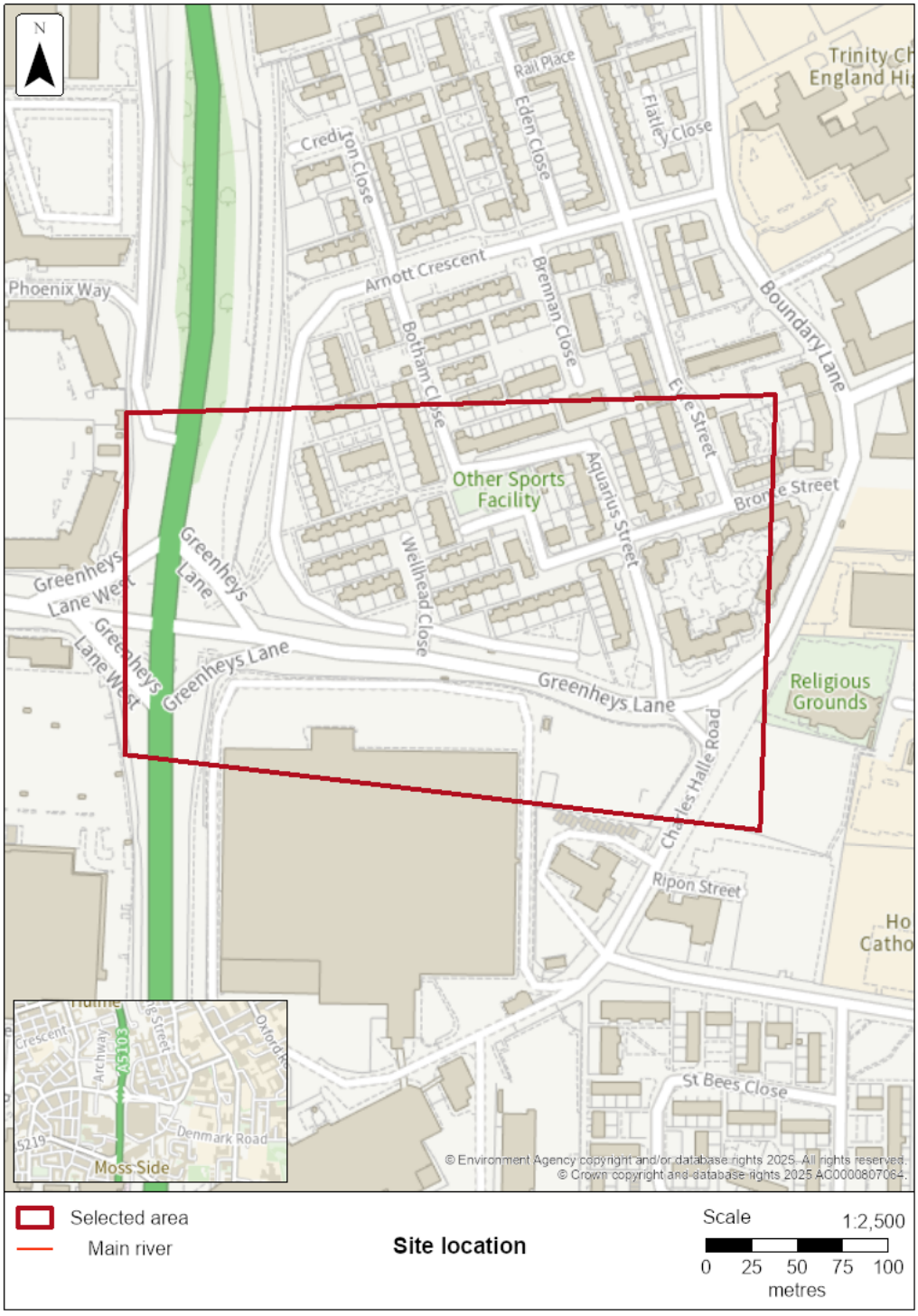
Flood risk assessment data

Location of site: 383994 / 396241 (shown as easting and northing coordinates)
Document created on: 12 September 2025
This information was previously known as a product 4.
Customer reference number: DT94PJUFDCH2

Map showing the location that flood risk assessment data has been requested for.



How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

> **We recommend that you work with a flood risk consultant to get your flood risk assessment.**

Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Information that's unavailable

This document **does not** contain:

- past floods
- flood defences and attributes

We do not have past flooding data for this location.

Please note that:

- flooding may have occurred that we do not have records for
- flooding can come from a range of different sources
- we can only supply flood risk data relating to floodng from rivers or the sea

You can contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

We aren't able to display flood defence locations and attributes as there are no formal flood defences in the area of interest.

Surface water and other sources of flooding

When using the surface water map on the check your long term flood risk service the following considerations apply:

- surface water extents are suitable for use in planning
- surface water climate change scenarios may help to inform risk assessments, but the available data fall short of what is required to assess planned development
- surface water depth information should not be used for planning purposes

To find out about other factors that might affect the flood risk of this location, you should also check:

- reservoir flood risk
- groundwater flood risk - you could use the British Geological Survey groundwater flooding data, groundwater: current status and flood risk and the guide on mining and groundwater constraints for development - further information may be available from the lead local flood authority (LLFA)
- your local planning authority's SFRA, which includes future flood risk

Your Lead Local Flood Authority is Manchester District.

