

Flood risk assessment data

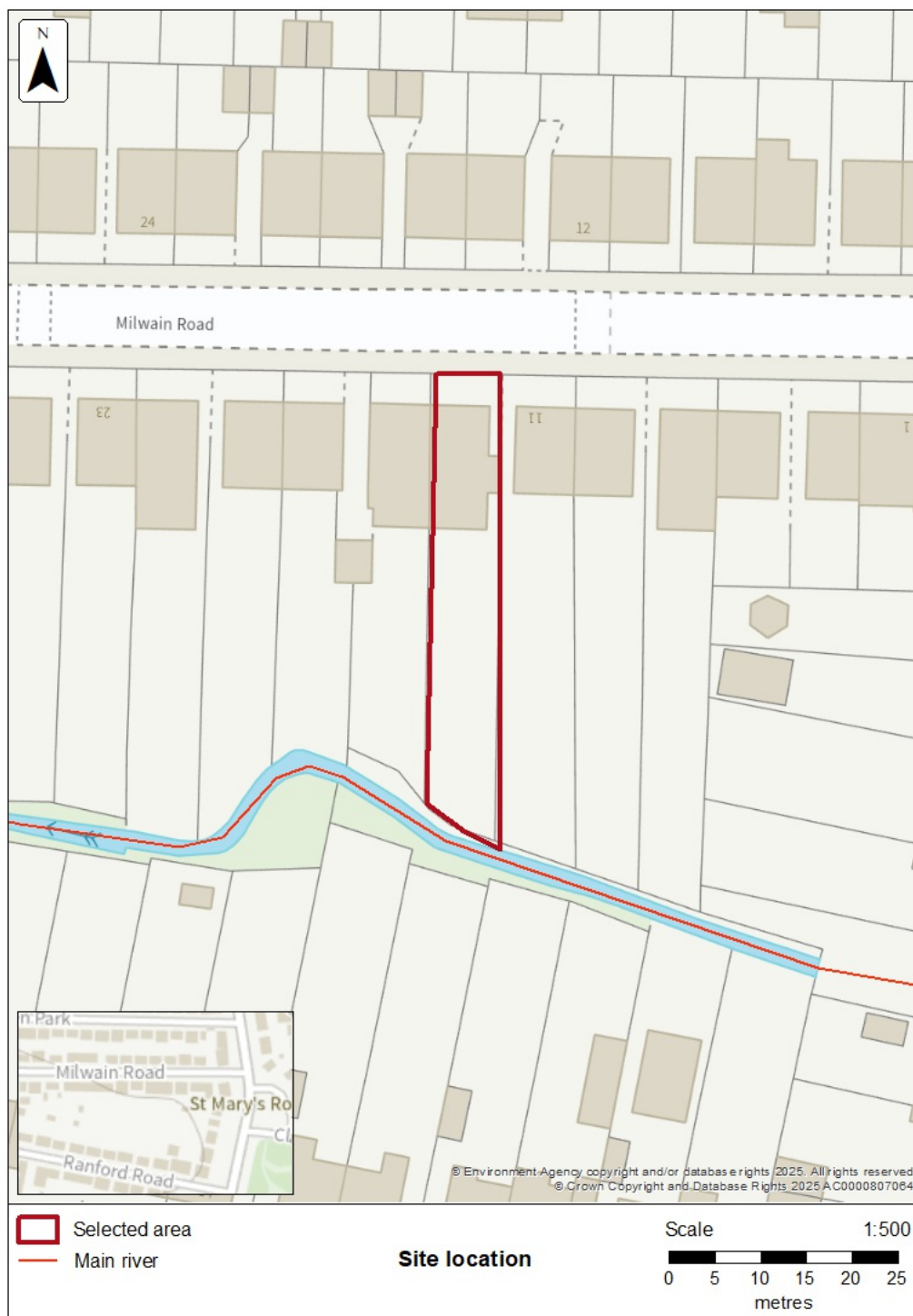
Location of site: 387171 / 393630 (shown as easting and northing coordinates)

Document created on: 6 February 2025

This information was previously known as a product 4.

Customer reference number: 8H7K9AW2BD3N

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)
- flood defences and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- climate change 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

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 flooding 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.

Surface water and other sources of flooding

Use the [long term flood risk service](#) to find out about the risk of flooding from:

- surface water
- ordinary watercourses
- reservoirs

Or you can contact your Lead Local Flood Authority for further information.

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: Cringle Black Brook 2017

Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial, defences removed climate change fluvial

Date: 1 April 2018

This model contains 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 occurring 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

The flood zones are not currently being updated. The last update was in November 2023. Some of the flood zones may have changed, however all source data is included in the models below.



