Flood Risk Assessment

15 Buckden Road, Brampton, Huntingdon

Date	Prepared For	Reference
February 2025	Carmen Sutton	73364



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Contract

GeoSon Limited were instructed by Carmen Sutton, by an email dated the 26th January 2025, to undertake a Site Specific Flood Risk Assessment to support a proposed planning application for development at 15 Buckden Road, Brampton, Huntingdon.

Project	Flood Risk Assessment for Planning
Prepared For	Carmen Sutton
Location	15 Buckden Road, Brampton, Huntingdon PE28 4PR
Application	Erection of a two storey extension
Our Reference	73364
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Purpose

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Introduction

Context

GeoSon Limited have been instructed by Carmen Sutton to undertake a Site Specific Flood Risk Assessment (FRA) to support a proposed planning application for development at 15 Buckden Road, Brampton, Huntingdon.

This FRA has been undertaken in accordance with the revised National Planning Policy Framework (NPPF) December 2024 and the associated Planning Practice Guidance (PPG).

The level of flood risk to and from the site has been determined using third party information including Environment Agency flood data, national government mapping, LiDAR topography data and Local Authority documentation.

National FRA Requirements

In accordance with the National Planning Policy Framework (NPPF), a Flood Risk Assessment is required to accompany a planning application when a development site is:

- located within flood zones 2 or 3 (including minor development and change of use)
- more than 1 hectare (ha) in size
- less than 1 ha in flood zone 1 however includes a change of use in development type to a more vulnerable class (for example from commercial to residential) which could be affected by sources of flooding other than rivers and the sea
- located within an area which has been identified to have critical drainage problems by the Environment Agency

The site is located within Flood Zone 2 and 3 on the Environment Agency's Flood Map for Planning. As such, in accordance with NPPF guidance the applicant is required to submit a Flood Risk Assessment.

The Flood Risk Assessment is required to consider the proposed use of the site and assess the potential flood risk posed to the intended development from multiple sources of flooding including rivers, sea, surface water, groundwater, reservoir failure, sewer surcharge and any other artificial sources.

The Flood Risk Assessment will assess the risk posed from all potential sources of flooding so that site users and third party land will be safe now and for the expected lifetime of the development, taking climate change into account.

Objectives

The objectives of this document are to determine:

- Whether the site is at significant risk of flooding from any source currently or in the future, taking climate change into account
- Whether the development will increase flood risk elsewhere

If the site is identified to be at risk of flooding from any source this FRA will:

- Outline appropriate mitigation measures, compliant with NPPF and PPG, which would be suitable to incorporate within the proposed development to alleviate flood risk on and off site
- Determine whether safe ingress and egress can be achieved and maintained for the lifetime of the development

Site Details

Site Description

The proposed application site is located at 15 Buckden Road, Brampton, Huntingdon PE28 4PR. The site is approximately 1250m^2 in size and is occupied by a detached residential dwelling in the west. A soft landscaped garden, gravel driveway and several outbuildings are located in the east.

The site is accessed via Buckden Road which runs along the western boundary of the application area.

Having reviewed aerial imagery the wider area is primarily characterised by detached residential dwellings similar to that of the site. A tributary of Brampton Brook flows in an easterly direction along the northern boundary of the site, approximately 45m north of the dwelling footprint.

Site Address	15 Buckden Road, Brampton, Huntingdon PE28 4PR
Current Use	Residential Use
Proposed Use	Residential Use
OS NGR	TL 21424 70458
County	Cambridgeshire
Local Planning Authority	Huntingdonshire District Council
Lead Local Flood Authority	Cambridgeshire County Council

Table 1: Site Details



Figure 1: Photo of the Site Taken from above Buckden Road (Source: Zoopla)