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: Corn Brook 2017
Scenario(s): No defences exist fluvial, no defences exist climate change fluvial
Date: 31 December 2017

These models contain the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occuring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 3.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

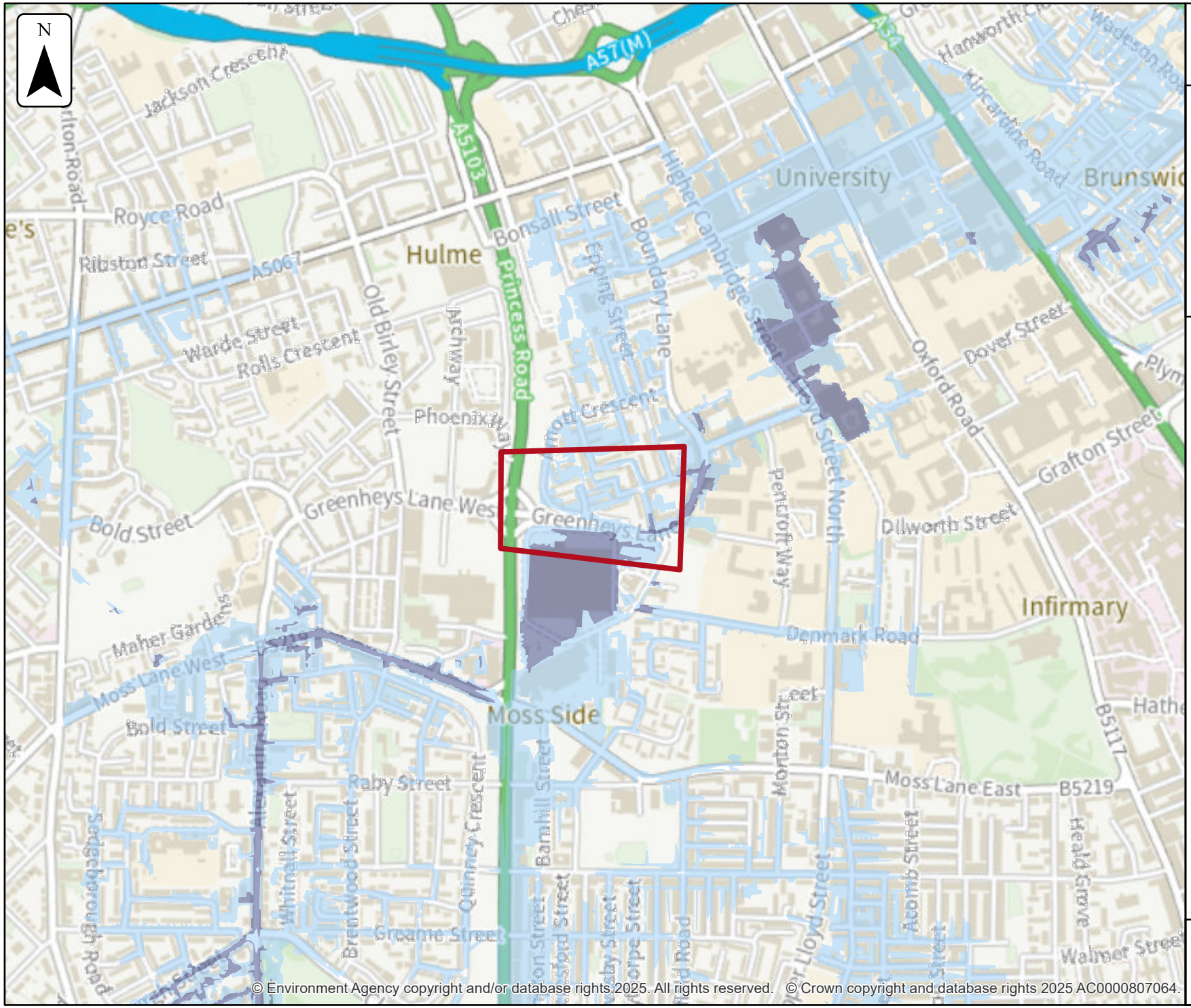
- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change



Environment Agency

Flood map for planning

Location (easting/northing)
383994/396241

Scale
1:10,000

Created
12 Sep 2025

© Environment Agency copyright and/or database rights 2025. All rights reserved. © Crown copyright and database rights 2025 AC0000807064.

Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

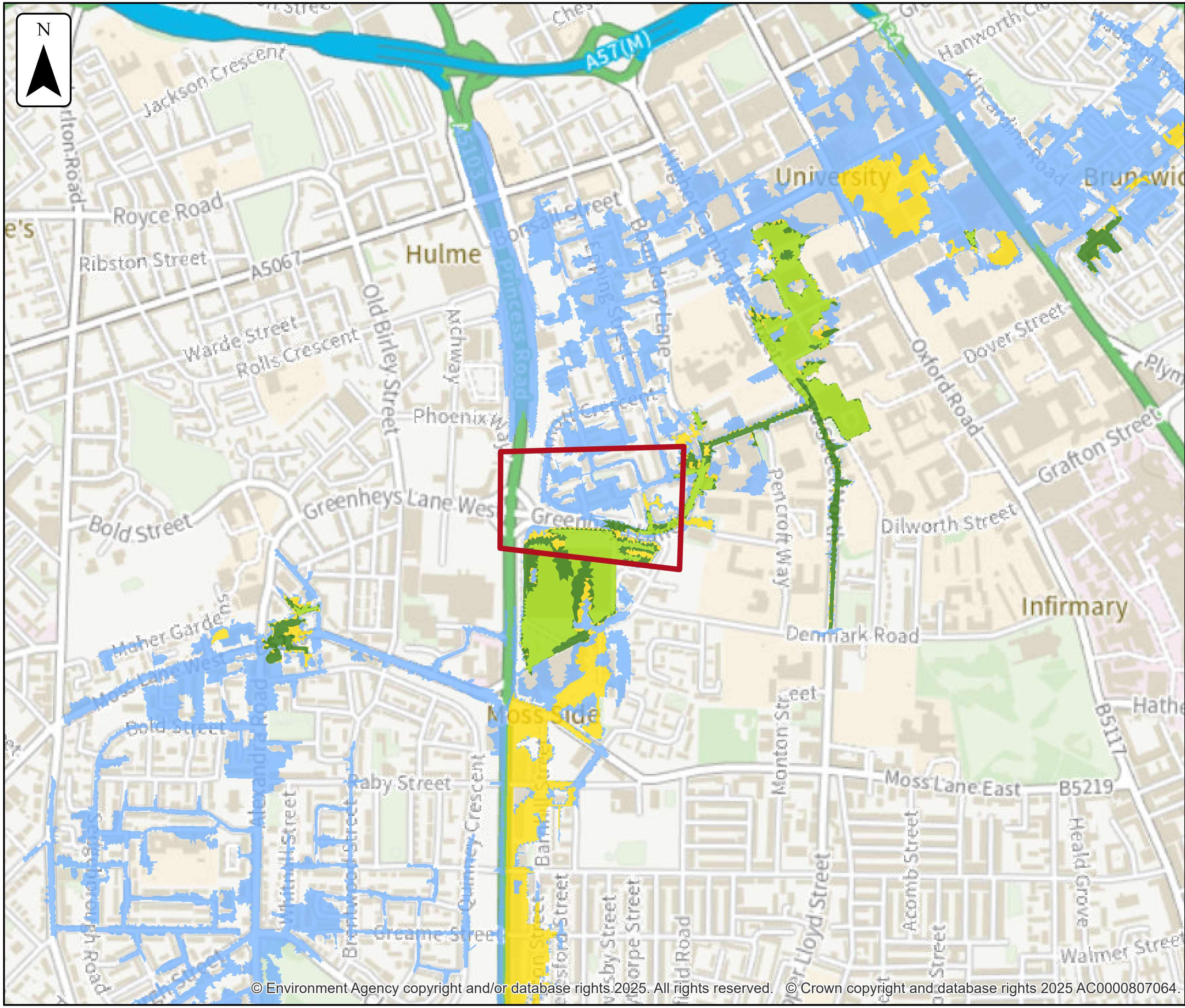
The climate change data included in the models may not include the latest flood risk assessment climate change allowances. Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- Defended climate change modelled fluvial: risk of flooding from rivers where there are flood defences, including estimated impact of climate change
- Defences removed climate change modelled fluvial: risk of flooding from rivers where flood defences have been removed, including estimated impact of climate change
- No defences exist climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change