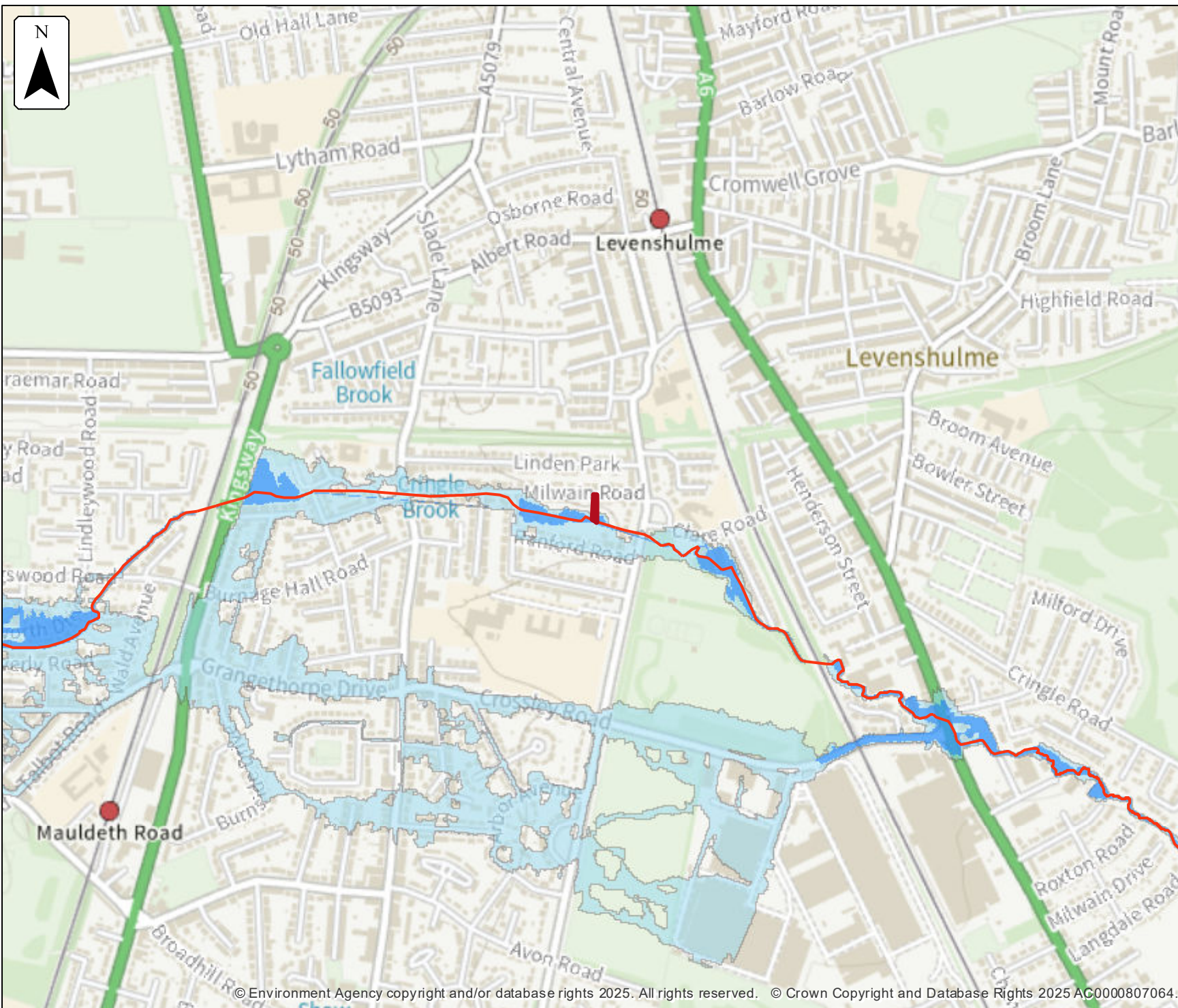
Flood map for planning

Location (easting/northing)
387171/393630

Scale
1:10,000

Created
6 Feb 2025

-  Selected area
-  Main river
-  Flood zone 3
-  Flood zone 2



Flood defences and attributes

The flood defences map shows the location of the flood defences present.

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is in mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.

Use this information:

- to help you assess if there is a reduced flood risk for this location because of defences
- with any information in the modelled data section to find out the impact of defences on flood risk



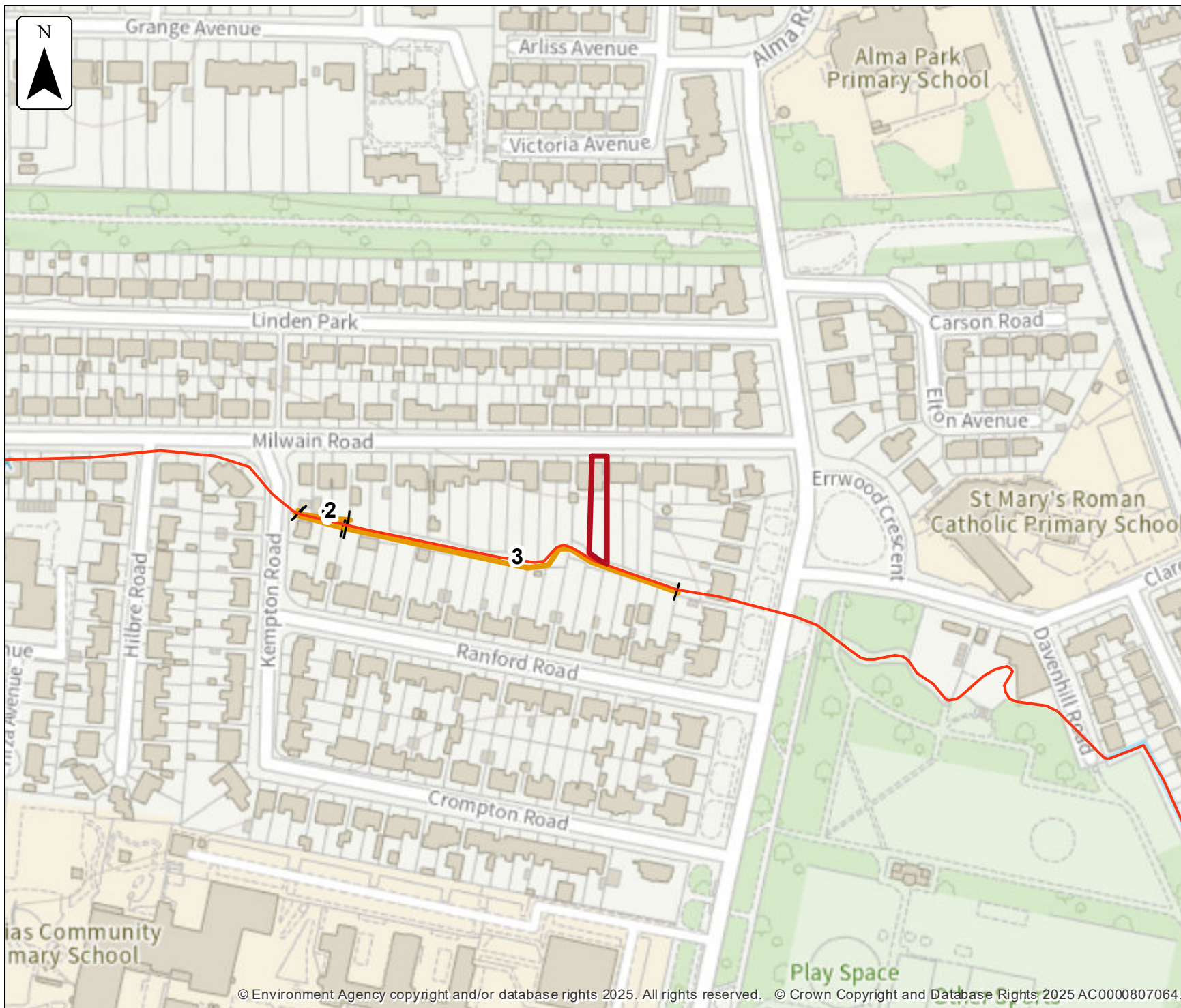
Flood defences

Location (easting/northing)
387171/393630

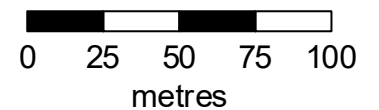
Scale
1:2,500

Created
6 Feb 2025

-  Selected area
-  Main river
-  Flood defence



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Flood defences data

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
1	71686	Engineered High Ground	100		47.89	48.71	
2	58923	Engineered High Ground	100		47.70	48.55	
3	7430	Engineered High Ground	100		50.40	47.83	

Any blank cells show where a particular value has not been recorded for an asset.