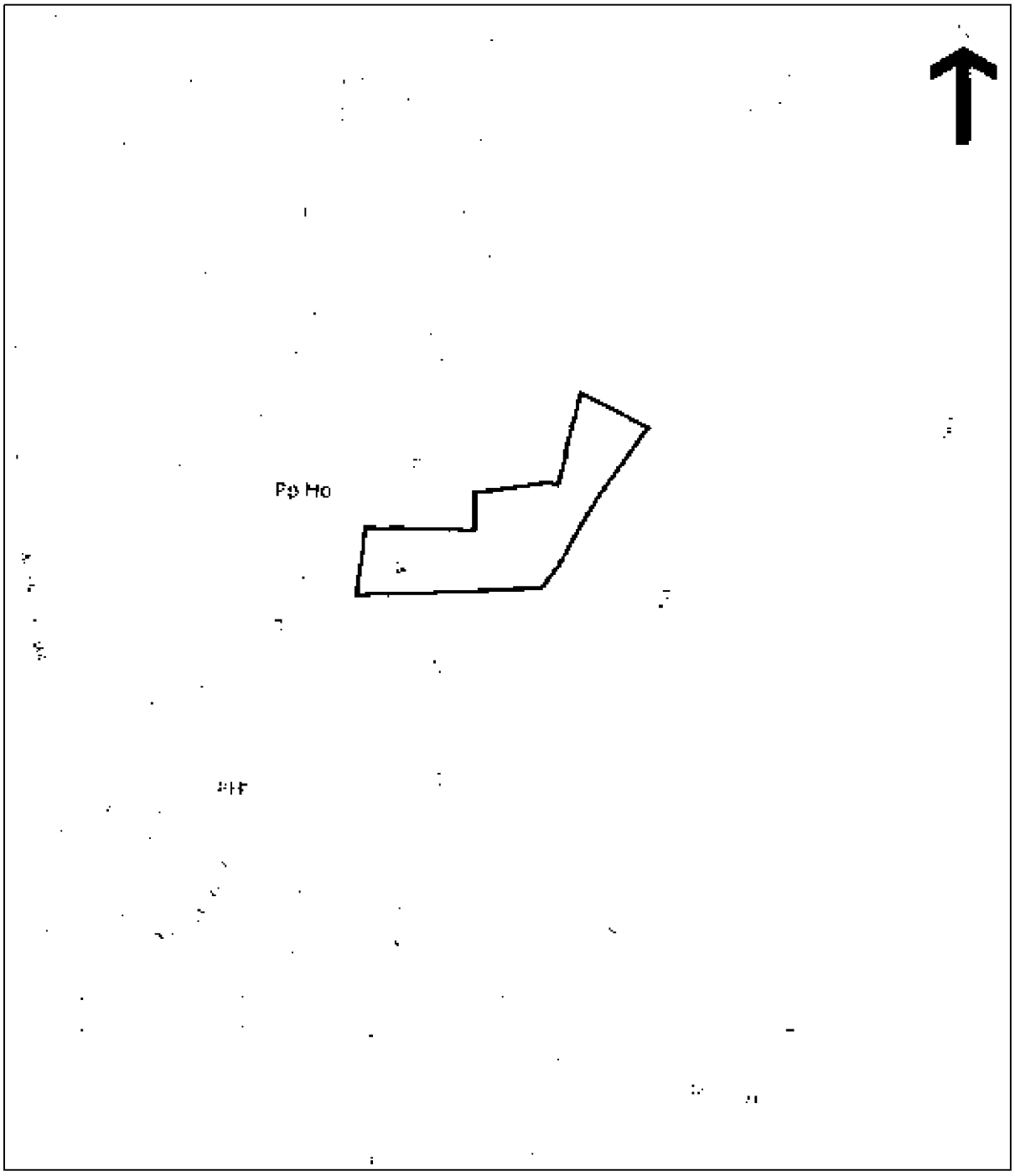


Figure 2: Site Location

Topography

Topographic LiDAR data has been obtained from the Environment Agency to assess the ground elevation profile across the site and within the wider area.

Light Detection and Ranging (LiDAR) is an airborne remote sensing technique, which accurately measures the height of the terrain and surface objects on the ground through the use of a laser, scanner and GPS receiver. The mapping technique measures the distance between the aircraft and the ground to generate precise, three-dimensional information of the terrain and surface objects. Hundreds of thousands of measurements per second are made of the ground, allowing highly detailed surface and terrain models to be generated at different spatial resolutions ranging between 25cm and 2.0 metres.

The LiDAR dataset can be supplied in two forms by the EA:

1. As a Digital Surface Model (DSM), which includes surface objects, such as vehicles, buildings and vegetation, as well as the terrain surface. Or;
2. As a Digital Terrain Model (DTM) produced by removing surface objects such as buildings from the Digital Surface Model through application of bespoke algorithms and manual filtering techniques.

For the purposes of this study the 1.0m resolution Digital Terrain Model has been used.

Environment Agency 1.0m LiDAR data indicates that the ground topography within the red outline application boundary ranges between 10.20mAOD, associated with land along the northern periphery (adjacent to the watercourse), and 11.60mAOD in the south eastern corner of the site.

Based on plans provided by the applicant, the proposed rear extension will be constructed upon land with an approximate elevation of 11.20mAOD.

The section of Buckden Road, adjacent west of the site, appears to be elevated at 11.10-11.20mAOD.

Figure 3 shows the elevation profile of the site and surrounding area.



Figure 3: Topography of the Site and Surrounding Area

Existing Finished Floor Levels

Review of available online information indicates that there is a step up into the dwelling from the front entrance.

In light of this, and having reviewed the property listing images, it is considered that the Finished Floor Level of the residential dwelling is raised at least 150mm above adjacent, external ground levels along the western elevation of the property.

A conservative approach has been adopted to estimate the existing Finished Floor Level utilising the assumed threshold measurement and the average LiDAR elevation which corresponds to land along the western façade of the existing dwelling.

Comparison of the estimated threshold measurement at 15 Buckden Road with corresponding EA LiDAR data indicates that the dwelling has an existing Finished Floor Level of approximately 11.30mAOD (workings below).

Average External LiDAR Elevation (mAOD)	+	Estimated Threshold (m)	=	Approximate Finished Floor Level (mAOD)
11.15	+	0.15	=	11.30

Table 2: Estimated Existing Finished Floor Level

Geology and Hydrogeology

Review of online British Geological Survey (BGS) records indicate that the site is located upon Oxford Clay Formation (Mudstone) bedrock.

This geological strata was formed between the Callovian Age and Oxfordian Age some 154.8 to 165.3 million years ago.



Figure 4: Bedrock Geology Map (Source: British Geological Survey)

According to BGS data the site is also underlain by superficial deposits comprising River Terrace Deposits (Sand and Gravel).

