MICHAEL EVANS
& ASSOCIATES LTD
Civil and Structural Engineers
& Design Consultants

Our Ref: 25-204
27/11/2025

Kelly Gillott
Paul Gaughan Building Consultants Ltd
Unit E14, Langham Park Industrial Estate
Lows Lane,
Stanton by Dale, Ilkeston,
Derbyshire, DE7 4RJ

Dear Kelly,

Flood Risk Assessment Letter Report – Ridgeway House, Ridgeway Lane, Belper, DE56 2JT

Introduction

Michael Evans & Associates Ltd have been commissioned to undertake a Flood Risk Assessment in support of a planning application for proposed residential development at Ridgeway House, Ridgeway Lane, Belper, Derbyshire, DE56 2JT. The proposed development is located within Flood Zone 3, therefore the planning application for the development must be supported by a site-specific Flood Risk Assessment.

This Flood Risk Assessment report has been undertaken in accordance with the guidance in the National Planning Policy Framework (NPPF), Planning Practice Guidance, and the Amber Borough Council Strategic Flood Risk Assessment (SFRA), October 2016.

This report should be read in conjunction with the drawings provided as part of the planning application submission.

Site Information

The proposed development site is situated to the south and southeast of the towns of Bullbridge and Ambergate respectively. It is a residential property approximately 0.454 ha in area, containing the main house in the southwest nearest Ridgeway Lane / Slack Lane, as well as three outbuildings. The towns of Belper and Ripley are located approximately 3 km to the

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south and the east. Downmeadow Brook, an ordinary watercourse, forms the northern and eastern site boundary. A surfaced access track is adjacent to the west and terminates at its junction with Ridgeway Lane / Slack Lane. The Brook flows in a generally north-westerly direction towards its confluence with the River Amber approximately 630m to the northwest, between Bullbridge and Ambergate. The River Amber itself flows generally westwards to join the River Derwent. A site location plan is included with the planning application documents.

The L-shaped outbuilding which will contain the proposed accommodation is a partially 2-storey structure with a building footprint approximately 268m^2 (6% of the property area). It is currently used as a domestic garage and storage space.

Ground levels in the locality fall generally south to north. Surveyed building threshold levels vary from 77.05m to 77.36mAOD, whilst levels on the tarmac adjacent to the building range between 77.04m and 77.39mAOD. Adjacent ground levels to the rear vary from 76.39m – 77.25mAOD, falling to 75.62m – 76.17mAOD in the bed of Downmeadow Brook. Water levels in the brook varied from 75.99m to 76.21mAOD when surveyed in November 2025. Levels on the access track along the front of the property vary between 76.68m and 77.76mAOD. Ground levels around the main house range between 77.74m and 78.13mAOD. A copy of the topographical survey plan is attached to this report.

Proposals

The proposed development consists of alterations in parts of the existing outbuilding to create residential accommodation. The accommodation will comprise:

- Two one-bedroom annexes, one on the ground floor and the other on the first floor.
- One one-bedroom holiday flat on the ground floor.
- One two-bedroom holiday flat with one bedroom on the ground floor and the other on the first floor.

The development will extend over approximately 195m^2 of the building footprint. There will be no new impermeable areas created as parking space and service areas are already available on existing tarmac hardstandings on the property. The existing surface water drainage serving the buildings and the property will not be affected and will continue as at present.

The flood risk vulnerability class of the development site will remain **more vulnerable** once the works are complete.

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The Sequential Test

The Sequential Test ensures that new developments are located in areas with the lowest flood risk. It is stated in the SFRA that the Sequential Test does not need to be applied for applications for minor development or change of use (except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site). It is considered that the test need not be applied on this development as it is minor development and change of use within an existing permanent structure, and will not form part of a caravan, camping or chalet site.

Assessment of Flood Risk

Fluvial Flood Risk

The site is shown on the Environment Agency's Flood Map for Planning to be located mostly within Flood Zone 3, an area with a high probability of flooding, defined as greater than a 1% or 0.5% chance of flooding each year from rivers or the sea respectively. The EA's flood map shows the main house to be outside the predicted flood extents. The main sources of flood risk in the area are the River Amber and Downmeadow Brook.

Selected modelled flood information for the site, sourced from the Environment Agency, indicates the following (River Amber model, JBA 2012):

- The site falls outside the 1% (plus 50%) Annual Exceedance Probability **no defences exist climate change modelled fluvial extent**.
- The site falls outside the 0.1% Annual Exceedance Probability **no defences exist climate change modelled fluvial extent**.
- The applicable River Amber in-channel 1% (plus 30%) Annual Exceedance Probability **no defences exist climate change modelled fluvial levels** vary from 69.42m to 71.59mAOD.
- The applicable River Amber in-channel 1% (plus 50%) Annual Exceedance Probability **no defences exist climate change modelled fluvial levels** vary from 69.62m to 71.72mAOD.

This information appears to show that the site is at low risk of fluvial flooding, contrary to what is shown on the Flood Map for Planning. EA flood information is appended to this report.

Flood maps included in the SFRA's Appendix A indicate the following:

- The site falls within the 100-year Climate Change (Higher Central) fluvial flood extent.
- It falls outside Flood Zone 3b (the functional floodplain).

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Based on the above, it is assumed that the River Amber model (JBA, 2012) did not extend to the proposed development site, though the site location (red line) is shown on the provided model flood maps. Therefore, the site is confirmed to be at high risk of fluvial flooding. Records indicate that the site last experienced flooding when the channel capacity of the River Amber was exceeded in February 1977.

Surface Water Flood Risk

Surface water flooding arises when overland runoff flows occur during intense, often short duration rainfall, when water is unable to soak into the ground or enter drainage systems. The excess water will then pond in depressed locations.

According to the Surface Water Flood Map in the SFRA, there is a high risk (3.3% AEP) of pluvial flooding on the site. The proposed development will not exacerbate the existing situation.

Risk of Flooding from Sewers

Flooding from sewers occurs when rainfall causes the capacity of sewers to be exceeded, or when there is blockage or structural failure. Additionally, sewer flooding is more likely to occur along the routes of trunk sewers, particularly if these discharge into watercourses. Severn Trent Water recorded more than 20 incidents of sewer flooding in surrounding areas up to August 2016.

Groundwater Flooding

Groundwater flooding occurs when the water table rises to levels high enough to enable the emergence of groundwater above the surface. Groundwater flooding affects low-lying ground and tends to develop and last over long periods. The Groundwater Susceptibility Map in the SFRA indicates that the property is not susceptible to groundwater flooding.

Risk of Flooding from Artificial Sources

Flooding from artificial sources arises from the failure of man-made infrastructure such as canals or reservoir embankments, as well as from activities such as ground water pumping. The risk of flooding from artificial water bodies, e.g. canals and reservoirs, is low due to legal and other requirements for the robust maintenance of such infrastructure.

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Managing and Mitigating Flood Risk

Because the existing ground floor levels cannot be raised primarily due to ceiling height constraints, flood risk will have to be mitigated by the retrofitting of flood resistance and flood resilient measures. The design flood level has been assumed to be 300mm above the highest adjacent (to the building) ground level, i.e. 77.39m + 300mm = 77.69mAOD. This is 1.70m above the lowest adjacent surveyed water level in Downmeadow Brook (early November 2025). This flood level is also consistent with the main house being outside the predicted flood extents, adjacent ground levels being above 77.70mAOD.