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

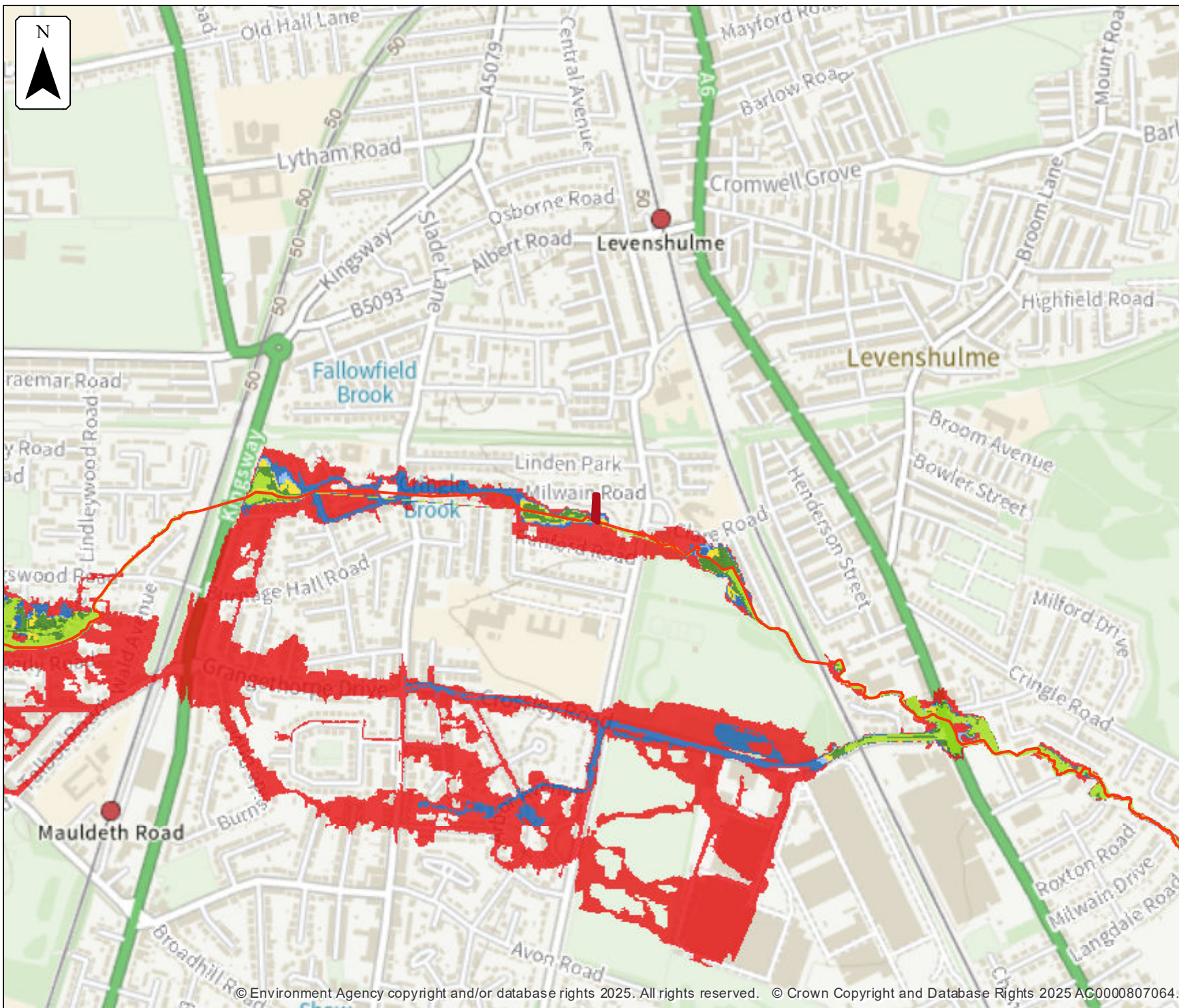
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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
- 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



Defended modelled fluvial extent

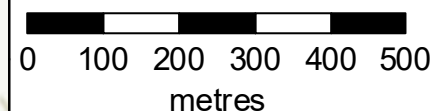
Location (easting/northing)
387171/393630

Scale Created
1:10,000 6 Feb 2025

Model name
**Cringle Black Brook
2017**

- Selected area
- Main river
- Modelled flood extent
 - 5% AEP
 - 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





Defences removed modelled fluvial extent

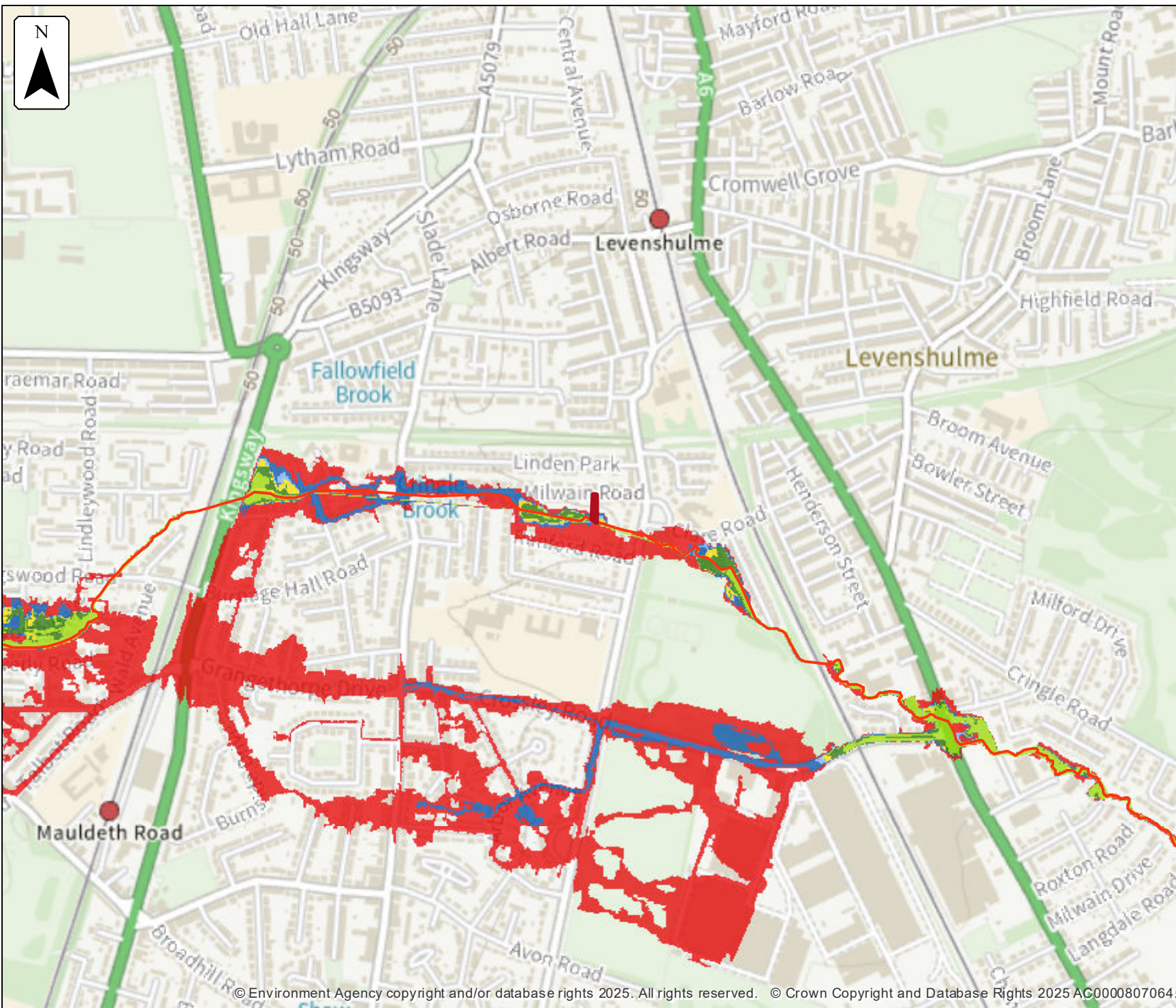
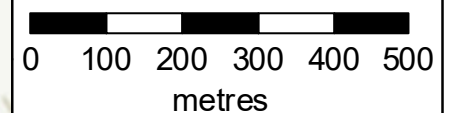
Location (easting/northing)
387171/393630

Scale Created
1:10,000 6 Feb 2025

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Main river
- Modelled flood extent
-  5% AEP
 -  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





Defended climate change modelled fluvial extent

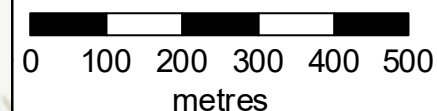
Location (easting/northing)
387171/393630

Scale Created
1:10,000 6 Feb 2025

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Main river
- Modelled flood extent
-  1.0% AEP (+30%)
 -  1.0% AEP (+35%)
 -  1.0% AEP (+70%)
 -  0.1% AEP (+30%)

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





Defences removed climate change modelled fluvial extent

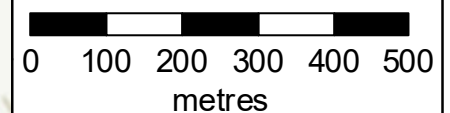
Location (easting/northing)
387171/393630