No defences exist climate change modelled fluvial extent

Location (easting/northing)
383994/396241

Scale **1:10,000**

Created **12 Sep 2025**

Model name
Corn Brook 2017

- Selected area
- Main river

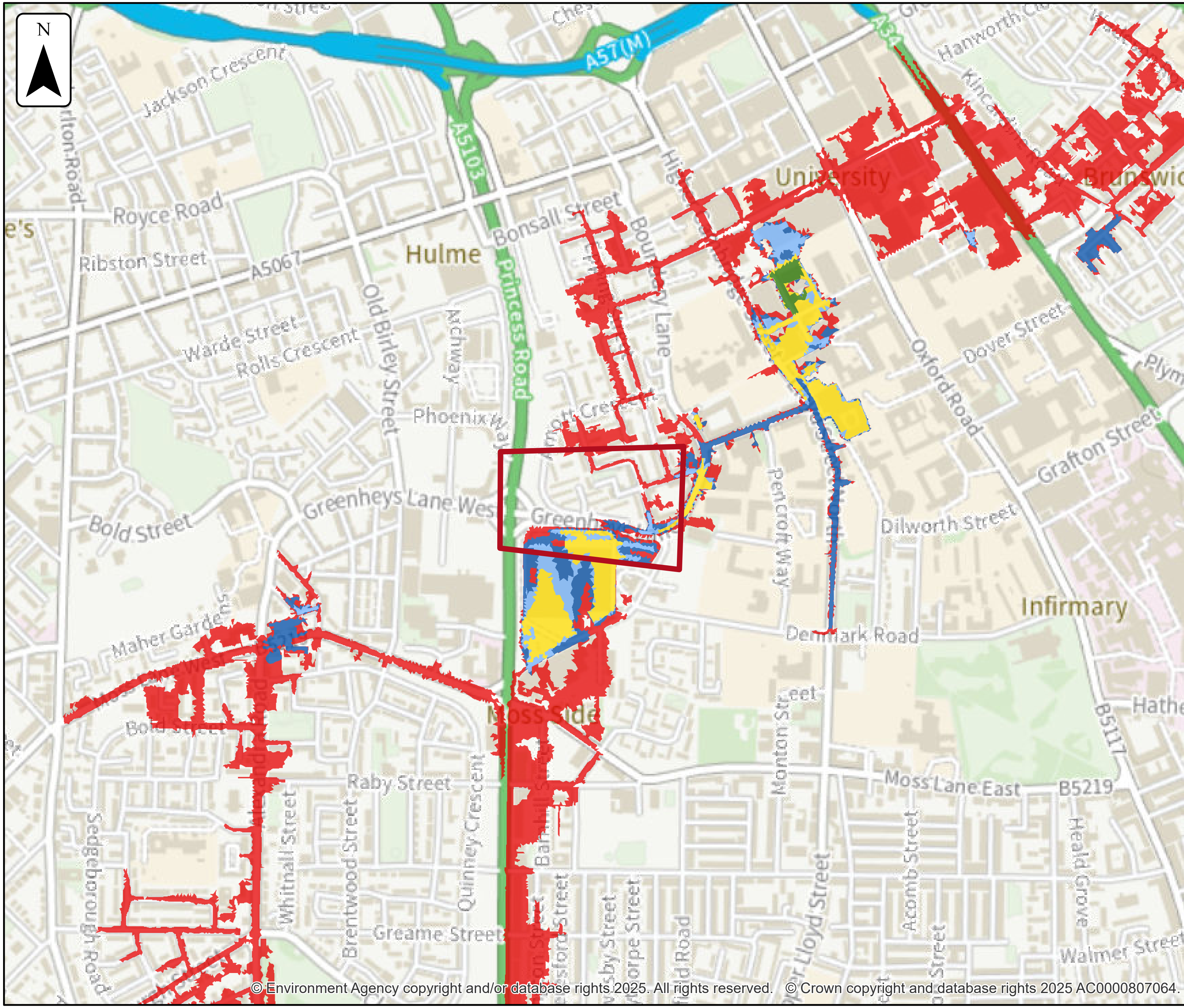
Modelled flood extent

- 1% AEP (+30%)
- 1% AEP (+35%)
- 1% AEP (+70%)
- 0.1% AEP (+30%)

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres

© Environment Agency copyright and/or database rights 2025. All rights reserved. © Crown copyright and database rights 2025 AC0000807064.



© Environment Agency copyright and/or database rights 2025. All rights reserved. © Crown copyright and database rights 2025 AC0000807064.

Environment Agency

No defences exist modelled fluvial extent

Location (easting/northing)
383994/396241

Scale **1:10,000**

Created **12 Sep 2025**

Model name
Corn Brook 2017

Selected area

Main river

Modelled flood extent

2% AEP

1.33% AEP

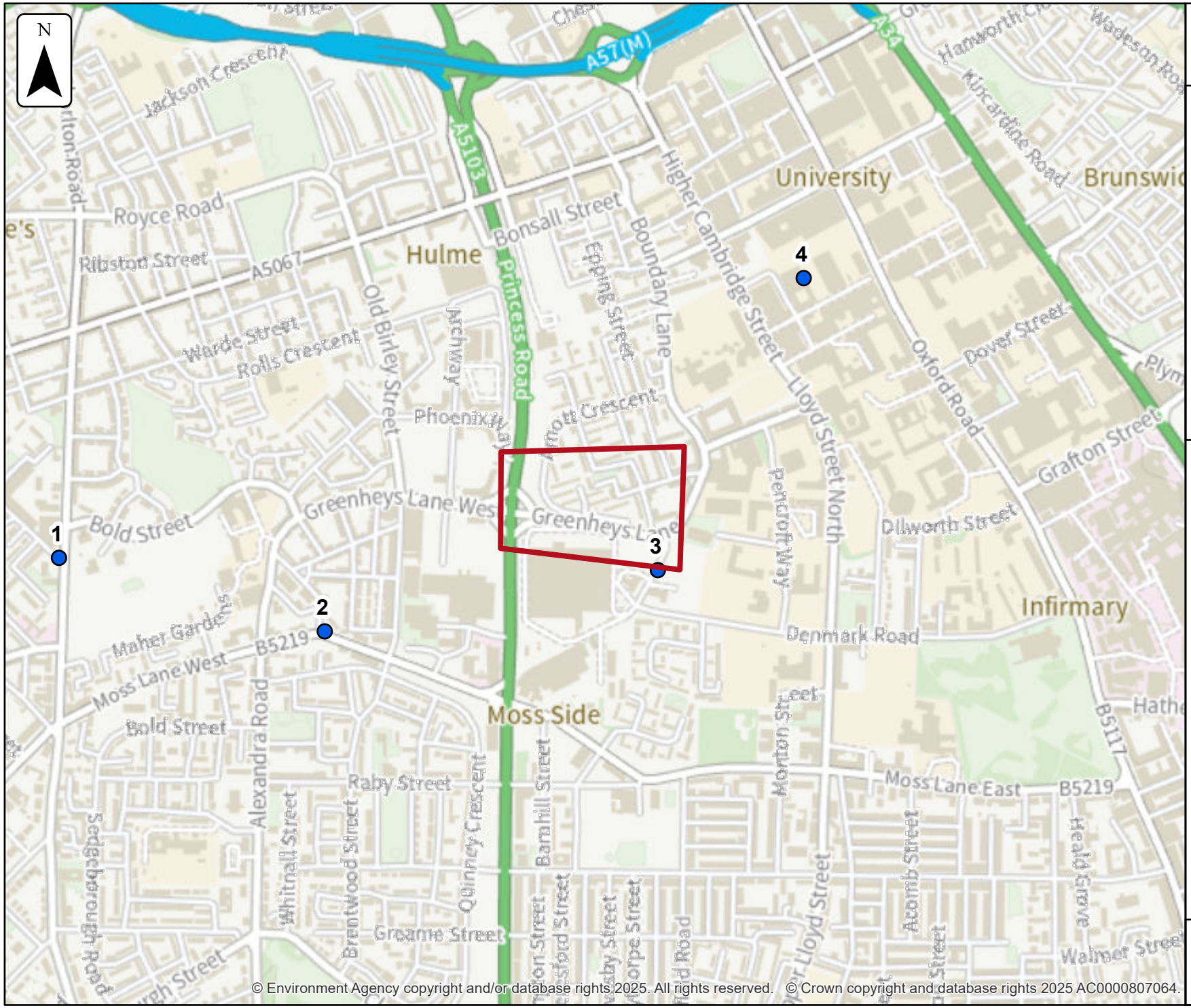
1% AEP

0.5% AEP

0.1% AEP

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres



© Environment Agency copyright and/or database rights 2025. All rights reserved. © Crown copyright and database rights 2025 AC0000807064.