Flood resistance measures will be implemented to prevent structural damage and minimise water entry up to the design flood level, 77.69mAOD. They will include the following.

- Watertight Perimeter Sealing: External Walls: Ensure all brickwork and blockwork below the design flood level is well-maintained and sealed, potentially using a water-resistant render or sealant.

- Service Entries: Seal all points where pipes, cables, and ducts penetrate the ground floor walls with waterproof mastic or expanding grout to ensure a watertight bond.

- Airbricks and Vents: Replace standard airbricks with automatic self-closing airbricks or vents that remain open for ventilation but seal shut immediately upon contact with water.

- Non-Return Valves (NRVs): Install non-return valves on the foul and surface water drainage pipes that exit the ground floor to prevent the backflow of floodwater or sewage into the building.

- Flood Barriers: Install provision for demountable flood barriers that can be slotted into the doorways and any ground-floor window openings quickly upon a flood warning. The barrier height must exceed the design flood level.

Flood resilience measures ensure the structure and services can be quickly cleaned and restored, enabling rapid recovery following a flood event. These will include:

- Internal Finishes (Ground Floor), if not already in place:

    - Apply cement-based plaster (e.g., lime or cementitious) on ground floor walls instead of standard gypsum plaster, which rapidly breaks down when wet.

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- Use ceramic or stone floor tiles with waterproof grout, or polished concrete flooring, rather than carpet or timber laminates.

- Electrical and Mechanical Services (Ground Floor):
  - Locate or relocate all critical services (e.g., electrical meters, fuse boards, and wiring connections) to the first floor (within the residential space) or mount them at least 600mm above the design flood level on the ground floor.
  - Ensure all ground-floor electrical sockets and switches are also mounted above the design flood level.

Resident Safety

Flood mapping indicates that Slack Lane is unlikely to experience flooding, as it is shown on the flood map to be in Flood Zone 1 (low flood risk) with levels above 77.70mAOD and rising southwards. **Safe access and egress** will be possible to and from the south at all times. **Shelter in place** may also be available in the accommodation situated on the first floor.

A flood emergency plan for the holiday lets and annexes will be drafted and implemented. The property owner or landlord will sign up for flood warnings and alerts with the relevant authorities, and in times of imminent flooding ensure that all occupants are informed in time.

Conclusion

The proposed development comprises alterations to and the creation of holiday fats and residential annexes in an existing outbuilding. The proposals extend over approximately 195m^2 of the building footprint and are considered to be minor development and change of use in an existing structure. The flood risk vulnerability classification across the whole site will remain more vulnerable.

No new impermeable areas will be created, and the existing surface water drainage arrangements will remain in place, such that there will be no increase in flood risk on the site or to its neighbours following the proposed development. Flood resistant and flood resilient measures will be implemented to protect the building and its occupants, and the landlord will ensure that a flood emergency plan is in place throughout the lifetime of the development.

This flood risk assessment letter report is considered to be appropriate to the scale, nature and location of the development, and proportionate to the degree of flood risk.

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MICHAEL EVANS
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Signed for and on behalf of Michael Evans & Associates Ltd,

DMutepfa

Daniel Mutepfa
Senior Drainage Engineer

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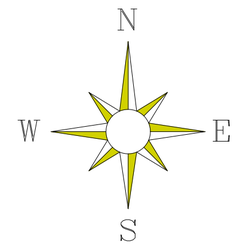

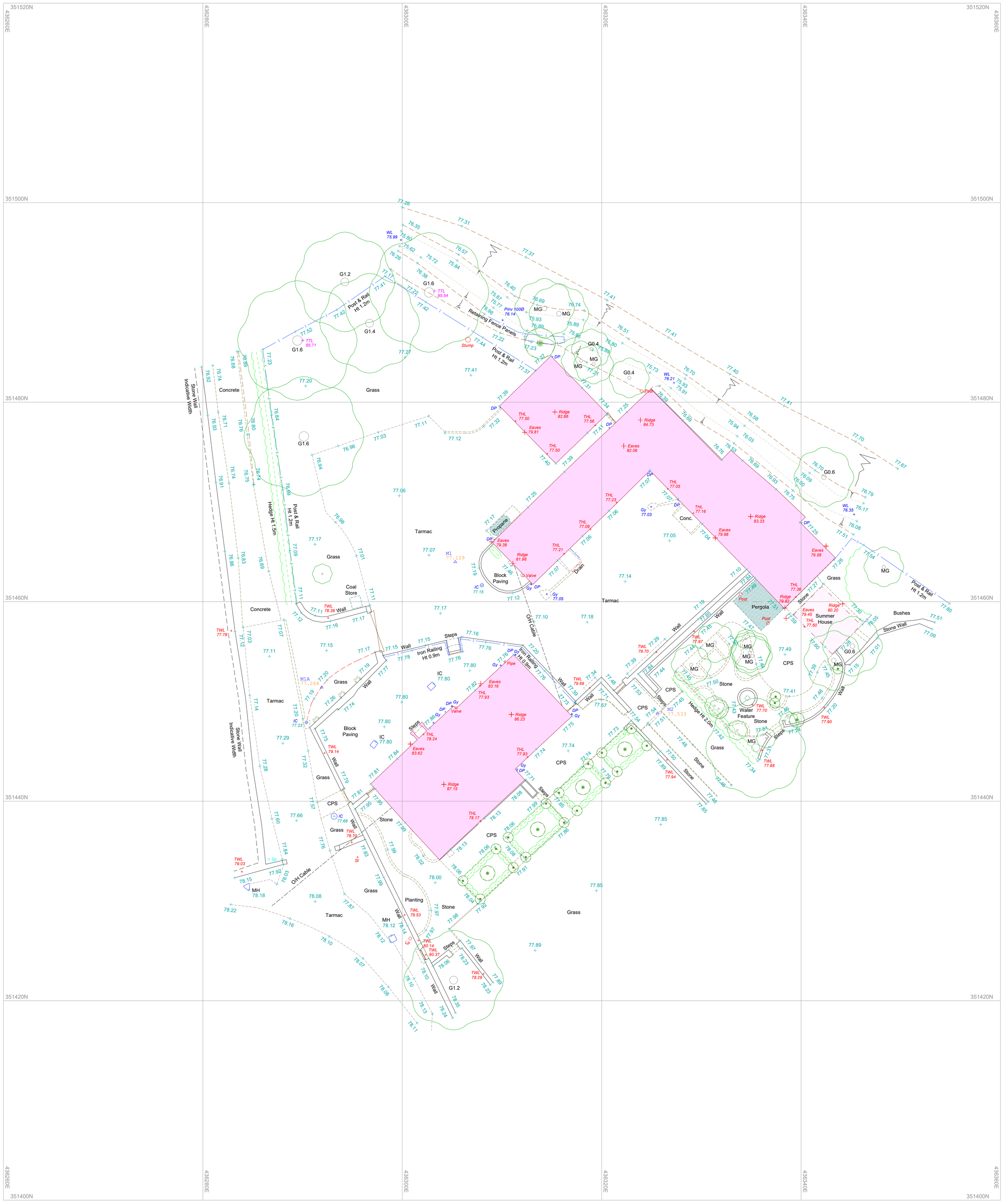

Station	Easting (m)	Northing (m)	Level (m)
M1	436305.320	351463.992	77.129
M1A	436291.921	351451.409	77.266
M2	436325.601	351448.818	77.533