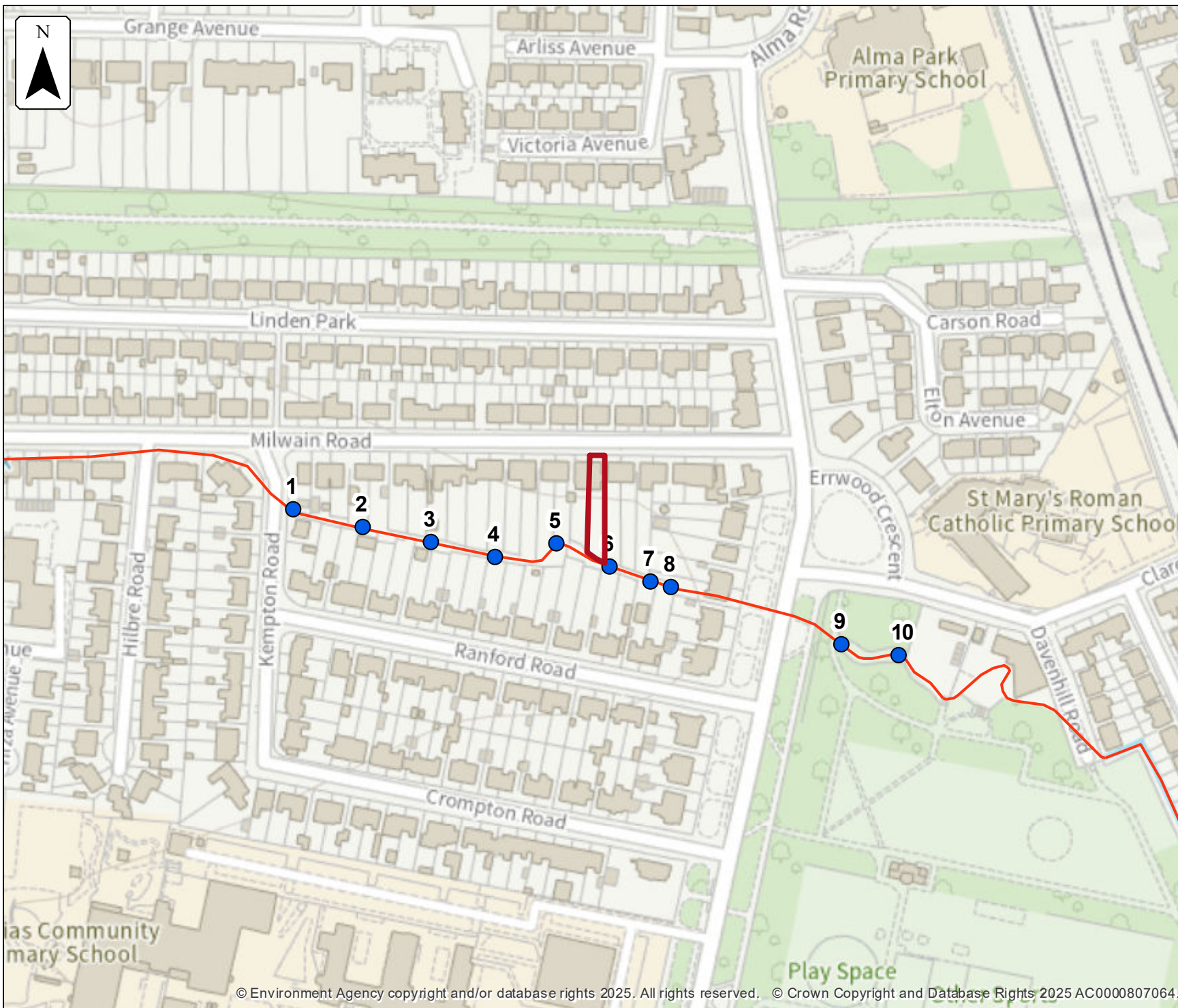
Scale Created
1:10,000 6 Feb 2025

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Main river
- Modelled flood extent
-  1.0% AEP (+30%)
 -  1.0% AEP (+35%)
 -  1.0% AEP (+70%)
 -  0.1% AEP (+30%)

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





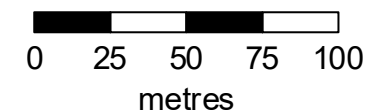
Defended modelled fluvial node locations

Location (easting/northing)
387171/393630

Scale Created
1:2,500 6 Feb 2025

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
1	1440090	387024	393629	47.10	47.28	47.50	47.64	47.67	47.71	47.85	47.98	48.05	48.23	48.55
2	1440075	387058	393620	47.38	47.56	47.76	47.89	47.92	47.96	48.09	48.23	48.31	48.44	48.70
3	1440120	387091	393613	47.61	47.74	47.90	48.01	48.03	48.07	48.16	48.25	48.31	48.49	48.73
4	1440093	387122	393606	47.85	47.96	48.07	48.16	48.18	48.20	48.27	48.34	48.38	48.52	48.74
5	1440113	387152	393613	47.94	48.05	48.16	48.25	48.27	48.30	48.36	48.40	48.43	48.53	48.75
6	1440121	387178	393601	48.02	48.13	48.23	48.30	48.32	48.35	48.41	48.44	48.46	48.59	48.76
7	1440124	387197	393594	48.33	48.42	48.51	48.56	48.58	48.60	48.66	48.69	48.71	48.76	48.91
8	1440059	387207	393591	48.58	48.67	48.76	48.83	48.84	48.86	48.92	48.95	48.98	49.03	49.14
9	1440103	387290	393563	49.33	49.49	49.63	49.73	49.76	49.80	49.90	49.96	50.0	50.13	51.03
10	1440110	387317	393558	49.49	49.64	49.79	49.89	49.92	49.95	50.06	50.12	50.17	50.30	51.05

Data in this table comes from the Cringle Black 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.

If no level or flow data is available for a scenario, no table will be shown.

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1440090	387024	393629	1.87	2.41	3.01	3.41	3.50	3.61	3.93	4.21	4.36	4.70	5.12
2	1440075	387058	393620	1.87	2.41	3.02	3.41	3.50	3.57	3.67	3.67	3.69	4.34	4.43
3	1440120	387091	393613	1.77	2.29	2.81	3.19	3.28	3.36	3.65	3.78	3.86	3.69	3.91
4	1440093	387122	393606	1.77	2.29	2.82	3.19	3.30	3.43	3.74	3.89	3.95	3.91	4.37
5	1440113	387152	393613	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.10	4.28	4.81	6.28
6	1440121	387178	393601	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.10	4.28	4.70	5.72
7	1440124	387197	393594	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.11	4.30	4.86	5.98
8	1440059	387207	393591	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.11	4.30	4.86	5.87
9	1440103	387290	393563	1.77	2.29	2.82	3.19	3.31	3.45	3.85	4.11	4.30	4.86	5.87
10	1440110	387317	393558	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.11	4.30	4.86	5.72