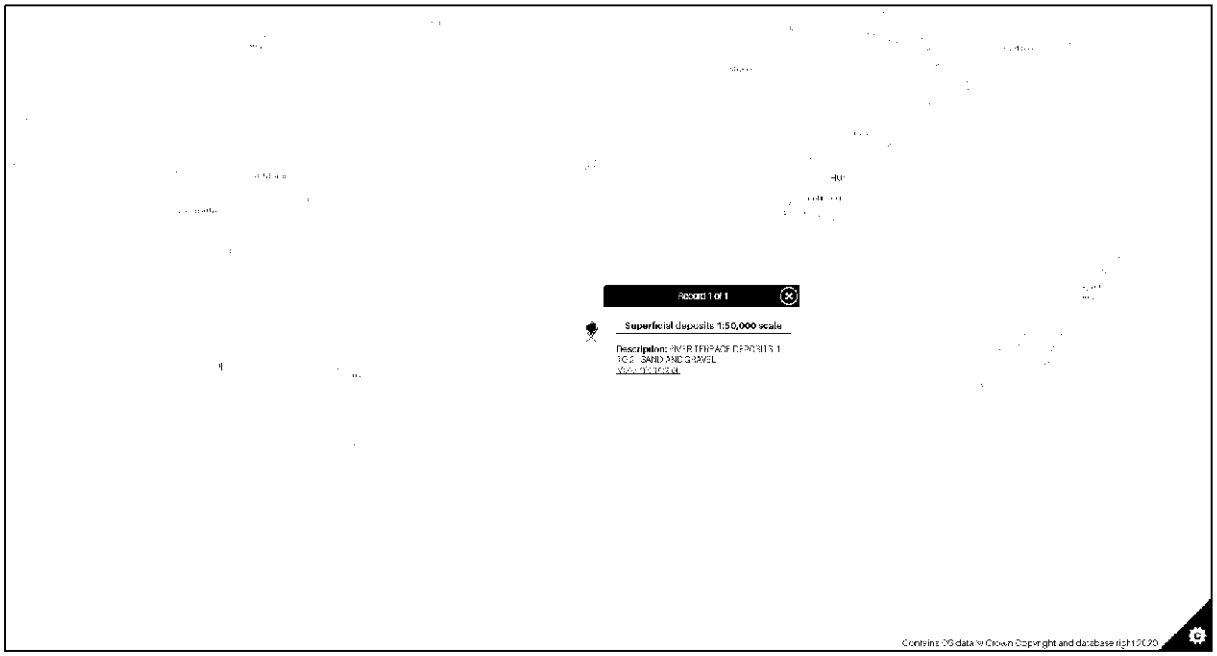


Figure 5: Superficial Geology Map (Source: British Geological Survey)

Review of Landis Soilscapes online viewer suggests that the site is located in an area where the soils are classified as 'Freely draining slightly acid loamy soils'.

DEFRA 'Magic Maps' indicate that there are no groundwater Source Protection Zones beneath the site. According to DEFRA 'Magic Maps' the closest Source Protection Zone to the site is located approximately 4.40km east of the development and is classified as a Zone 3 – Total Catchment Zone.

Nearby Watercourses

Review of aerial imagery indicates that a tributary of Brampton Brook flows in an easterly direction along the northern boundary of the site.

In addition to the watercourse which flows along the site boundary, several other water features have been identified within a 1.0km radius of 15 Buckden Road, including:

- Brampton Brook some 100m north of the building footprint, and
- The River Great Ouse 620m east

The River Great Ouse and Brampton Brook are classified as Main Rivers and are therefore managed by the Environment Agency.

Review of aerial imagery and the OS Open Map watercourse layers indicates that there are several additional water features including drainage ditches and ponds located within the surrounding area. The majority of these are managed by Alconbury & Ellington Internal Drainage Board.

Watercourses within a 1.0km of the site are shown in Figure 6.

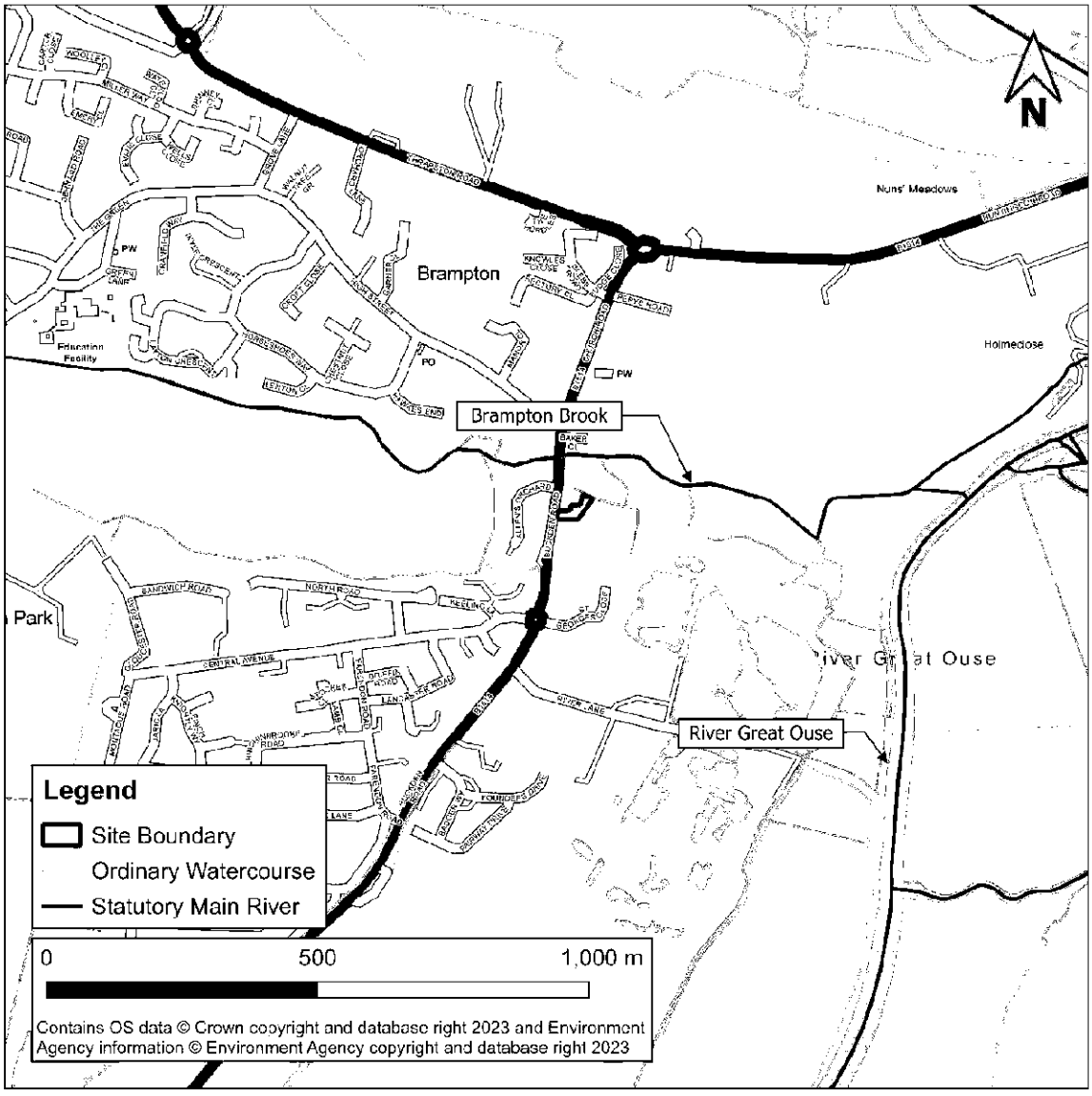


Figure 6: Watercourses Near the Site

Proposed Development

Development Proposals

The proposed planning application is for demolition of an existing porch followed by construction of a two storey rear extension.