REV	DATE	DESCRIPTION OF WORK	SURVEYOR	CHECKED BY

ABBREVIATION KEY

AR	Assumed Route	PTG	Pipe to Ground	Av	Air valve	G	Girth circumference	Sv	Stop valve		
BD	Base Bend	PTS	Pipe to Surface	Bg	Back gully	Gy	Gully	TCB	Telephone call box		
BD	Backdrop	RE	Rodding Eye	BH	Borehole	Ht	Height	TTL	Tree top level		
BL	Bed Level	RWP	Rainwater Pipe	BM	Benchmark	IC	Inspection cover	THL	Threshold level		
CL	Cover Level	SV	Stop Valve	Boll	Bollard	IFL	Internal floor level	TCB	Telephone call box		
CR	Cable Riser	SVP	Soil Vent Pipe	Bs	Bus stop	IL	Invert level	TL	Traffic light		
DP	Down Pipe	TE	Trapped Exit	BT	British Telecom	Lb	Letter box	THL	Threshold level		
EOT	End of Trace	TFR	Taken From Records	Bg	Back Gully	Lp	Lamp Post	Tp	Telegraph post		
EP	Electricity Pole	TP	Telegraph Pole	CL	Cover Level	MG	Multigirth	Ts	Traffic signal		
FH	Fire Hydrant	UTF	Unable to Find	CBX	Control box	MH	Manhole	TT	Tactile paving		
G	Gully	UTL	Unable to Lift	CPS	Concrete paving slab	Mkr	Marker post	TwL	Top of wall level		
GV	Gas Valve	UTS	Unable to Survey	CTV	Cable TV cover	NVP	No visible pipes	UTL	Unable to lift		
HOR	Head of Run	UTT	Unable to Trace	Elc	Electric cover	PInv	Pipe invert	WL	Water level		
HL	High Level	VP	Vent Pipe	Ep	Electricity post	Pb	Post box	Wm	Water meter		
IC	Inspection Chamber	WL	Water Level	Er	Earth rod	Re	Rodding eye	Wo	Wash out		
IL	Invert Level	WM	Water Meter	Fh	Fire hydrant	Sp	Sign post				
MH	Manhole	WO	Wash Out Valve	Fs	Flagstaff	St	Stop tap				
PR	Pipe Riser	D	Depth								

Ordnance Survey information is provided for a guide only.

OS BUILDING OUTLINE
OS DETAIL

Road
Drop Kerb
Verge Tarmac
Verge Concrete
Verge Grass
Verge
Tops
Bottoms

KEY

Floor level	FL:
Ceiling level	CL:
Suspended ceiling level	SusCL:
Underside level	U/S:
Sill height level	SHL:
Head height level	HHL:
Spring Point	SPR:
Arch Level	Arch:
Pointed Arch Level	P.Arch:
Down Pipe	DP:
Waste Pipe	WP:
Door / sliding door	
Inspection cover	
Building line	
Beam	
Ceiling Break	
Angled Ceiling	
Window	
Dimension	

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Tel: 01332 650 580 www.mapmatic.com Email: info@mapmatic.com

CLIENT Bob Dunn
PROJECT Ridgeway House, Ridgeway Lane, Belper DE56 2JT
TITLE Topographical Survey

Scale	1: 200@A1
Drawn	TB
Level datum	GNSS
Job number	8386
Drawing no.	0001
Date	19.11.2025
Checked	AW
Grid orientation	GNSS
Revision	0
Sheet	1 of 1

NOTES:

All critical measurements should be checked on site prior to design. No liability will be taken for this plan if passed onto 3rd parties. Trees and other survey data may be omitted due to dense vegetation. Some services may have been omitted due to parked vehicles and vegetation. Please note the drainage information has been ascertained by visual inspection from the surface and therefore values are estimated.

This survey has been orientated to the Ordnance Survey (OS) national grid via a Global Navigation Satellite System (GNSS) and the OS Active Network (OS NET). A true OSGB36 coordinate has been established near to the site centre via a transformation using the OSTN15 & OSGM15 transformation models. The survey has been correlated to this point and a further one or more OSGB36 points established to create a true OS bearing for angle orientation. No scale factor has been applied to the survey therefore the coordinates shown are arbitrary and not true OS coordinates.
Please refer to the survey station table to enable establishment of the on-site grid.

RICS ICES

Copyright Mapmatic 2024

Product 4: Flood Risk Data Package for 436318 / 351453

EIR/2025/37649 **Date: 24/10/2025**

Flood Map for Planning: The Flood Map for Planning is now classed as Open Data. As such it can be downloaded free of charge under an open data licence from the following addresses:

- https://flood-map-for-planning.service.gov.uk/

This location is within Flood Zone 3.

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.
- ignore the presence of defences,
- do not take into account potential impacts of climate change.
- The Flood Map for Planning on Gov.uk was last updated in Spring 2025 as part of our new National Flood Risk Assessment, NaFRA2.
- Our new National Flood Risk Assessment has improved the quality and consistency of our national flood risk products due to better methods and input data. This means there are some changes to flood risk information in many areas when the new data has been published.

Zone 1: Low Probability	Land having a less than 0.1% annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map for Planning – all land outside Zones 2, 3a and 3b)
Zone2: Medium Probability	Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a: High Probability	Land having a 1% (1 in 100) or greater annual probability of river flooding; or Land having a 0.5% or greater annual probability of sea. (Land shown in dark blue on the Flood Map)
Zone 3b: Functional Floodplain	• land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or • land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). • Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. • (Not separately distinguished from Zone 3a on the Flood Map)

Probability	Percentage chance of flooding each year
1 in 2 year	50%
1 in 5 year	20%
1 in 20 year	5%
1 in 50 year	2%
1 in 100 year	1%
1 in 1000 year	0.1%
Surface Water Flooding	
1 in 30	High Risk
1 in 100	Medium Risk
1 in 1000	Low Risk

Updated Climate Change Guidance: On 19th February 2016, the Flood risk assessments: climate change allowances' was published on www.gov.uk website. It has replaced previous guidance Climate Change Allowances for Planners. The climate change guidance can be found at: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

The climate change allowances for this location are:

- **29% (central)**
- **39% (higher central),**
- **63% (upper)**

Modelled Information: This product 4 shows the updated flood zones 1, 2 and 3 from March 2025, however the flood levels or depth data is not currently available for all of the locations identified as at risk. You may wish to contact our Sustainable Places team at planning.trentside@environment-agency.gov.uk to set up a chargeable agreement to discuss your planning proposal further with our local flood risk team. Alternatively, you could contact us again at a later date when we might be in a position to provide flood depth associated with our New National Flood Risk Assessment system.
potential scale and impacts of the overestimation. Please contact us for more information on how this might impact your site of interest if required for planning purposes.

Defence Information Flood defence data in routinely updated and freely available at: AIMS Spatial Flood Defences (inc. standardised attributes) - data.gov.uk and AIMS Asset Bundle - data.gov.uk.