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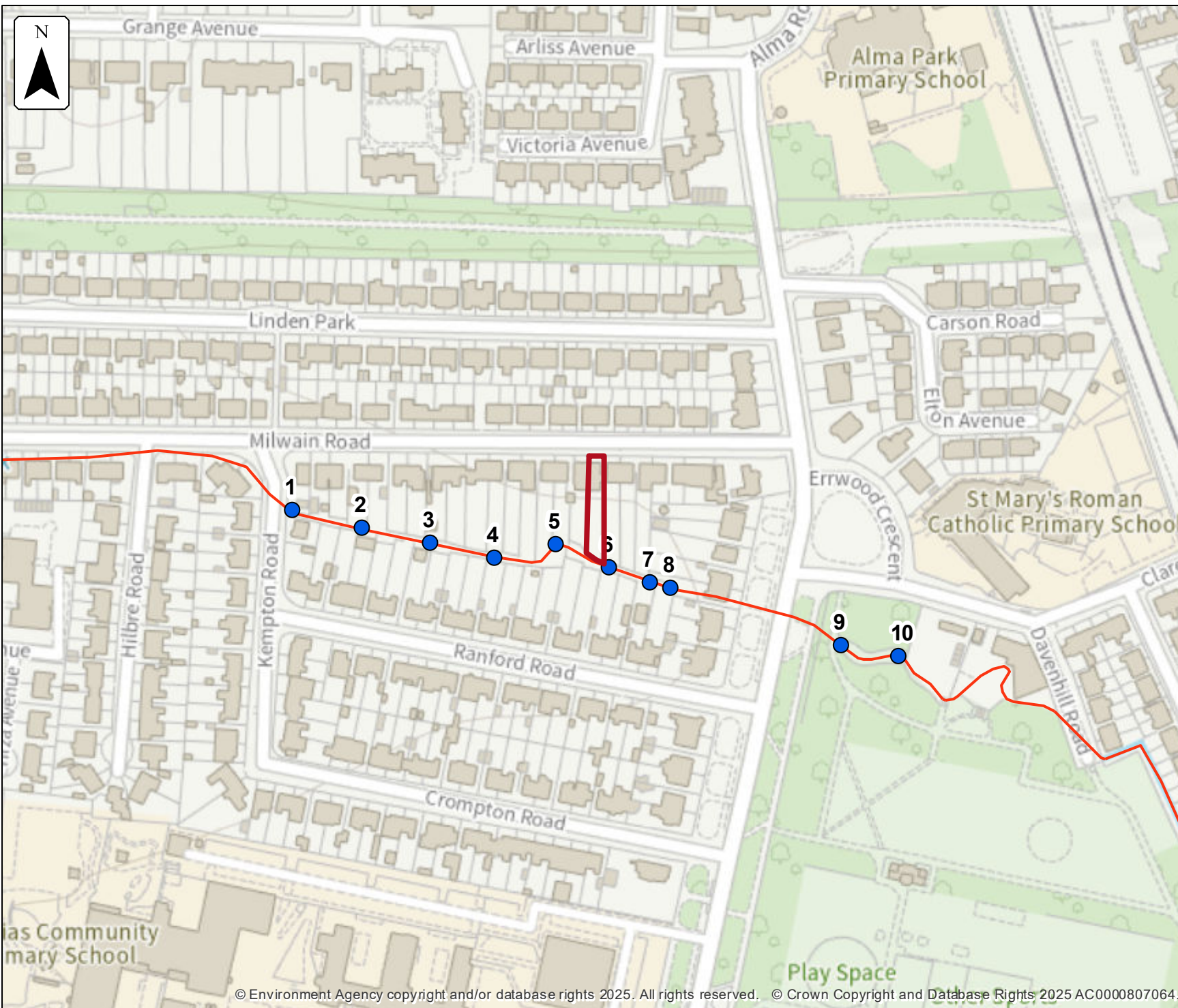
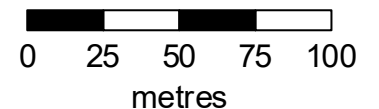
Defences removed modelled fluvial node locations

Location (easting/northing)
387171/393630

Scale Created
1:2,500 6 Feb 2025

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
1	1440090	387024	393629	47.10	47.28	47.50	47.64	47.67	47.71	47.85	47.98	48.05	48.23	48.55
2	1440075	387058	393620	47.38	47.56	47.76	47.89	47.92	47.96	48.09	48.23	48.31	48.44	48.70
3	1440120	387091	393613	47.61	47.74	47.90	48.01	48.03	48.07	48.16	48.25	48.31	48.49	48.73
4	1440093	387122	393606	47.85	47.96	48.07	48.16	48.18	48.20	48.27	48.34	48.38	48.52	48.74
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7	1440124	387197	393594	48.33	48.42	48.51	48.56	48.58	48.60	48.66	48.69	48.71	48.76	48.91
8	1440059	387207	393591	48.58	48.67	48.76	48.83	48.84	48.86	48.92	48.95	48.98	49.03	49.14
9	1440103	387290	393563	49.33	49.49	49.63	49.73	49.76	49.80	49.90	49.96	50.0	50.13	51.03
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Defences removed

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1440090	387024	393629	1.87	2.41	3.01	3.41	3.50	3.61	3.93	4.21	4.36	4.70	5.12
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6	1440121	387178	393601	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.10	4.28	4.70	5.72
7	1440124	387197	393594	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.11	4.30	4.86	5.98
8	1440059	387207	393591	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.11	4.30	4.86	5.87
9	1440103	387290	393563	1.77	2.29	2.82	3.19	3.31	3.45	3.85	4.11	4.30	4.86	5.87
10	1440110	387317	393558	1.77	2.29	2.82	3.19	3.31	3.44	3.85	4.11	4.30	4.86	5.72

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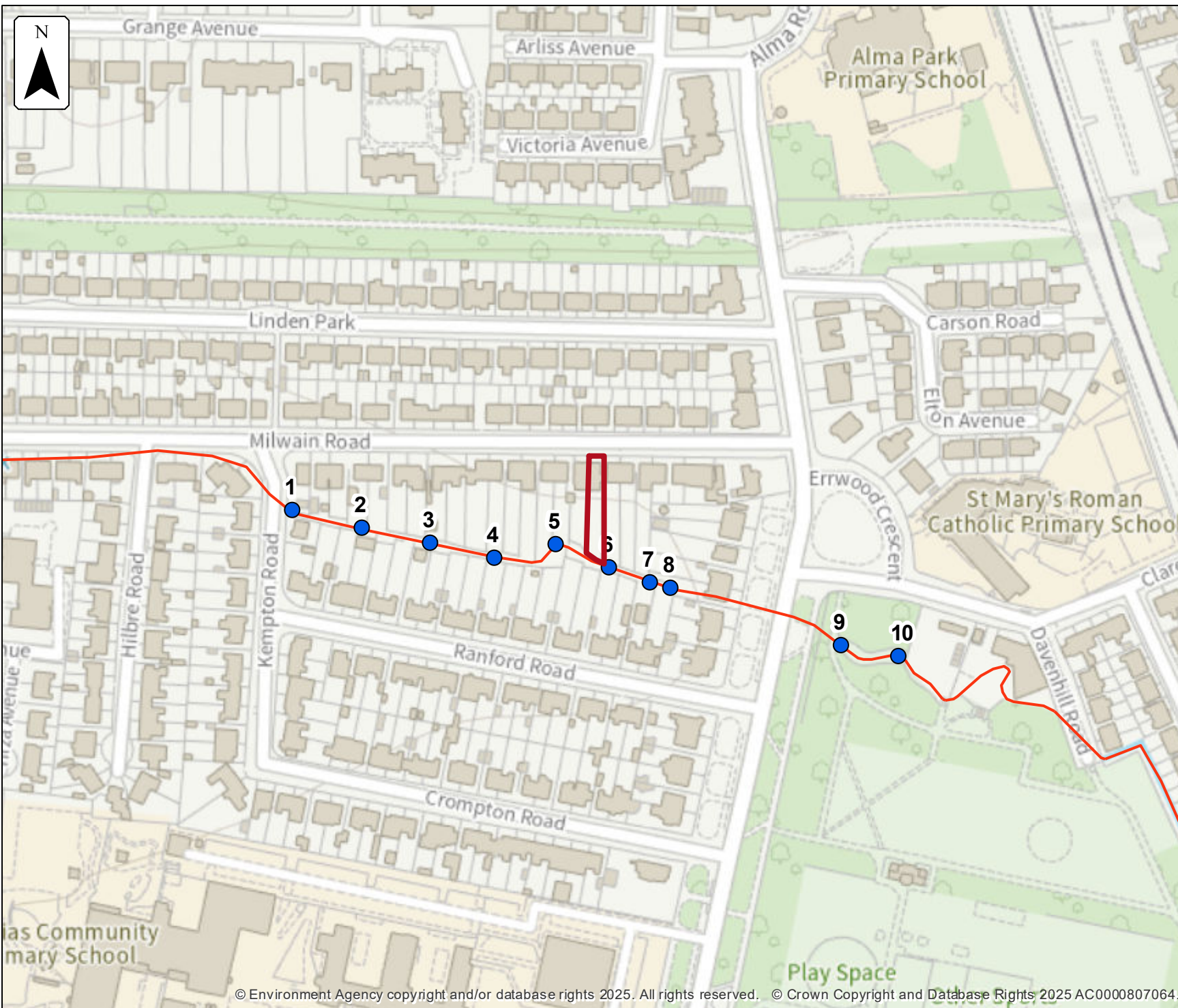
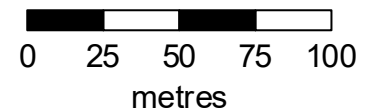
Defended climate change modelled fluvial node locations