According to plans provided by the applicant the proposed extension will provide additional space at ground floor level to create a larger kitchen and a new family room. An additional en-suite bedroom will be created at first floor level.

No bedrooms will be introduced at ground floor level as part of the proposals and no new residential units will be created within the site curtilage.

It has been confirmed that the Finished Floor Level of the proposed extension will match the existing ground floor level to allow a seamless connection between the extension and the main house.

Copies of the proposed site layout plans are shown in Figure 7 and Appendix B.

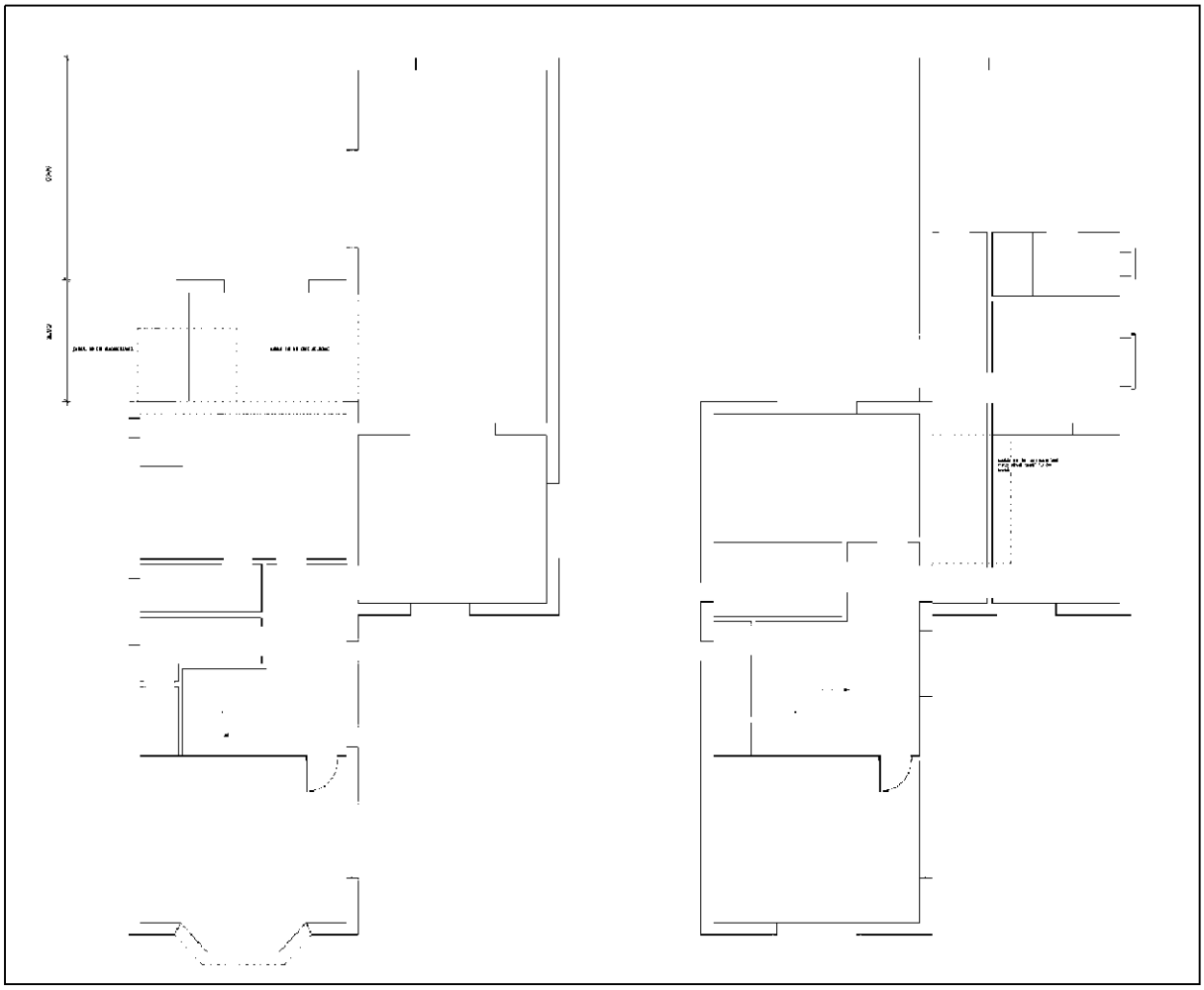


Figure 7: Proposed Ground and First Floor Layout Plan

Development Vulnerability Classification

The National Planning Policy Framework classifies land use type in terms of vulnerability to flooding. Annex 3 of the NPPF details the flood risk vulnerability classification for each land use type (refer below).

Essential infrastructure

- Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.
- Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including infrastructure for electricity supply including generation, storage and distribution systems; including electricity generating power stations, grid and primary substations storage; and water treatment works that need to remain operational in times of flood.
- Wind turbines.
- Solar farms.

Highly vulnerable

- Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding.
- Emergency dispersal points.
- Basement dwellings.
- Caravans, mobile homes and park homes intended for permanent residential use.
- Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure'.)

More vulnerable

- Hospitals
- Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.
- **Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.**
- Non–residential uses for health services, nurseries and educational establishments.
- Landfill* and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.