Historic Information: We have records of historic fluvial flooding at this location in 1977. Please note that we may or may not hold the original records in question. We do not make any claim as to the reliability of recorded flood extents or that all flood events in the area have been recorded. Please also be aware that flood defences may have been built after these historic flood events. Note - This information relates to the area the above-named property is in and is not specific to the property itself - it ***does not*** provide an indicator of flood risk ***at individual property level***.

Surface Water & Drainage: The Environment Agency (empowered under the Water Resources Act 1991) concentrates on the major elements of the drainage system, managing flood risk arising from designated "main rivers" and the sea. The Flood & Water Management Act (2010) has given Lead Local Flood Authorities (LLFAs) responsibility for the management of local flood risk, which includes surface runoff, groundwater, and flooding from ordinary watercourses (smaller rivers and streams). The LLFA for this area is **Derbyshire County Council,** and we recommend that you contact them with concerns about any flooding issues for this area.

Further information and maps for surface water, ordinary watercourses, and reservoir flooding can be found here:

https://www.gov.uk/check-long-term-flood-risk ; Reservoir flood maps: when and how to use them - GOV.UK (www.gov.uk)

Open Data Information: Many datasets are now classed as Open Data and as such can be downloaded free of charge under an open data licence from the following address: https://data.gov.uk/publisher/environment-agency

Permitting Information: Under the Environmental Permitting (England and Wales) Regulations 2016, any permanent or temporary works in, over or under a designated main river will require an Environmental Permit for Flood Risk Activities from the Environment Agency. Any permanent or temporary works within 8 metres of the top of bank of a designated main river, or landward toe of a flood defence may require an Environmental Permit for Flood Risk Activities from the Environment Agency. In addition, any permanent or temporary works within the floodplain of a designated main river may also require an Environmental Permit for Flood Risk Activities. To find out whether your activity requires a permit or falls under a relevant exclusion, exemption or standard rule please follow this link: https://www.gov.uk/guidance/flood-risk-activities-environmental-permits. The Environment Agency require access to the watercourse and free movement up to 8m from the river bank/ defence for maintenance purposes.

Please note that a permit is separate to and in addition to any planning permission granted.

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. 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 Assessment Advisory: All guidance on how to complete a full site specific Flood Risk Assessment (FRA) can be found here: Flood risk and coastal change - GOV.UK (www.gov.uk). Furthermore, information on how to use modelling for FRA's can be found here: Using modelling for flood risk assessments - GOV.UK (www.gov.uk). In addition, professional assistance can be provided by our planning officers, by contacting planning.trentside@environment-agency.gov.uk.

Flood risk assessment data

Location of site: 436318 / 351453 (shown as easting and northing coordinates)
Document created on: 21 October 2025
This information was previously known as a product 4.
Customer reference number: 3HB22M3M354F

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



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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)
- past floods
- 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
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

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 Derbyshire County.

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

About the models used

Model name: River Amber, JBA, 2012
Scenario(s): No defences exist fluvial, no defences exist climate change fluvial
Date: 1 May 2012

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 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:

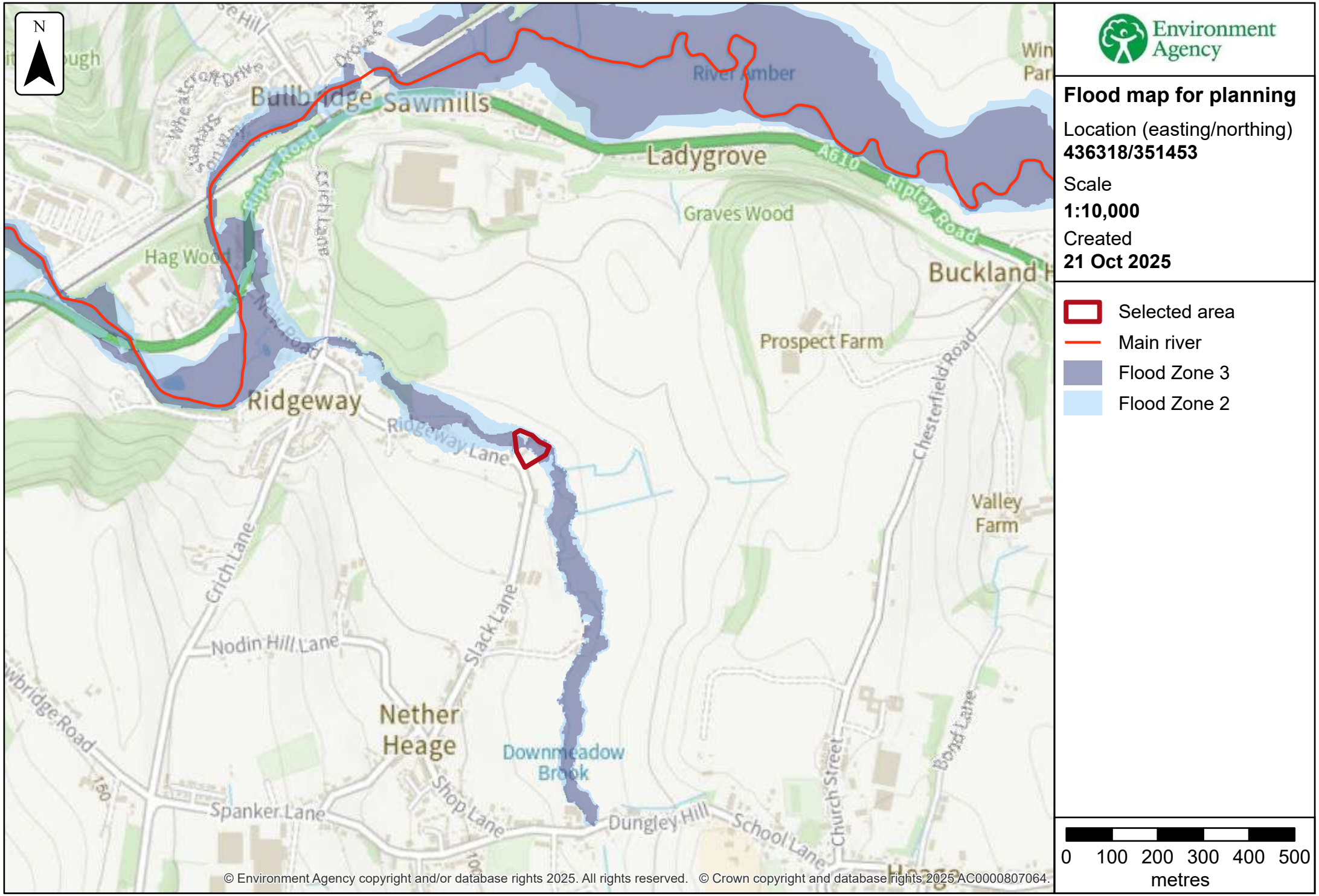
- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

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



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Past floods

Past flood events included in this document

The recorded flood outlines included in this document are for areas of land local to your site location that have been flooded by any of these sources:

- ephemeral water
- main rivers
- ordinary watercourses
- the sea
- unknown

Data limitations

The outlines do not include flooding from:

- drainage where rainfall has led to surface water ponding or overland runoff
- artificial, water-bearing sewer, water supply and wastewater treatment pipelines

Changes to flood defences

The defences (also known as assets) that were in place may also have changed. For example, assets may have been built more recently than the last recorded flood outline.