Environment Agency

No defences exist climate change modelled fluvial node locations

Location (easting/northing)
383994/396241

Scale
1:10,000

Created
12 Sep 2025

Model name
Corn Brook 2017

- Selected area
- Modelled location
- Main river

0 100 200 300 400 500
metres

Modelled node locations data

No defences exist climate change

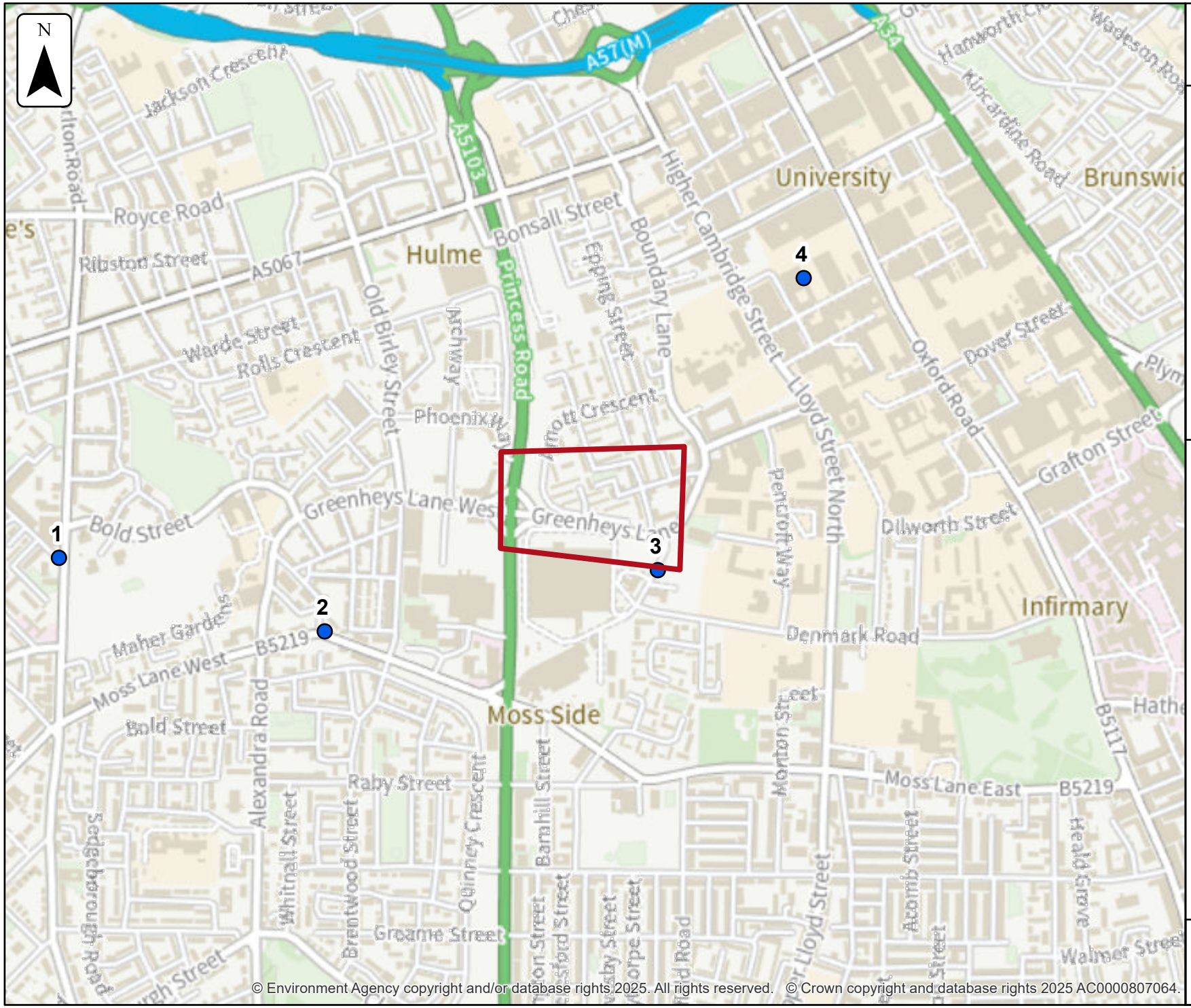
Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level
1	952451	382950	396136	30.34	30.39	30.82	31.99
2	952452	383467	395993	32.78	32.81	32.99	33.39
3	952465	384116	396112	33.75	33.79	34.02	34.46
4	952467	384400	396681	37.38	37.39	37.47	37.77

Data in this table comes from the Corn Brook 2017 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.