Less vulnerable

- Police, ambulance and fire stations which are not required to be operational during flooding.
- Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'more vulnerable' class; and assembly and leisure.
- Land and buildings used for agriculture and forestry.
- Waste treatment (except landfill* and hazardous waste facilities).

• Minerals working and processing (except for sand and gravel working). • Water treatment works which do not need to remain operational during times of flood. • Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place. • Car parks.
Water-compatible development
• Flood control infrastructure. • Water transmission infrastructure and pumping stations. • Sewage transmission infrastructure and pumping stations. • Sand and gravel working. • Docks, marinas and wharves. • Navigation facilities. • Ministry of Defence installations. • Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. • Water-based recreation (excluding sleeping accommodation). • Lifeguard and coastguard stations. • Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms. • Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

Table 3: Flood Risk Vulnerability Classification (Source: NPPF)

The site is currently occupied by a single residential property. Therefore, in terms of flood risk vulnerability it is considered "More Vulnerable".

The proposals comprise construction of a two storey rear extension. As such, according to NPPF guidance the site as whole will remain "More Vulnerable" post development.

In light of this, it is considered that the vulnerability of the site will not increase as a result of the development.

Sequential and Exception Test Guidance

In accordance with the National Planning Policy Framework, and associated Planning Practice Guidance, the Sequential and Exception Tests should be undertaken to determine the most appropriate location for a development and used to inform the proposed design layout.

The Sequential Test is designed to steer new development to areas with the lowest risk of flooding, taking all sources of flood risk and climate change into account.

The Exception Test is undertaken when development in a flood risk area cannot be avoided. The Exception Test comprises of two elements which need to be satisfied before a development can be permitted. It needs to be demonstrated that:

1. A development will provide wider sustainability benefits to the community that outweigh flood risk; and
2. A development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test Required	✓	✓	✓
Zone 3a	Exception Test Required	X	Exception Test Required	✓	✓
Zone 3b	Exception Test Required	X	X	X	✓

Table 4: Flood risk vulnerability and flood zone 'incompatibility' (Source: PPG)

Given the nature of the proposals the development is considered 'More Vulnerable'.

According to Table 4 (above) 'More Vulnerable' development is considered suitable within Flood Zone 1, 2 and 3a (subject to undertaking the Exception Test).

However, it should be noted that Sequential and Exception Tests do not apply to Change of Use and Minor Extension applications such as this.

EA Standing Advice Guidance

Environment Agency Standing Advice guidance applies to household or non-domestic extensions where the additional footprint created by the development is no more than 250 square metres.

The proposed extension will have a total built footprint of 60m^2. Therefore, it is considered that EA standing advice applies.

In accordance with the EA's Standing Advice for Minor Extensions, the following information is required within the Flood Risk Assessment:

- Plans showing the Finished Floor Levels (FFL) and estimated flood levels
- Assurance that the floor levels will be set either no lower than existing floor levels or 300 millimetres above estimated flood levels
- Details of appropriate flood resistance and resilience measures. Resilience measures should be recommended in accordance with Construction Industry Research and Information Association (CIRIA) Property Flood Resilience Code of Practice guidance.
- Confirmation that the development will not be flooded by surface water runoff or groundwater. This could be by diverting water away from the property (but managing the diverted water safely within the wider site) or by raising finished floor levels above the estimated flood depths.

If the minor extension is considered to be at increased flood risk as a result of multiple minor extensions in the area, the FRA will also need to include an assessment of off-site flood risk.

Assessment of Flood Risk

Flood risk is a combination of:

- the probability (likelihood or chance) of a flood event happening; and
- the potential consequences (impact) if an event were to occur.

In accordance with guidance set out in the Flood Risk and Coastal Change section of the PPG, areas at risk of flooding should be considered as those at risk of flooding from any source, now or in the future.

This study uses publicly available data (including EA flood maps and Local Authority documentation) to assess the potential flood risk posed to the intended development from multiple sources of flooding and the risk of flooding elsewhere, as a result of the proposals.

Where flood risks are identified this study outlines appropriate mitigation measures, compliant with NPPF and PPG, which would be suitable to incorporate within the proposed development to manage said flood risk(s).

Historical Flooding

Huntingdonshire Integrated Water Management Strategy: Level 1 Strategic Flood Risk Assessment (2024) states that:

The main source of flood risk in Huntingdonshire is from main rivers and ordinary watercourses. According to the HDC 2017 SFRA, the main source of flood risk is associated with the River Great Ouse and its tributaries. However, Huntingdonshire has also experienced a number of historic surface water / drainage related flood events caused by a number of mechanisms from insufficient storm and combined drainage capacity to poor surface water management.

The SFRA highlights that Brampton and Buckden have a history of surface water and fluvial related incidents. Cambridgeshire County Council have investigated and completed several Section 19 reports for the two conurbations following recent 'locally significant' flood events.

Having reviewed the Flood Investigation Report which summarises the flood event that occurred in Brampton on the 23rd December 2020, a total of 24 flood reports were received by the LLFA. Of the 24 flood reports made nine related to internal property flooding with the remaining reports associated with flooding of roads and gardens. The most significantly impacted areas comprised land and properties located along Thrapston Road, The Fairways and Park Road. No information has been provided to suggest that the site itself was impacted during the December 2020 event.

In addition to the information detailed within the Local Authority's documentation, review of the Environment Agency's Recorded Flood Outline and Historic Flood Map datasets indicate that one historical flood event has been recorded to have extended up to the northern boundary of the site (refer to Figure 8).

According to information held by the EA land adjacent north of the application boundary flooded in Easter 1998.