What the recorded flood outlines dataset is

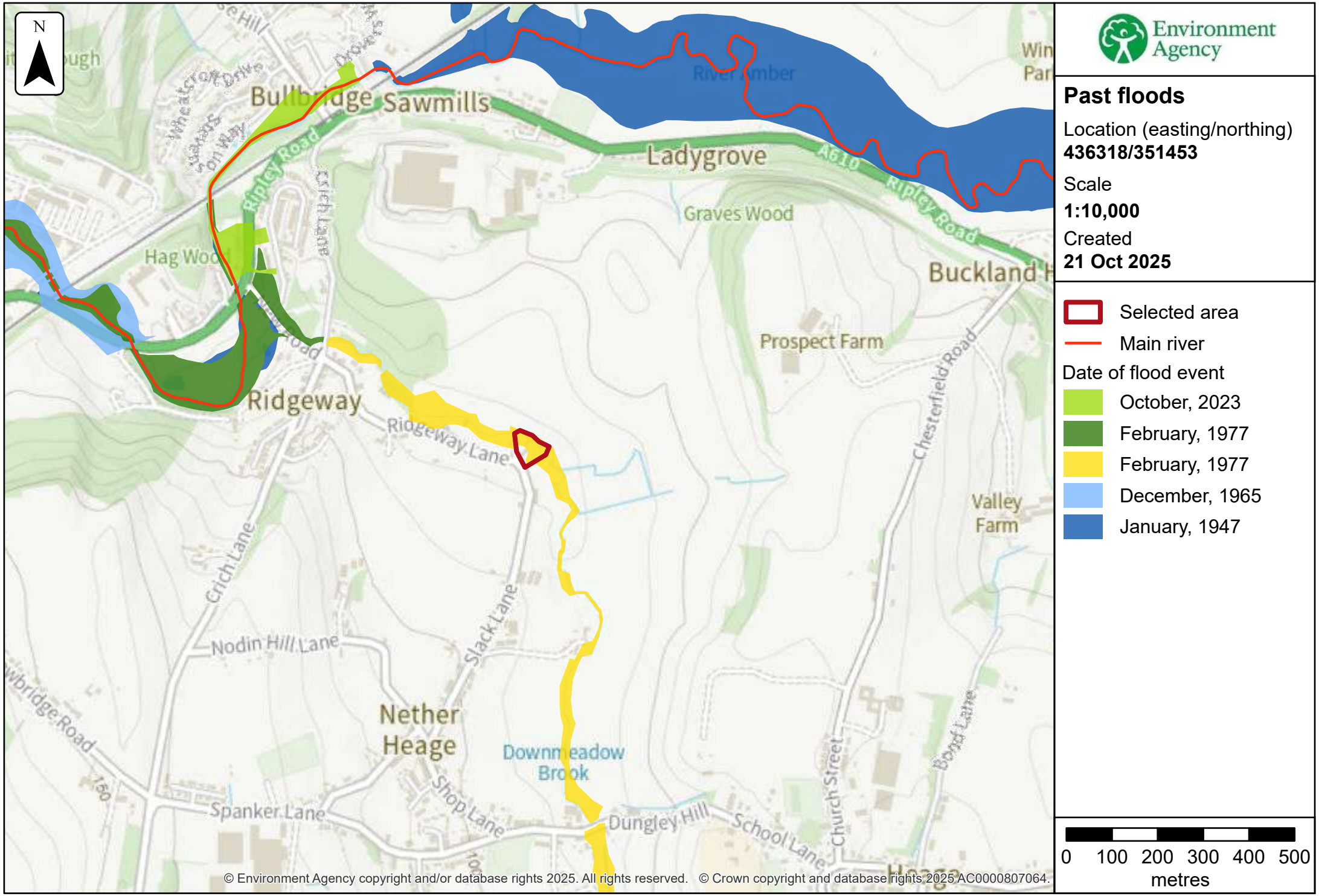
The recorded flood outlines are a geographical information system (GIS) data layer that show our verified records of areas that have flooded in the past from:

- rivers
- the sea
- groundwater
- surface water

Download the complete recorded flood outlines dataset, which includes data quality flags for outlines recorded after April 2020. This indicates the confidence we have in an outline.

Get flood information from other organisations

Contact Derbyshire County Lead Local Flood Authority (LLFA) and your drainage board to get information about past flooding caused by surface water or drainage systems.



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Data on past flood events

Start date	End date	Source of flood	Cause of flood	Affects location
16 October 2023	24 October 2023	main river	channel capacity exceeded (no raised defences)	No
25 February 1977	25 February 1977	main river	channel capacity exceeded (no raised defences)	No
1 February 1977	1 February 1977	main river	channel capacity exceeded (no raised defences)	Yes
1 December 1965	1 December 1965	main river	channel capacity exceeded (no raised defences)	No
1 January 1947	1 January 1947	main river	channel capacity exceeded (no raised defences)	No

Flood defences and attributes

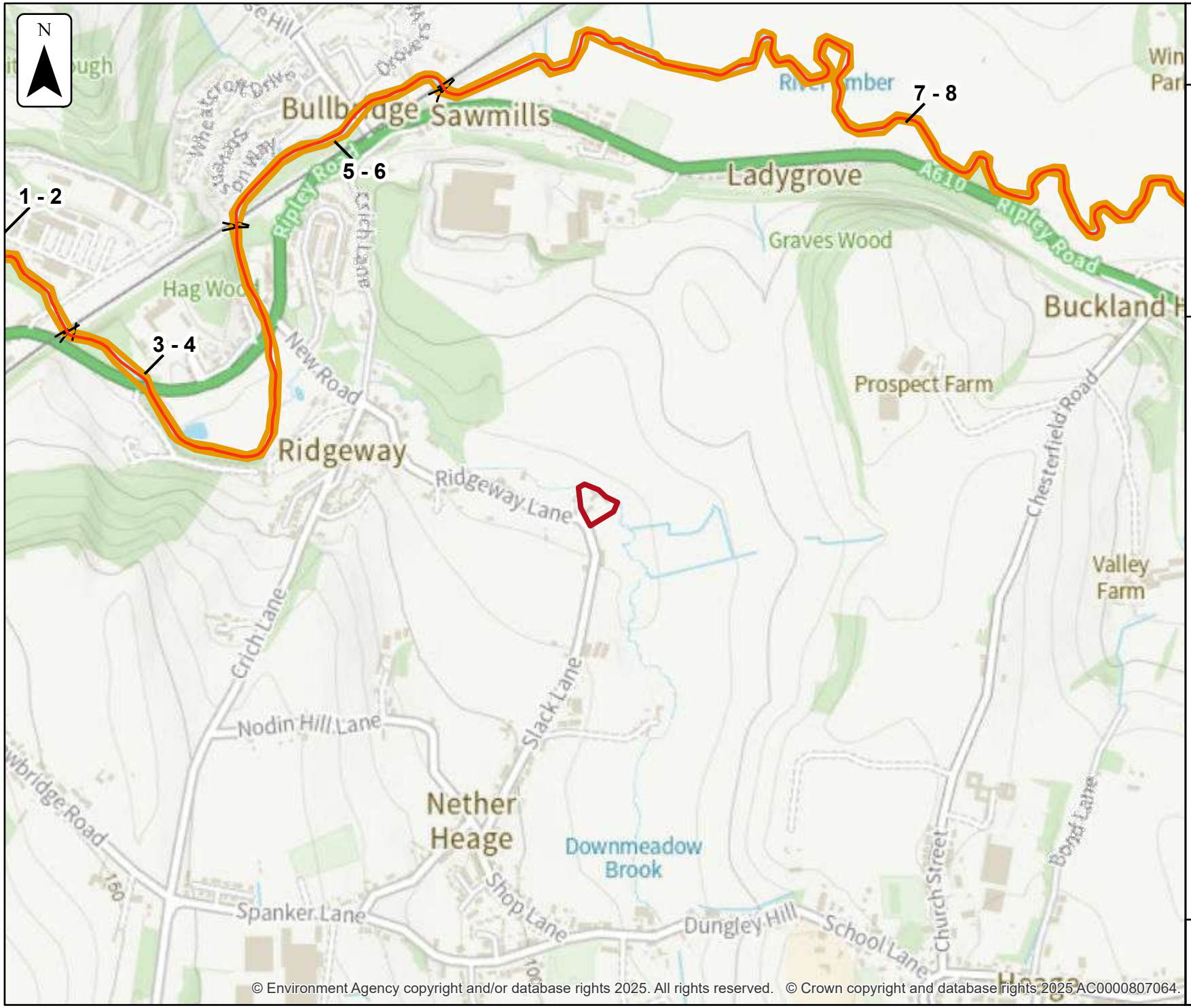
The flood defences map shows the location of the flood defences present.