No defences exist climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Flow	Flow	Flow	Flow
1	952451	382950	396136	2.24	2.33	2.93	6.63
2	952452	383467	395993	2.03	2.11	2.66	5.98
3	952465	384116	396112	1.57	1.63	2.05	4.51
4	952467	384400	396681	2.40	2.49	3.13	7.13

Data in this table comes from the Corn Brook 2017 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.



Environment Agency

No defences exist modelled fluvial node locations

Location (easting/northing)
383994/396241

Scale
1:10,000

Created
12 Sep 2025

Model name
Corn Brook 2017

- Selected area
- Modelled location
- Main river

0 100 200 300 400 500
metres

Modelled node locations data

No defences exist

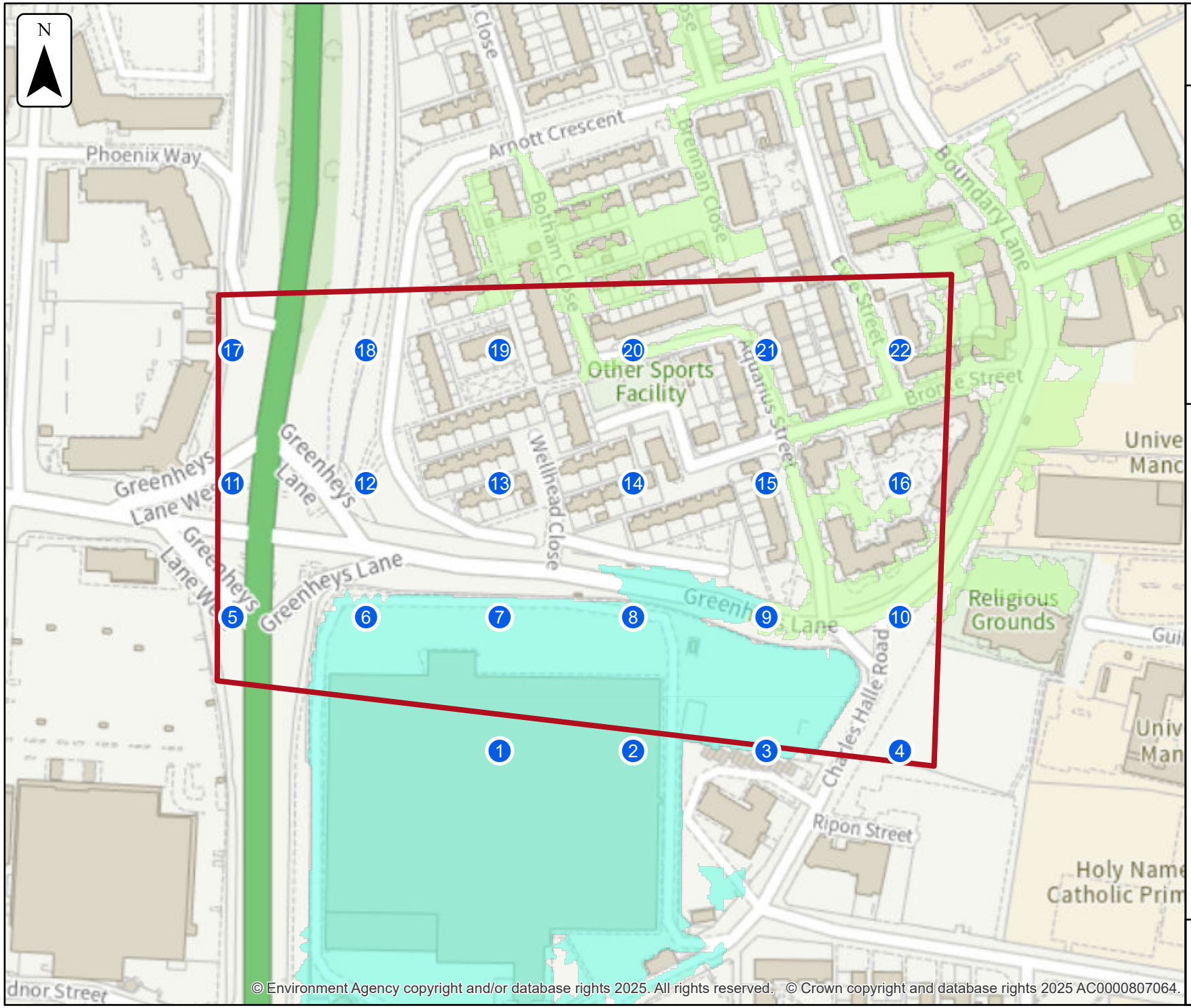
Label	Modelled location ID	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level
1	952451	382950	396136	29.95	30.07	30.16	30.47	31.73
2	952452	383467	395993	31.93	32.43	32.58	32.84	33.28
3	952465	384116	396112	32.77	33.26	33.47	33.83	34.34
4	952467	384400	396681	36.89	37.13	37.27	37.41	37.66

Data in this table comes from the Corn Brook 2017 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.

No defences exist

Label	Modelled location ID	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow
1	952451	382950	396136	1.13	1.46	1.72	2.47	5.10
2	952452	383467	395993	1.03	1.32	1.57	2.24	4.60
3	952465	384116	396112	0.81	1.03	1.21	1.70	3.47
4	952467	384400	396681	1.20	1.56	1.84	2.65	5.49

Data in this table comes from the Corn Brook 2017 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.