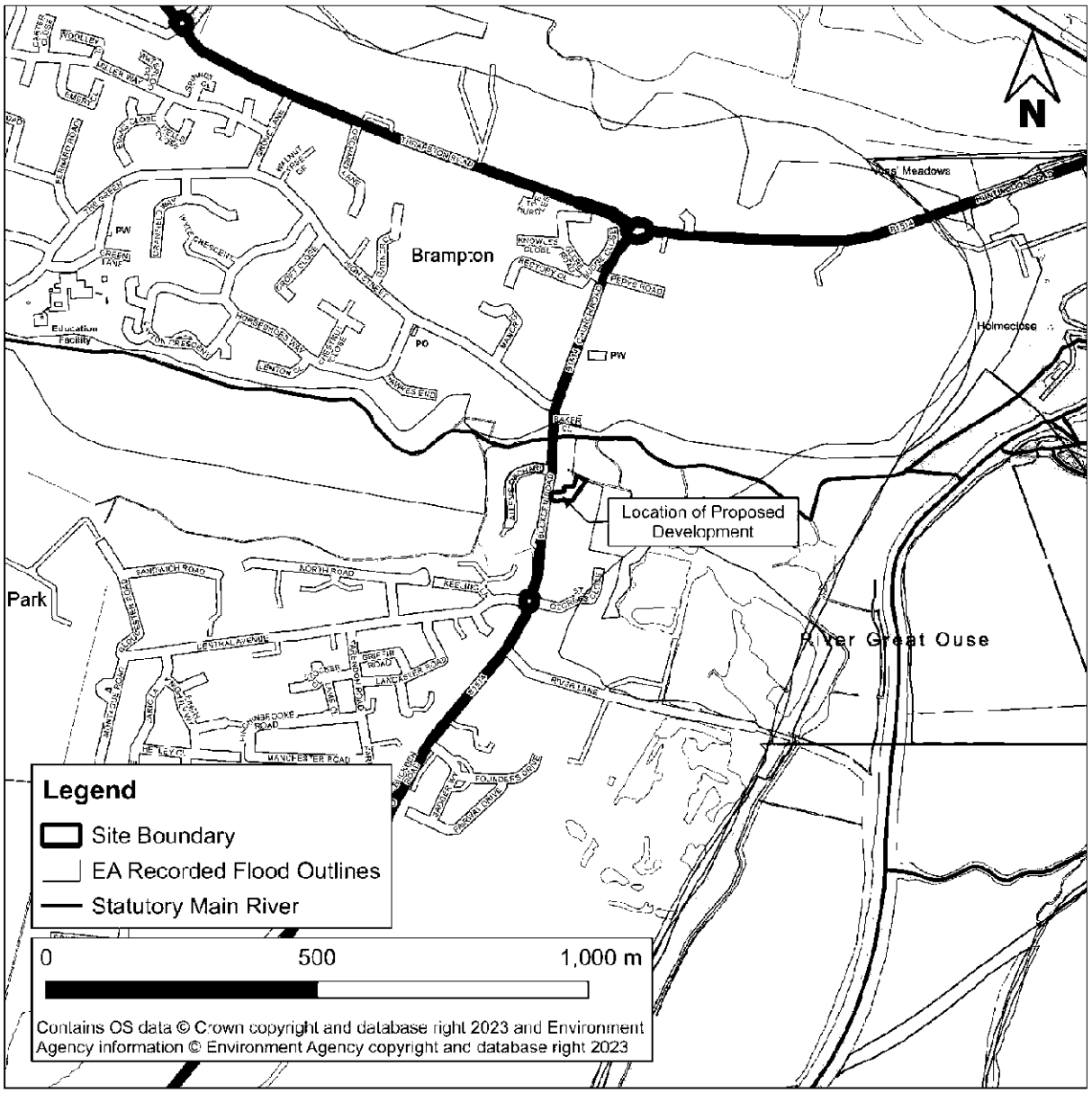


Figure 8: Environment Agency Recorded Flood Outlines

Fluvial (Rivers)

Environment Agency Flood Zones

The Environment Agency has created a set of Flood Zones which shows the risk of flooding from rivers and sea in England, for several return period events, ignoring the presence of defences. The Flood Zones are shown on the EA's Flood Map for Planning which forms the basis for assessing flood risk and development suitability under the National Planning Policy Framework.

Flood Zone	Definition
Zone 1 Low Probability	Land having a less than a 1 in 1000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map for Planning – all land outside Zones 2, 3a and 3b)
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1000 annual probability of tidal flooding. (Land shown in light blue on the Flood Map)
Zone 3a High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of tidal flooding. (Land shown in dark blue on the Flood Map)
Zone 3b Functional Floodplain	This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. The functional floodplain will normally comprise: • land having a 1 in 30 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 1 in 1000 annual probability of flooding). Areas of functional floodplain should be identified by local planning authorities within Strategic Flood Risk Assessments, in agreement with the Environment Agency. (Note, Zone 3b is not separately distinguished from Zone 3a on the Flood Map).

Table 5: Flood Zone Definitions (Source: Planning Practice Guidance)

Note: The Flood Zones shown on the Environment Agency's Flood Map for Planning (Rivers and Sea) do not take into account the possible impacts of climate change and consequent changes in the future probability of flooding.

According to the Environment Agency's Flood Map for Planning (refer to Figure 9) the site is located within Flood Zone 2 and Flood Zone 3.

Flood Zone 2 and 3 are defined as follows:

- Flood Zone 2 - land which has between a 1 in 100 and 1 in 1000 annual probability of fluvial flooding, and a 1 in 200 and 1 in 1000 annual probability of tidal flooding
- Flood Zone 3 - land which has greater than a 1 in 100 annual probability of fluvial flooding, and greater than a 1 in 200 annual probability of tidal flooding.

The primary sources of flood risk to the site appear to originate from Brampton Brook and the River Great Ouse located some 100m north and 620m east of the dwelling, respectively.