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



Environment Agency

Flood defences

Location (easting/northing)
436318/351453

Scale
1:10,000

Created
21 Oct 2025

- Selected area
- Main river
- Flood defence

0 100 200 300 400 500
metres

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	397871	Engineered High Ground					
2	397872	Engineered High Ground					
3	397866	Engineered High Ground					
4	397869	Engineered High Ground					
5	397865	Engineered High Ground					
6	397862	Engineered High Ground					
7	397857	Engineered High Ground					
8	397861	Engineered High Ground					

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

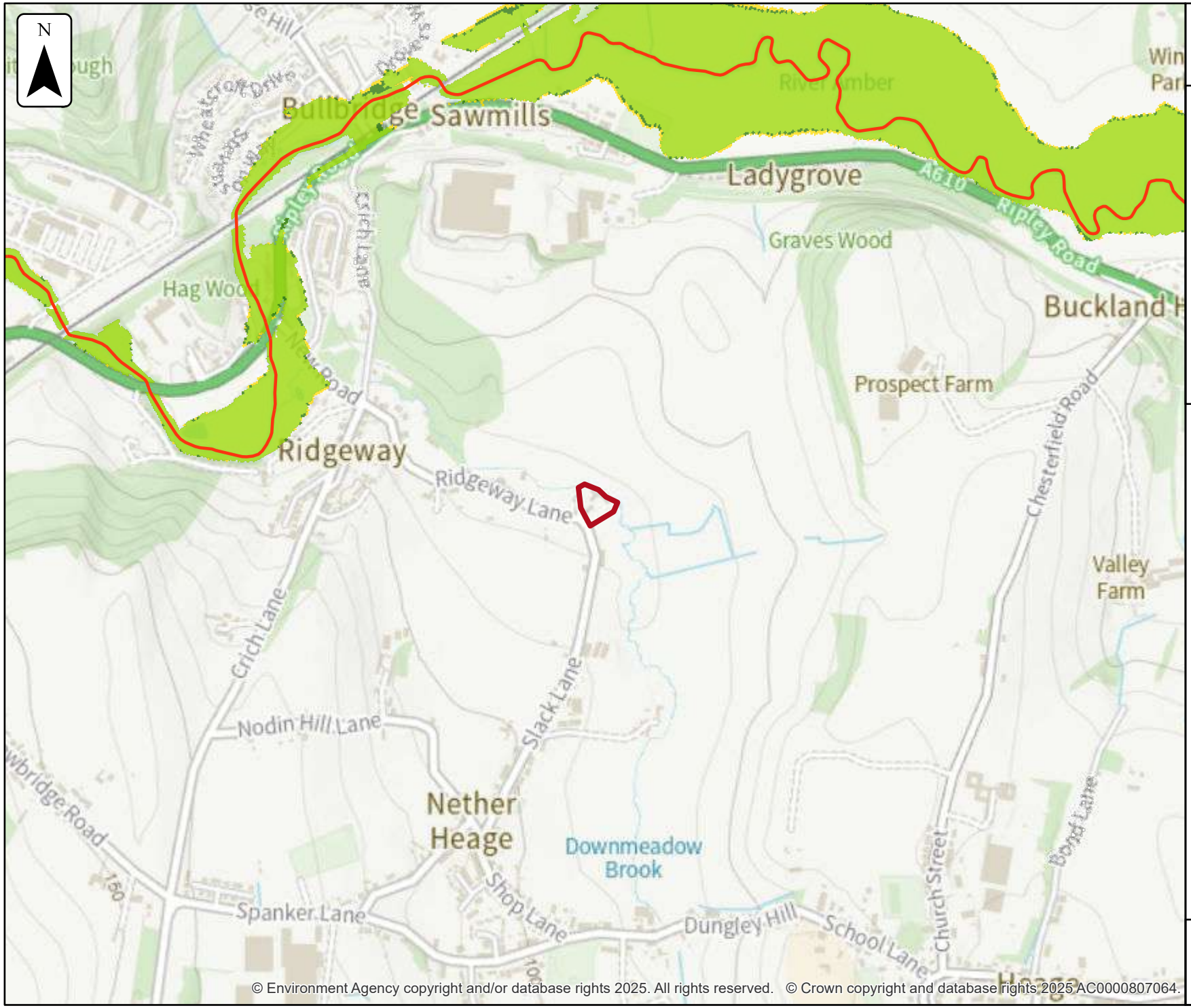
The climate change data included in the models may not include the latest flood risk assessment climate change allowances. Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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:

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



Environment Agency

No defences exist climate change modelled fluvial extent

Location (easting/northing)
436318/351453

Scale
1:10,000

Created
21 Oct 2025

Model name
River Amber, JBA, 2012

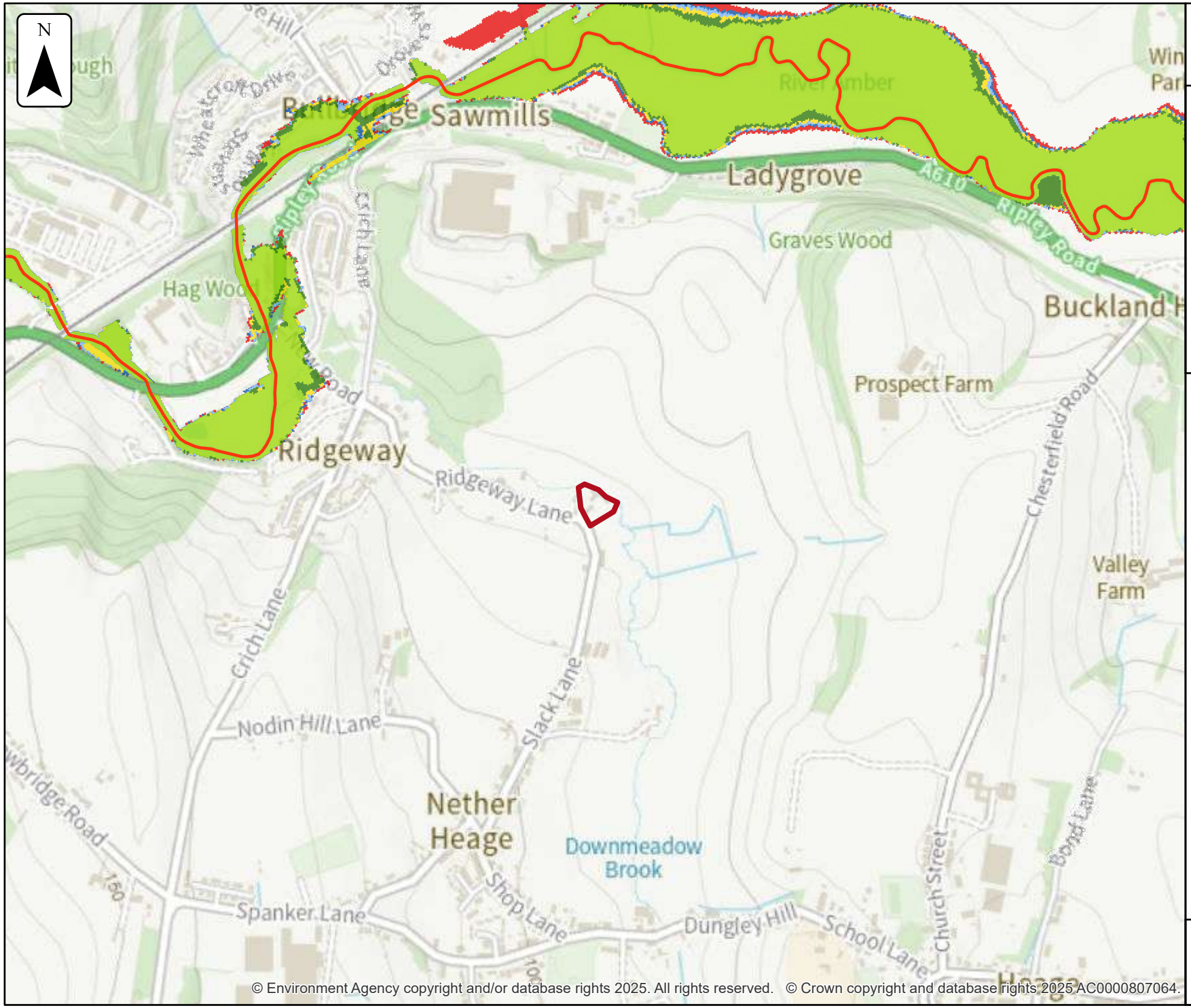
- Selected area
- Main river

Modelled flood extent

- 1% AEP (+20%)
- 1% AEP (+30%)
- 1% AEP (+50%)

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

0 100 200 300 400 500
metres



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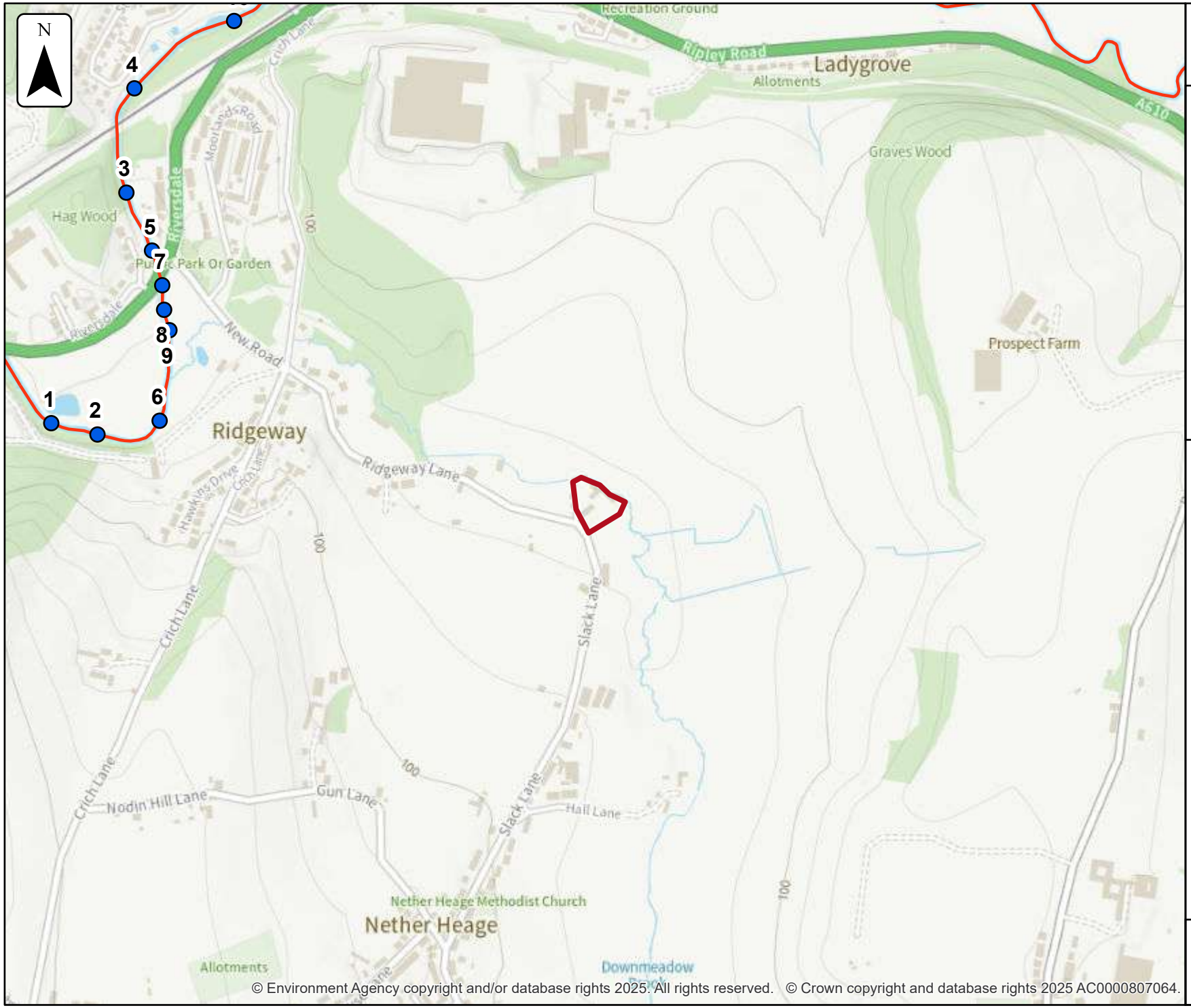

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No defences exist climate change modelled fluvial node locations