Environment Agency

No defences exist modelled fluvial extent and height

Location (easting/northing)
383994/396241

Scale
1:2,500

Created
12 Sep 2025

Model name
Corn Brook 2017

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 8.5
- 8.5 - 17.0
- 17.0 - 25.5
- 25.5 - 34.0
- 34.0 - 42.5
- 42.5 - 51.0
- 51.0 - 59.5
- 59.5 - 68.0
- 68.0 - 76.5

This map shows the 0.1% AEP height data

0 25 50 75 100
metres

Sample point data

No defences exist

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height
1	383947	396121	NoData	NoData	NoData	33.57	33.71
2	384012	396121	NoData	33.44	33.47	33.57	33.71
3	384077	396121	NoData	NoData	NoData	NoData	33.79
4	384142	396121	NoData	NoData	NoData	NoData	NoData
5	383817	396186	NoData	NoData	NoData	NoData	NoData
6	383882	396186	NoData	NoData	NoData	NoData	33.74
7	383947	396186	NoData	33.49	33.54	33.61	33.78
8	384012	396186	NoData	33.50	33.54	33.62	33.79
9	384077	396186	NoData	NoData	NoData	NoData	34.04
10	384142	396186	NoData	NoData	NoData	NoData	NoData
11	383817	396251	NoData	NoData	NoData	NoData	NoData
12	383882	396251	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height
13	383947	396251	NoData	NoData	NoData	NoData	NoData
14	384012	396251	NoData	NoData	NoData	NoData	NoData
15	384077	396251	NoData	NoData	NoData	NoData	NoData
16	384142	396251	NoData	NoData	NoData	NoData	NoData
17	383817	396316	NoData	NoData	NoData	NoData	NoData
18	383882	396316	NoData	NoData	NoData	NoData	NoData
19	383947	396316	NoData	NoData	NoData	NoData	NoData
20	384012	396316	NoData	NoData	NoData	NoData	34.50
21	384077	396316	NoData	NoData	NoData	NoData	34.49
22	384142	396316	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	34.37	34.52	34.76	34.84

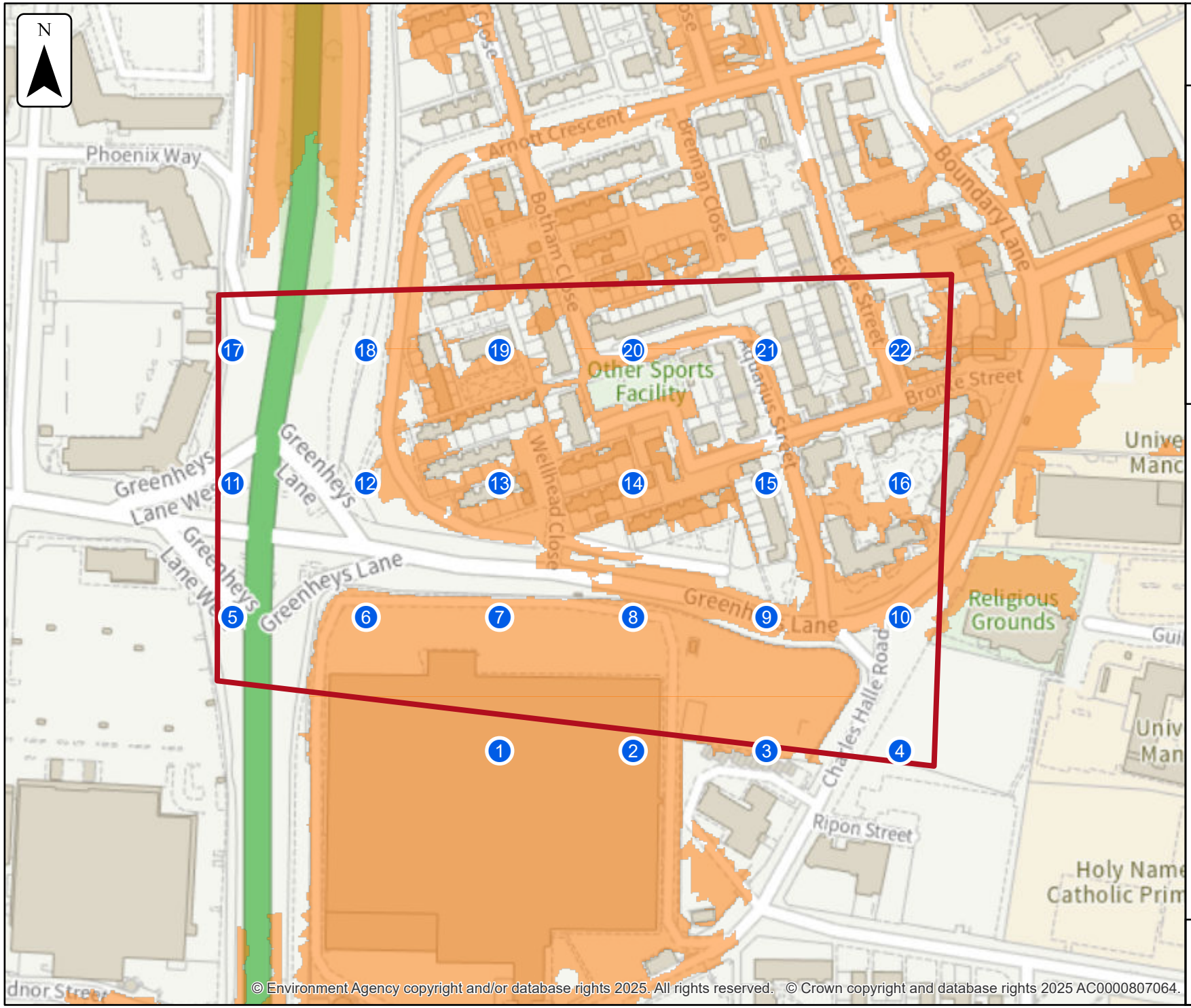
Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