Location (easting/northing)
387171/393630

Scale Created
1:2,500 6 Feb 2025

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level	Flow	Flow	Flow	Flow
1	1440090	387024	393629	48.30	48.32	48.41	48.69	4.84	4.88	5.03	5.16
2	1440075	387058	393620	48.51	48.52	48.60	48.79	4.37	4.43	4.46	4.52
3	1440120	387091	393613	48.54	48.56	48.63	48.82	3.67	3.69	3.69	4.34
4	1440093	387122	393606	48.57	48.59	48.65	48.84	3.93	3.93	4.03	4.96
5	1440113	387152	393613	48.58	48.60	48.66	48.84	5.14	5.28	5.77	7.0
6	1440121	387178	393601	48.63	48.65	48.69	48.84	4.82	4.80	5.16	6.33
7	1440124	387197	393594	48.79	48.80	48.84	48.98	5.15	5.27	5.78	6.19
8	1440059	387207	393591	49.06	49.07	49.10	49.19	5.15	5.27	5.78	5.91
9	1440103	387290	393563	50.24	50.35	50.88	51.11	5.15	5.27	5.78	5.91
10	1440110	387317	393558	50.40	50.49	50.91	51.13	5.15	5.26	5.65	5.89

Data in this table comes from the Cringle Black Brook 2017 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

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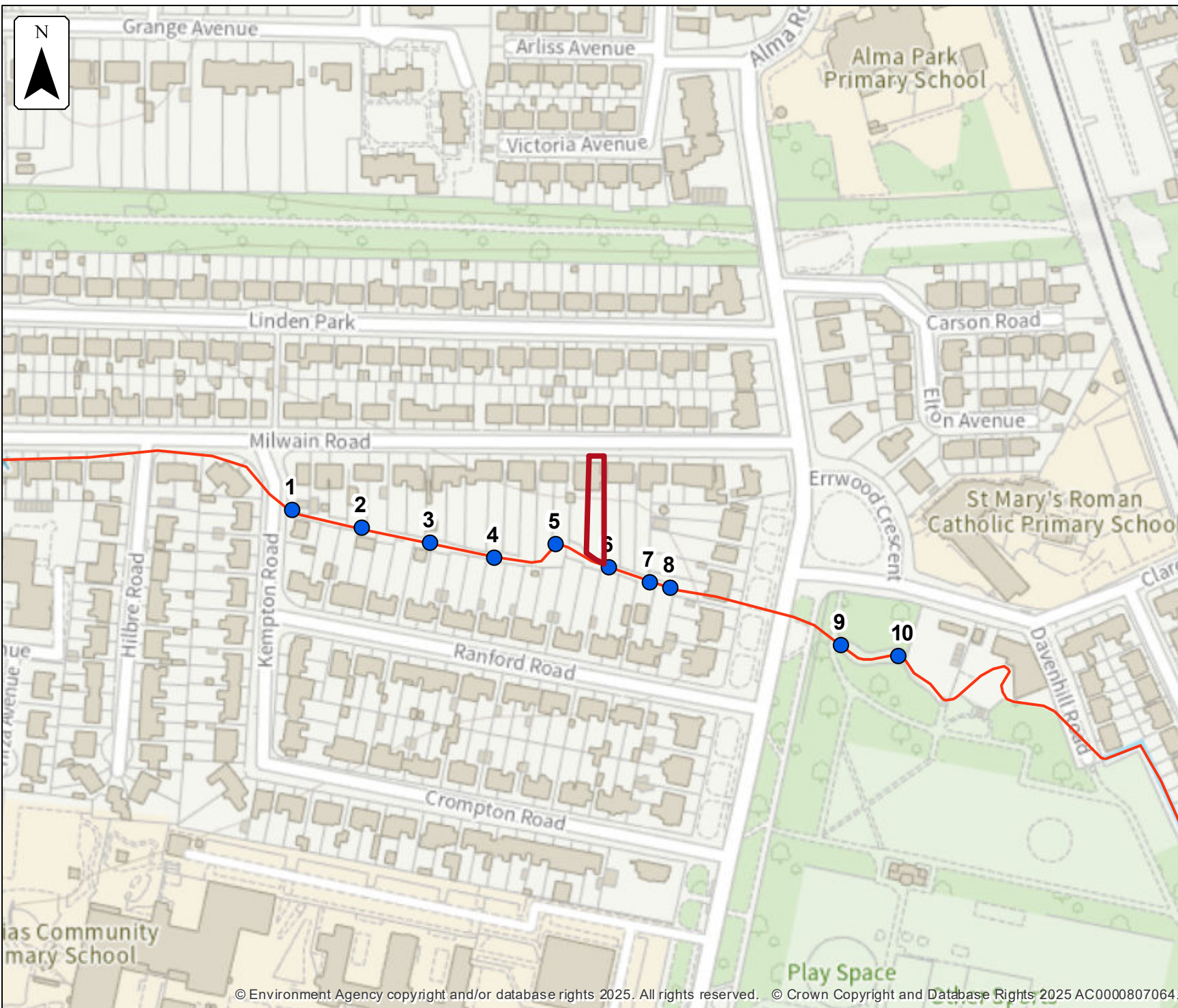
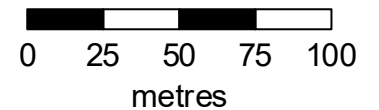
Defences removed climate change modelled fluvial node locations

Location (easting/northing)
387171/393630

Scale Created
1:2,500 6 Feb 2025

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defences removed climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level	Flow	Flow	Flow	Flow
1	1440090	387024	393629	48.30	48.32	48.41	48.69	4.84	4.88	5.03	5.16
2	1440075	387058	393620	48.51	48.52	48.60	48.79	4.37	4.43	4.46	4.52
3	1440120	387091	393613	48.54	48.56	48.63	48.82	3.67	3.69	3.69	4.34
4	1440093	387122	393606	48.57	48.59	48.65	48.84	3.93	3.93	4.03	4.96
5	1440113	387152	393613	48.58	48.60	48.66	48.84	5.14	5.28	5.77	7.0
6	1440121	387178	393601	48.63	48.65	48.69	48.84	4.82	4.80	5.16	6.33
7	1440124	387197	393594	48.79	48.80	48.84	48.98	5.15	5.27	5.78	6.19
8	1440059	387207	393591	49.06	49.07	49.10	49.19	5.15	5.27	5.78	5.91
9	1440103	387290	393563	50.24	50.35	50.88	51.11	5.15	5.27	5.78	5.91
10	1440110	387317	393558	50.40	50.49	50.91	51.13	5.15	5.26	5.65	5.89

Data in this table comes from the Cringle Black 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.