Location (easting/northing)
436318/351453

Scale
1:7,500

Created
21 Oct 2025

Model name
River Amber, JBA, 2012

- Selected area
- Modelled location
- Main river

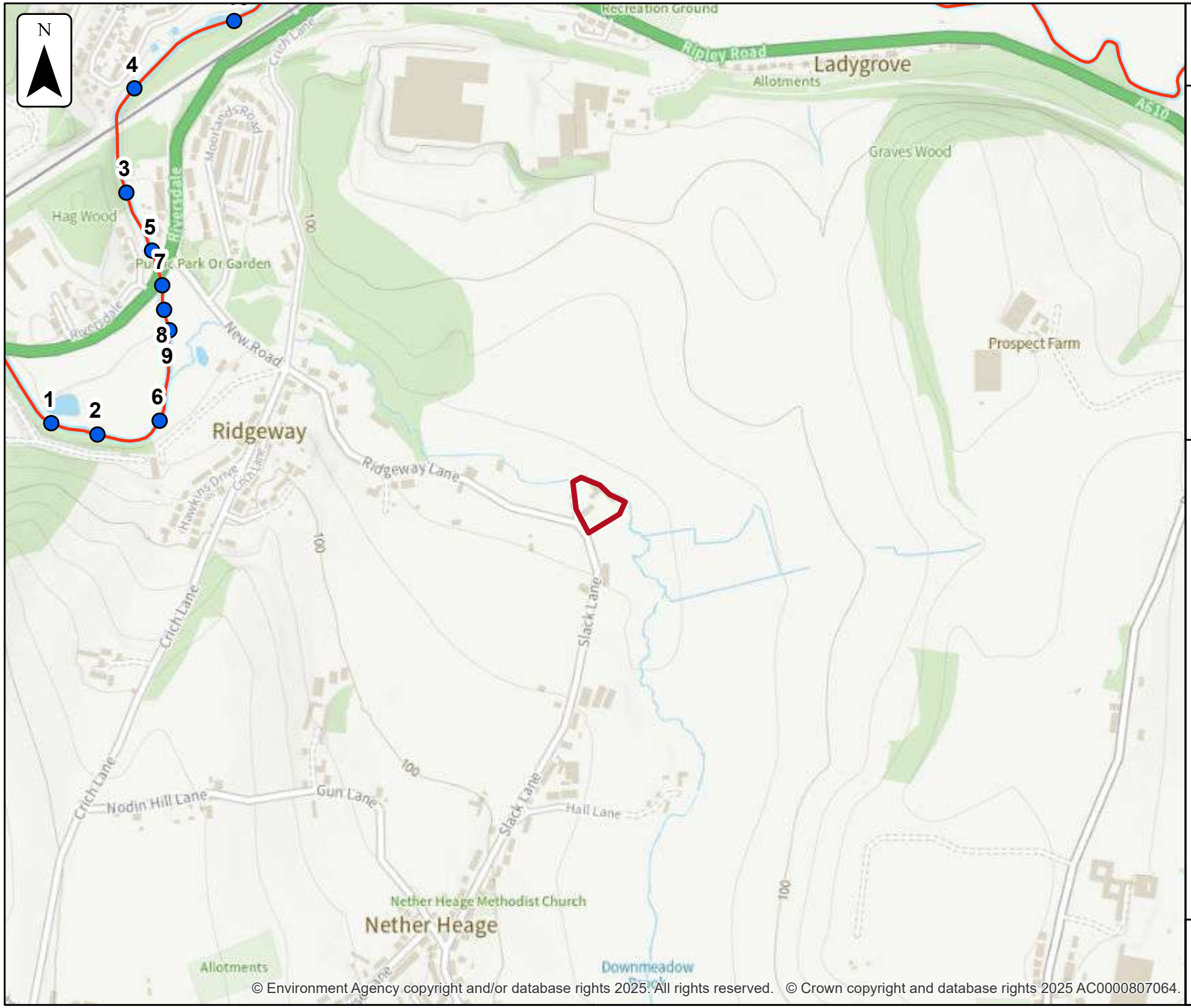
0 100 200 300
metres

Modelled node locations data

No defences exist climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
				Level	Level	Level	Flow	Flow	Flow
1	1404663	435524	351571	69.30	69.42	69.62	69.30	69.42	69.62
2	1404672	435591	351554						
3	1404614	435633	351908	71.27	71.32	71.39	71.27	71.32	71.39
4	1404651	435645	352060	71.51	71.59	71.72	71.51	71.59	71.72
5	1404644	435671	351823	71.36	71.42	71.53	71.36	71.42	71.53
6	1404647	435682	351574	69.50	69.62	69.83	69.50	69.62	69.83
7	1404626	435686	351772	70.33	70.38	70.49	70.33	70.38	70.49
8	1404621	435688	351736						
9	1404622	435696	351707	70.16	70.22	70.34	70.16	70.22	70.34
10	1404665	435791	352158						

Data in this table comes from the River Amber, JBA, 2012 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.



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Environment Agency

No defences exist modelled fluvial node locations

Location (easting/northing)
436318/351453

Scale
1:7,500

Created
21 Oct 2025

Model name
River Amber, JBA, 2012

- Selected area
- Modelled location
- Main river

0 100 200 300
metres

Modelled node locations data

No defences exist

Label	Modelled location ID	Easting	Northing	50% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level
1	1404663	435524	351571	67.95	68.40	68.58	68.80	68.91	69.01	69.07	69.26
2	1404672	435591	351554	68.04	68.51	68.71	68.96	69.08		69.24	69.45
3	1404614	435633	351908	69.42	70.39	70.71	70.95	71.05	71.12	71.14	71.23
4	1404651	435645	352060	69.55	70.49	70.81	71.08	71.20	71.30	71.32	71.46
5	1404644	435671	351823	69.41	70.40	70.72	70.98	71.09	71.17	71.20	71.31
6	1404647	435682	351574	68.14	68.58	68.76	68.99	69.10	69.19	69.25	69.46
7	1404626	435686	351772	69.11	69.73	69.88	70.03	70.09	70.16	70.17	70.28
8	1404621	435688	351736	69.04	69.64	69.78	69.92	69.99		70.07	70.17
9	1404622	435696	351707	68.91	69.55	69.70	69.85	69.92	69.99	70.01	70.12
10	1404665	435791	352158	69.94	70.99	71.36	71.68	71.82		71.96	72.11

Data in this table comes from the River Amber, JBA, 2012 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	50% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1404663	435524	351571	30.78	44.77	50.48	57.75	61.32	69.01	66.34	72.93
2	1404672	435591	351554	30.18	40.44	43.72	47.68	49.54		52.38	56.18
3	1404614	435633	351908	30.41	44.12	51.16	63.12	70.09	71.12	78.23	88.81
4	1404651	435645	352060	30.55	46.21	53.24	62.49	67.37	71.30	73.54	81.61
5	1404644	435671	351823	30.54	46.16	52.52	59.04	61.05	71.17	64.08	67.18
6	1404647	435682	351574	31.02	45.19	49.90	55.48	58.16	69.19	61.86	66.79
7	1404626	435686	351772	30.54	46.19	52.87	59.51	62.29	70.16	66.14	70.97
8	1404621	435688	351736	30.54	46.16	52.38	58.38	60.25		63.46	68.13
9	1404622	435696	351707	30.54	42.48	46.64	50.39	51.83	69.99	53.73	56.20
10	1404665	435791	352158	30.56	46.02	50.69	54.84	57.26		60.23	63.97

Data in this table comes from the River Amber, JBA, 2012 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.

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 Derbyshire County.

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 East Midlands Environment Agency team at emdenquiries@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