No defences exist

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth
1	383947	396121	NoData	NoData	NoData	0.24	0.38
2	384012	396121	NoData	0.16	0.18	0.28	0.42
3	384077	396121	NoData	NoData	NoData	NoData	0.23
4	384142	396121	NoData	NoData	NoData	NoData	NoData
5	383817	396186	NoData	NoData	NoData	NoData	NoData
6	383882	396186	NoData	NoData	NoData	NoData	0.20
7	383947	396186	NoData	0.11	0.15	0.23	0.39
8	384012	396186	NoData	0.11	0.16	0.23	0.40
9	384077	396186	NoData	NoData	NoData	NoData	0.17
10	384142	396186	NoData	NoData	NoData	NoData	NoData
11	383817	396251	NoData	NoData	NoData	NoData	NoData
12	383882	396251	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth
13	383947	396251	NoData	NoData	NoData	NoData	NoData
14	384012	396251	NoData	NoData	NoData	NoData	NoData
15	384077	396251	NoData	NoData	NoData	NoData	NoData
16	384142	396251	NoData	NoData	NoData	NoData	NoData
17	383817	396316	NoData	NoData	NoData	NoData	NoData
18	383882	396316	NoData	NoData	NoData	NoData	NoData
19	383947	396316	NoData	NoData	NoData	NoData	NoData
20	384012	396316	NoData	NoData	NoData	NoData	0.12
21	384077	396316	NoData	NoData	NoData	NoData	0.11
22	384142	396316	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	0.21	0.28	0.34	0.51

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



© Environment Agency copyright and/or database rights 2025. All rights reserved. © Crown copyright and database rights 2025 AC0000807064.

Environment Agency

No defences exist climate change modelled fluvial extent and height

Location (easting/northing)
383994/396241

Scale
1:2,500

Created
12 Sep 2025

Model name
Corn Brook 2017

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 4.625
- 4.625 - 9.25
- 9.25 - 13.875
- 13.875 - 18.5
- 18.5 - 23.125
- 23.125 - 27.75
- 27.75 - 32.375
- 32.375 - 37.0
- 37.0 - 41.625

This map shows the
0.1% AEP +30% height data

0 25 50 75 100
metres

Sample point data

No defences exist climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
1	383947	396121	33.54	33.56	33.62	33.78
2	384012	396121	33.54	33.56	33.62	33.78
3	384077	396121	NoData	NoData	33.68	33.88
4	384142	396121	NoData	NoData	NoData	NoData
5	383817	396186	NoData	NoData	NoData	NoData
6	383882	396186	NoData	NoData	NoData	33.83
7	383947	396186	33.59	33.60	33.67	33.86
8	384012	396186	33.60	33.61	33.67	33.88
9	384077	396186	NoData	NoData	34.09	34.16
10	384142	396186	NoData	NoData	NoData	NoData
11	383817	396251	NoData	NoData	NoData	NoData
12	383882	396251	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
13	383947	396251	NoData	NoData	NoData	NoData
14	384012	396251	NoData	NoData	NoData	34.31
15	384077	396251	NoData	NoData	NoData	NoData
16	384142	396251	NoData	NoData	NoData	NoData
17	383817	396316	NoData	NoData	NoData	NoData
18	383882	396316	NoData	NoData	NoData	NoData
19	383947	396316	NoData	NoData	NoData	NoData
20	384012	396316	NoData	NoData	NoData	34.53
21	384077	396316	NoData	NoData	NoData	NoData
22	384142	396316	NoData	NoData	NoData	NoData
Max value in selected area:			34.75	34.76	34.82	34.86

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

No defences exist climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
1	383947	396121	0.21	0.23	0.29	0.47
2	384012	396121	0.26	0.27	0.33	0.49
3	384077	396121	NoData	NoData	0.11	0.32
4	384142	396121	NoData	NoData	NoData	NoData
5	383817	396186	NoData	NoData	NoData	NoData
6	383882	396186	NoData	NoData	NoData	0.29
7	383947	396186	0.20	0.22	0.28	0.48
8	384012	396186	0.21	0.22	0.29	0.49
9	384077	396186	NoData	NoData	0.10	0.18
10	384142	396186	NoData	NoData	NoData	NoData
11	383817	396251	NoData	NoData	NoData	NoData
12	383882	396251	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
13	383947	396251	NoData	NoData	NoData	NoData
14	384012	396251	NoData	NoData	NoData	0.24
15	384077	396251	NoData	NoData	NoData	NoData
16	384142	396251	NoData	NoData	NoData	NoData
17	383817	396316	NoData	NoData	NoData	NoData
18	383882	396316	NoData	NoData	NoData	NoData
19	383947	396316	NoData	NoData	NoData	NoData
20	384012	396316	NoData	NoData	NoData	0.15
21	384077	396316	NoData	NoData	NoData	NoData
22	384142	396316	NoData	NoData	NoData	NoData
Max value in selected area:			0.33	0.34	0.39	0.60

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is Manchester District.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

Find out more about flood risk activity permits

Help and advice

Contact the Greater Manchester Merseyside and Cheshire Environment Agency team at inforequests.gmmc@environment-agency.gov.uk for:

- more information about getting a product 5, 6, 7 or 8
- general help and advice about the site you're requesting data for