If no level or flow data is available for a scenario, no table will be shown.



Defended modelled fluvial extent and height

Location (easting/northing)
387171/393630

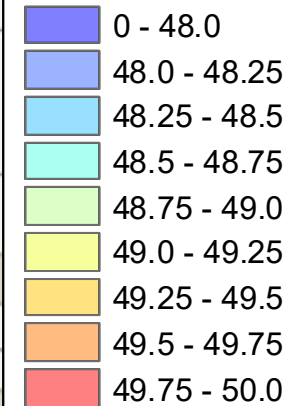
Scale Created
1:500 6 Feb 2025

Model name
**Cringle Black Brook
2017**

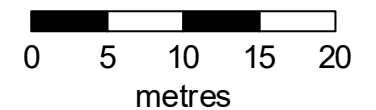
 Selected area

 Main river

Modelled 2D grid
Water level in mAOD



This map shows the
0.5% AEP height data



Sample point data

Defended

Label	Easting	Northing	50% AEP	10% AEP	5% AEP	4% AEP	2% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
1	387169	393598	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07
2	387177	393598	NoData	NoData	NoData	NoData	0.01	0.02	0.04	0.06
3	387161	393606	0.01	0.03	0.04	0.04	0.04	0.06	0.16	0.38
4	387169	393606	1.44	1.63	1.70	1.72	1.79	1.84	1.93	2.11
5	387177	393606	NoData	NoData	NoData	NoData	NoData	0.32	0.56	0.73
6	387185	393606	NoData	NoData	NoData	NoData	NoData	0.39	0.74	0.92
7	387161	393614	NoData	NoData	NoData	NoData	NoData	NoData	0.09	0.31
8	387169	393614	NoData	NoData	NoData	NoData	NoData	NoData	0.05	0.22
9	387177	393614	NoData	NoData	NoData	NoData	NoData	0.26	0.61	0.79
10	387185	393614	NoData	NoData	NoData	NoData	NoData	0.04	0.39	0.56
11	387161	393622	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
12	387169	393622	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
13	387177	393622	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.08
14	387185	393622	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
15	387161	393630	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	387169	393630	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	50% AEP	10% AEP	5% AEP	4% AEP	2% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
17	387177	393630	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
18	387185	393630	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
19	387161	393638	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
20	387169	393638	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	387177	393638	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
22	387185	393638	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
23	387161	393646	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	387169	393646	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
25	387177	393646	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
26	387185	393646	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
27	387161	393654	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
28	387169	393654	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
29	387177	393654	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
30	387185	393654	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
31	387161	393662	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
32	387169	393662	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
33	387177	393662	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			1.15	1.30	1.36	1.37	1.44	1.49	1.58	1.75

Data in this table comes from the Cringle Black 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.

If no height or depth data is available for a scenario, no table will be shown.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defended

Label	Easting	Northing	50% AEP	5% AEP	4% AEP	2% AEP	1% AEP	0.5% AEP
			Height	Height	Height	Height	Height	Height
1	387169	393598	NoData	NoData	NoData	NoData	NoData	NoData
2	387177	393598	NoData	NoData	NoData	48.41	48.46	48.59
3	387161	393606	47.95	48.26	48.28	48.36	48.42	48.53
4	387169	393606	47.97	48.28	48.30	48.38	48.43	48.54
5	387177	393606	NoData	NoData	NoData	NoData	48.28	48.58
6	387185	393606	NoData	NoData	NoData	NoData	48.23	48.58
7	387161	393614	NoData	NoData	NoData	NoData	NoData	48.53
8	387169	393614	NoData	NoData	NoData	NoData	NoData	48.58
9	387177	393614	NoData	NoData	NoData	NoData	48.23	48.58
10	387185	393614	NoData	NoData	NoData	NoData	48.23	48.58
11	387161	393622	NoData	NoData	NoData	NoData	NoData	NoData
12	387169	393622	NoData	NoData	NoData	NoData	NoData	NoData
13	387177	393622	NoData	NoData	NoData	NoData	NoData	NoData
14	387185	393622	NoData	NoData	NoData	NoData	NoData	NoData
15	387161	393630	NoData	NoData	NoData	NoData	NoData	NoData
16	387169	393630	NoData	NoData	NoData	NoData	NoData	NoData
17	387177	393630	NoData	NoData	NoData	NoData	NoData	NoData
18	387185	393630	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	50% AEP	5% AEP	4% AEP	2% AEP	1% AEP	0.5% AEP
			Height	Height	Height	Height	Height	Height
19	387161	393638	NoData	NoData	NoData	NoData	NoData	NoData
20	387169	393638	NoData	NoData	NoData	NoData	NoData	NoData
21	387177	393638	NoData	NoData	NoData	NoData	NoData	NoData
22	387185	393638	NoData	NoData	NoData	NoData	NoData	NoData
23	387161	393646	NoData	NoData	NoData	NoData	NoData	NoData
24	387169	393646	NoData	NoData	NoData	NoData	NoData	NoData
25	387177	393646	NoData	NoData	NoData	NoData	NoData	NoData
26	387185	393646	NoData	NoData	NoData	NoData	NoData	NoData
27	387161	393654	NoData	NoData	NoData	NoData	NoData	NoData
28	387169	393654	NoData	NoData	NoData	NoData	NoData	NoData
29	387177	393654	NoData	NoData	NoData	NoData	NoData	NoData
30	387185	393654	NoData	NoData	NoData	NoData	NoData	NoData
31	387161	393662	NoData	NoData	NoData	NoData	NoData	NoData
32	387169	393662	NoData	NoData	NoData	NoData	NoData	NoData
33	387177	393662	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			48.0	48.29	48.31	48.40	48.45	48.58

Data in this table comes from the Cringle Black 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.