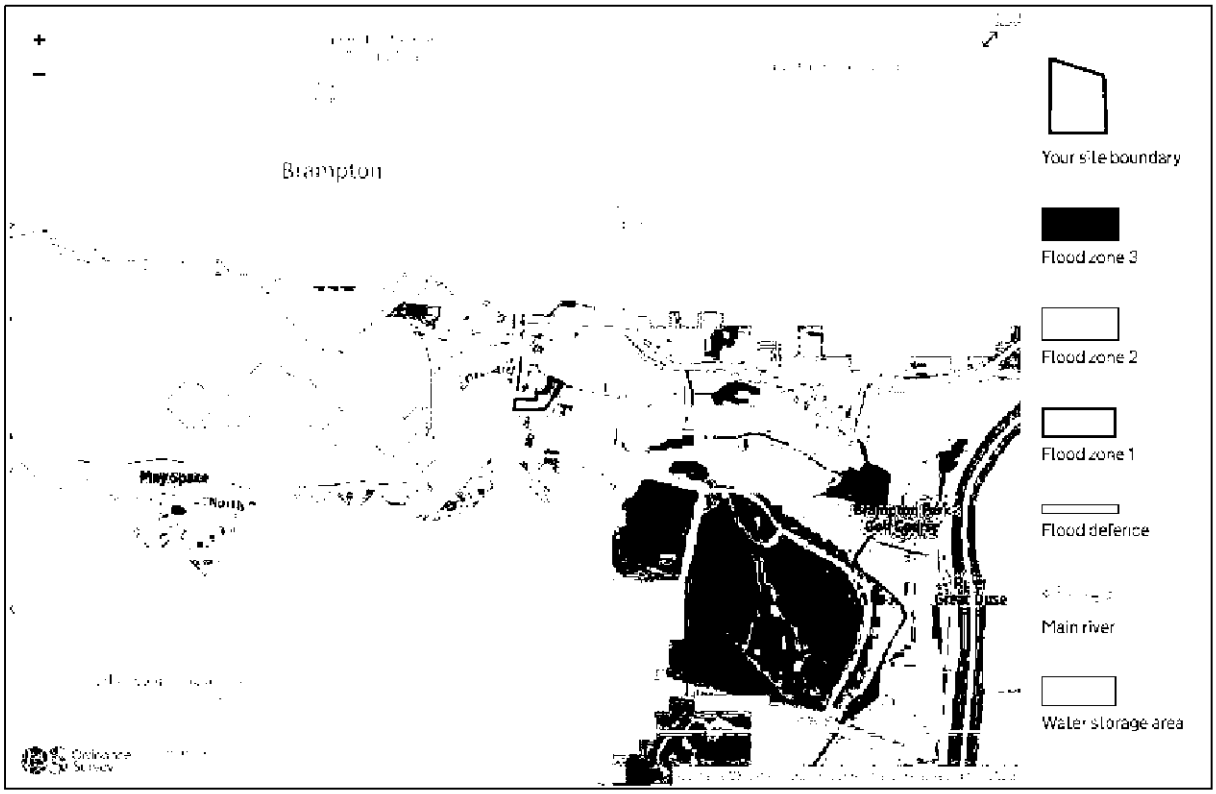


Figure 9: Environment Agency Flood Map for Planning (Source: EA)

Huntingdonshire District Council Level 1 SFRA Flood Zones

In 2024 Huntingdonshire District Council published its current Integrated Water Management Strategy: Level 1 Strategic Flood Risk Assessment which provides a catchment wide assessment of current and future flood risk from all sources.

Following production of the Level 1 SFRA Huntingdonshire District Council created an interactive online viewer which shows flood data from numerous sources across the catchment. The interactive mapping tool presents data from the SFRA and includes modelled information relating to Brampton and the surrounding area.

Review of Huntingdonshire District Council's online flood map shows that the development area is located entirely outside of the modelled Flood Zone 3a and Flood Zone 3b extents. However, the extension footprint is shown to be situated within the modelled Flood Zone 2 extent.

