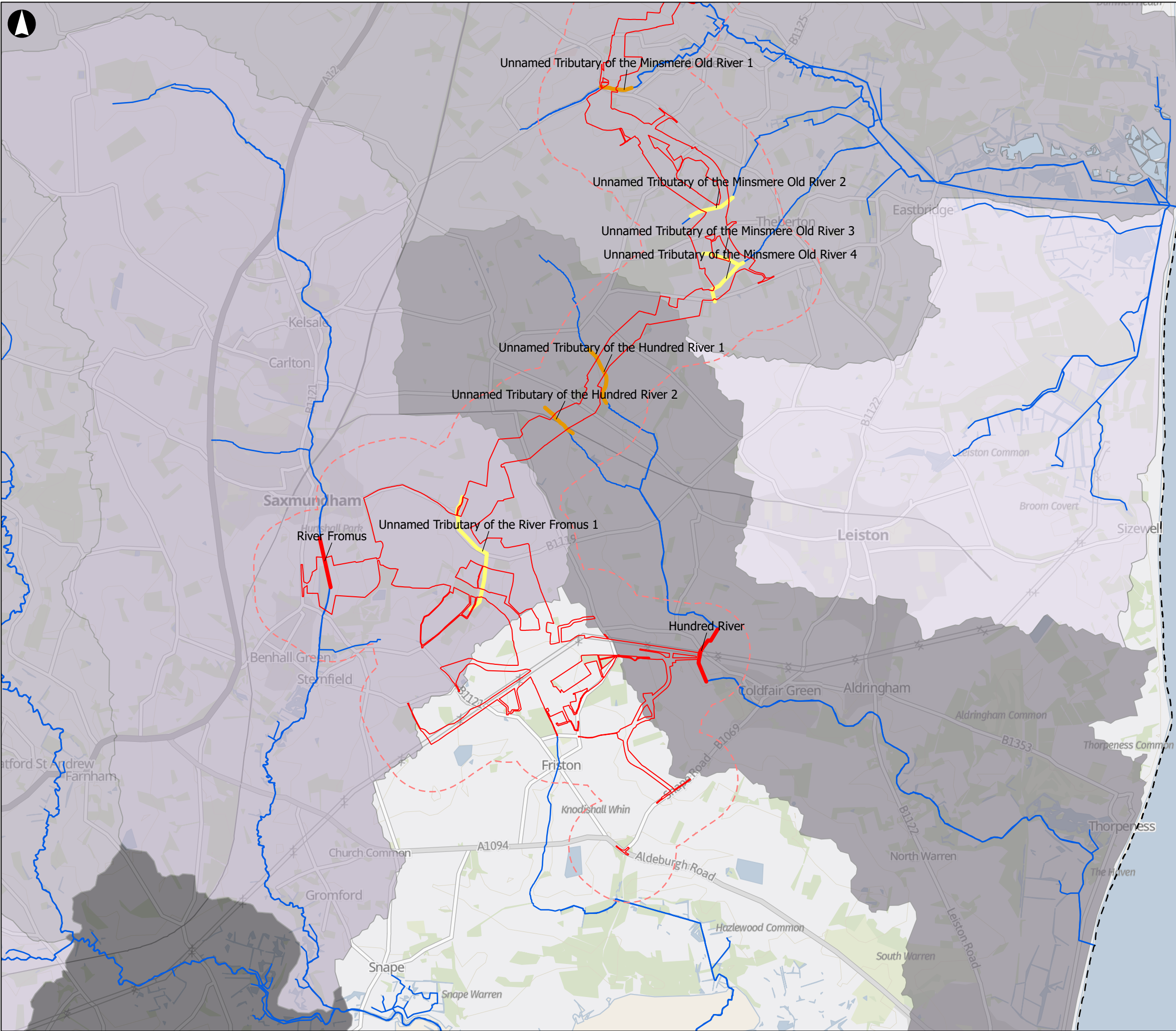
Role
Environment

Suitability
S2

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A3



- Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

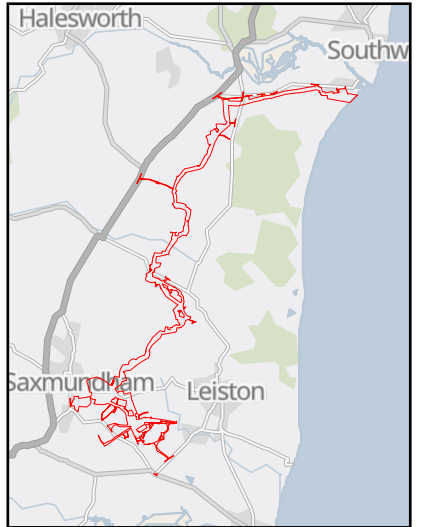
Study Area

OS Open Rivers
- Receptor Value

High Value

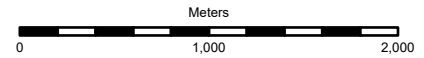
Moderate Value

Low Value



Contains OS data © Crown Copyright and database right 2025
Contains data from OS Zoomstack

Coordinate System: OSGB 1936 / British National Grid



P03	26/09/2025	EW	JM	CP	LC
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Rev	Date	By	Chkd	Appd	Authd
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ARUP

8 Fitzroy Street
London W1T 4BJ
Tel +44 20 7636 1531
www.arup.com

Client

National Grid LionLink Limited (NGLLL)

Project Name

LIONLINK

Drawing Title

Figure 12.8 WER Surface Water Bodies - Watercourse naming - Hundred River and Fromus - Sheet 2

Scale at A3

1:40,000

Role

Environment

Suitability

S2

Project Number

287334-00

Rev

P03

Drawing Number

LLK1-ARU-DWG-ENV-00021

A3