If no height or depth data is available for a scenario, no table will be shown.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Defences removed modelled fluvial extent and height

Location (easting/northing)
387171/393630

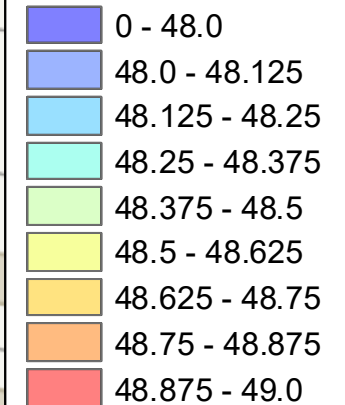
Scale Created
1:500 6 Feb 2025

Model name
**Cringle Black Brook
2017**

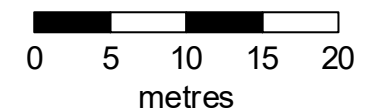
 Selected area

 Main river

Modelled 2D grid
Water level in mAOD



This map shows the
10.0% AEP height data



Sample point data

Defences removed

Label	Easting	Northing	10% AEP	3.33% AEP	50% AEP	10% AEP
			Depth	Depth	Height	Height
1	387169	393598	NoData	NoData	NoData	NoData
2	387177	393598	NoData	0.00	NoData	NoData
3	387161	393606	0.03	0.04	47.95	48.18
4	387169	393606	1.63	1.74	47.97	48.19
5	387177	393606	NoData	NoData	NoData	NoData
6	387185	393606	NoData	NoData	NoData	NoData
7	387161	393614	NoData	NoData	NoData	NoData
8	387169	393614	NoData	NoData	NoData	NoData
9	387177	393614	NoData	NoData	NoData	NoData
10	387185	393614	NoData	NoData	NoData	NoData
11	387161	393622	NoData	NoData	NoData	NoData
12	387169	393622	NoData	NoData	NoData	NoData
13	387177	393622	NoData	NoData	NoData	NoData
14	387185	393622	NoData	NoData	NoData	NoData
15	387161	393630	NoData	NoData	NoData	NoData
16	387169	393630	NoData	NoData	NoData	NoData

Label	Easting	Northing	10% AEP	3.33% AEP	50% AEP	10% AEP
			Depth	Depth	Height	Height
17	387177	393630	NoData	NoData	NoData	NoData
18	387185	393630	NoData	NoData	NoData	NoData
19	387161	393638	NoData	NoData	NoData	NoData
20	387169	393638	NoData	NoData	NoData	NoData
21	387177	393638	NoData	NoData	NoData	NoData
22	387185	393638	NoData	NoData	NoData	NoData
23	387161	393646	NoData	NoData	NoData	NoData
24	387169	393646	NoData	NoData	NoData	NoData
25	387177	393646	NoData	NoData	NoData	NoData
26	387185	393646	NoData	NoData	NoData	NoData
27	387161	393654	NoData	NoData	NoData	NoData
28	387169	393654	NoData	NoData	NoData	NoData
29	387177	393654	NoData	NoData	NoData	NoData
30	387185	393654	NoData	NoData	NoData	NoData
31	387161	393662	NoData	NoData	NoData	NoData
32	387169	393662	NoData	NoData	NoData	NoData
33	387177	393662	NoData	NoData	NoData	NoData
Max value in selected area:			1.30	1.39	48.0	48.21

Data in this table comes from the Cringle Black 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.

If no height or depth data is available for a scenario, no table will be shown.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



**Defended
climate change
modelled fluvial
extent and height**

Location (easting/northing)
387171/393630

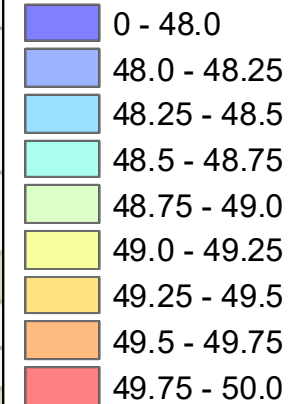
Scale Created
1:500 6 Feb 2025

Model name
**Cringle Black Brook
2017**

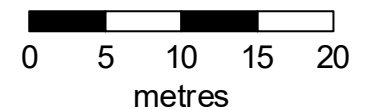
 Selected area

 Main river

Modelled 2D grid
Water level in mAOD



This map shows the
1.0% AEP +70% height data



Sample point data

Defended climate change

Label	Easting	Northing	1% AEP (+70%)	1% AEP (+70%)
			Depth	Height
1	387169	393598	NoData	NoData
2	387177	393598	0.05	48.69
3	387161	393606	0.29	48.66
4	387169	393606	2.04	48.67
5	387177	393606	0.66	48.68
6	387185	393606	0.85	48.68
7	387161	393614	0.22	48.66
8	387169	393614	0.15	48.68
9	387177	393614	0.72	48.68
10	387185	393614	0.49	48.68
11	387161	393622	NoData	NoData
12	387169	393622	NoData	NoData
13	387177	393622	NoData	NoData
14	387185	393622	NoData	NoData
15	387161	393630	NoData	NoData
16	387169	393630	NoData	NoData

Label	Easting	Northing	1% AEP (+70%)	1% AEP (+70%)
			Depth	Height
17	387177	393630	NoData	NoData
18	387185	393630	NoData	NoData
19	387161	393638	NoData	NoData
20	387169	393638	NoData	NoData
21	387177	393638	NoData	NoData
22	387185	393638	NoData	NoData
23	387161	393646	NoData	NoData
24	387169	393646	NoData	NoData
25	387177	393646	NoData	NoData
26	387185	393646	NoData	NoData
27	387161	393654	NoData	NoData
28	387169	393654	NoData	NoData
29	387177	393654	NoData	NoData
30	387185	393654	NoData	NoData
31	387161	393662	NoData	NoData
32	387169	393662	NoData	NoData
33	387177	393662	NoData	NoData
Max value in selected area:			1.69	48.68

Data in this table comes from the Cringle Black 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.

If no height or depth data is available for a scenario, no table will be shown.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



**Defences removed
climate change
modelled fluvial
extent and height**

Location (easting/northing)
387171/393630

Scale Created
1:500 6 Feb 2025

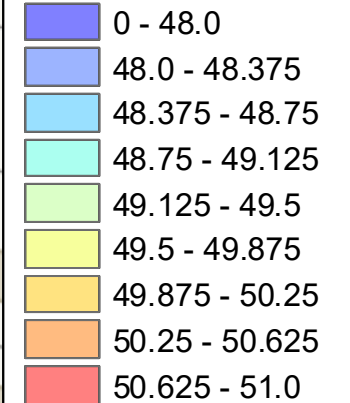
Model name
**Cringle Black Brook
2017**

 Selected area

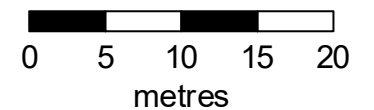
 Main river

Modelled 2D grid

Water level in mAOD



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



Sample point data

Defences removed climate change

Label	Easting	Northing	0.1% AEP (+30%)	0.1% AEP (+30%)
			Depth	Height
1	387169	393598	0.15	48.85
2	387177	393598	0.07	48.85
3	387161	393606	0.48	48.84
4	387169	393606	2.21	48.85
5	387177	393606	0.82	48.85
6	387185	393606	1.01	48.85
7	387161	393614	0.41	48.84
8	387169	393614	0.31	48.85
9	387177	393614	0.88	48.85
10	387185	393614	0.66	48.85
11	387161	393622	NoData	NoData
12	387169	393622	NoData	NoData
13	387177	393622	0.17	48.85
14	387185	393622	NoData	NoData
15	387161	393630	NoData	NoData
16	387169	393630	NoData	NoData

Label	Easting	Northing	0.1% AEP (+30%)	0.1% AEP (+30%)
			Depth	Height
17	387177	393630	NoData	NoData
18	387185	393630	NoData	NoData
19	387161	393638	NoData	NoData
20	387169	393638	NoData	NoData
21	387177	393638	NoData	NoData
22	387185	393638	NoData	NoData
23	387161	393646	NoData	NoData
24	387169	393646	NoData	NoData
25	387177	393646	NoData	NoData
26	387185	393646	NoData	NoData
27	387161	393654	NoData	NoData
28	387169	393654	NoData	NoData
29	387177	393654	NoData	NoData
30	387185	393654	NoData	NoData
31	387161	393662	NoData	NoData
32	387169	393662	NoData	NoData
33	387177	393662	NoData	NoData
Max value in selected area:			1.83	48.85

Data in this table comes from the Cringle Black 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.

If no height or depth data is available for a scenario, no table will be shown.

'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