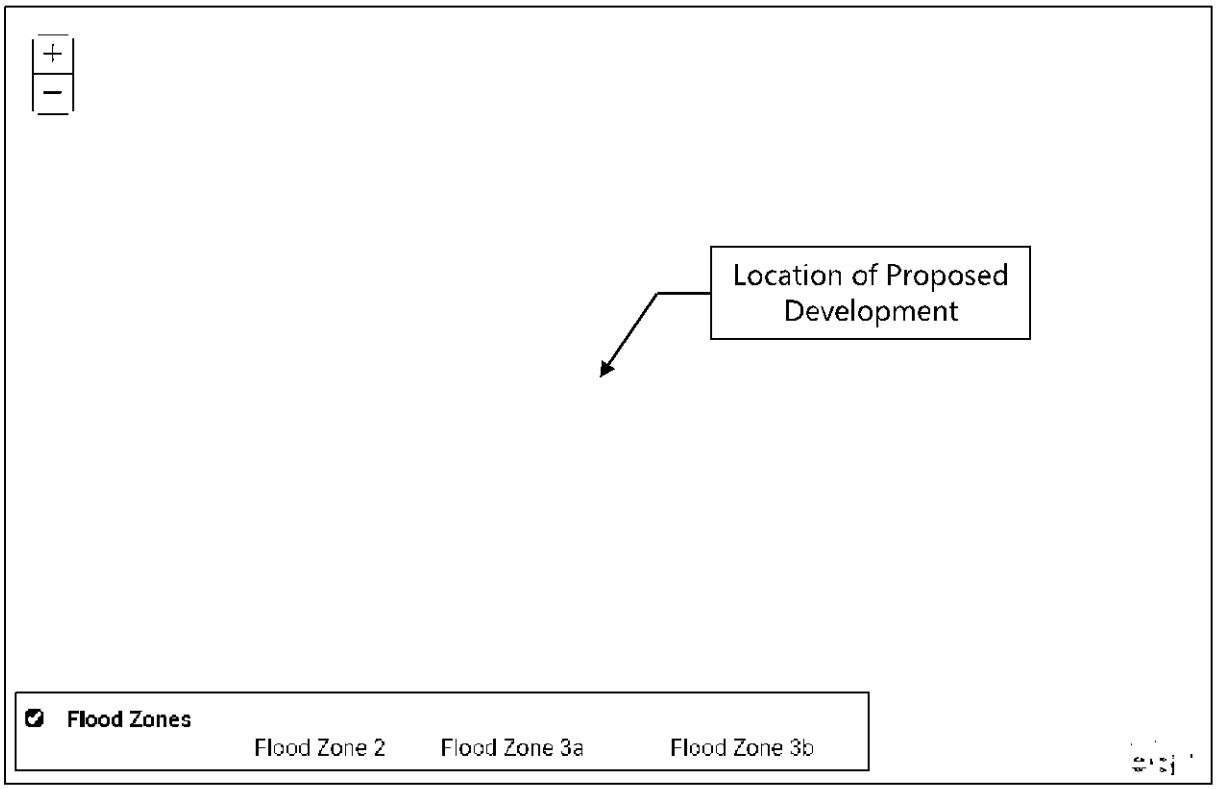


Figure 10: Extract of Flood Zone Extent Map (Source: HDC SFRA 2024)

Additionally, Huntingdonshire District Council's SFRA interactive map presents modelled climate change flood extent mapping for the fluvial climate change event. As can be seen in Figure 11, whilst part of the site is located within the climate change extent the development footprint itself is located entirely above of the modelled climate change flood level.

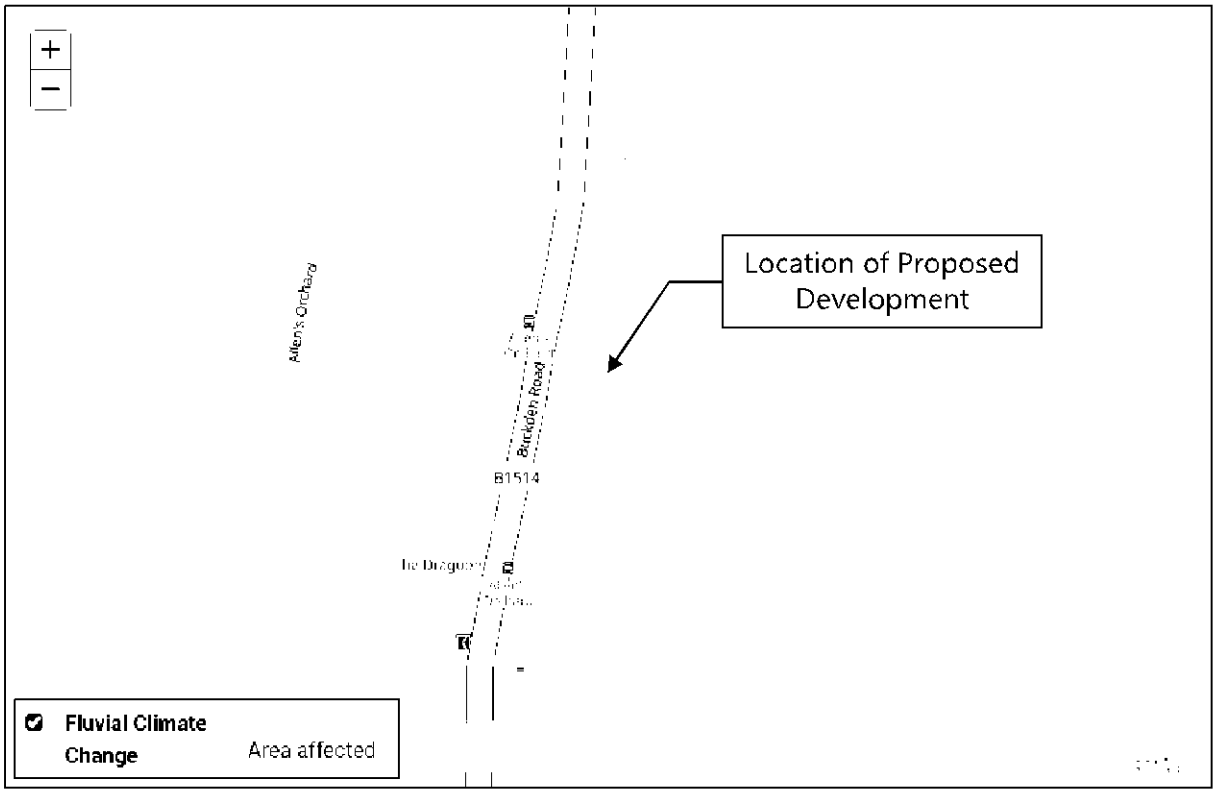


Figure 11: Modelled Climate Change Extent Mapping (Source: HDC SFRA 2024)

Environment Agency Product 4 Response

Considering that the site has been modelled within Flood Zone 2 and 3 on the Environment Agency's Flood Map for Planning, a Product 4 enquiry was raised with the Environment Agency to obtain detailed flood model information in the relation to the site.

A Product 4 response (EA reference: UR3DM3HKR5E9) was received in February 2025 (refer to Appendix C). Within which the Environment Agency provided details of in-channel flood levels and flows as well as 2D floodplain levels extracted from three local flood models, including the:

- 2015 Lower Ouse Downstream Model
- 2015 Lower Ouse Brampton Model, and
- 2015 Lower Ouse Alconbury Brook Model

Having reviewed the data provided, the site is not impacted by modelled fluvial extents taken from Alconbury Brook Model element of the Lower Ouse model. Additionally, only the northern periphery of the site is shown to be at risk of flooding during the 1 in 1000yr event in the 2015 Lower Ouse Brampton Model.

The application area does however lie within several fluvial extents taken from the Lower Ouse Downstream Model.

Therefore, the following section provides a review of the modelled outputs taken from the 2015 Lower Ouse Downstream Model.

Defended and undefended 2D floodplain levels and corresponding depths have been provided for 30 node points across the site and within the immediate surrounding area for several return period events including the 1% AEP (1 in 100 year), 0.1% AEP (1 in 1000 year) and the 1% AEP (1 in 100 year) plus 20% climate change scenario. Refer to Figure 12.

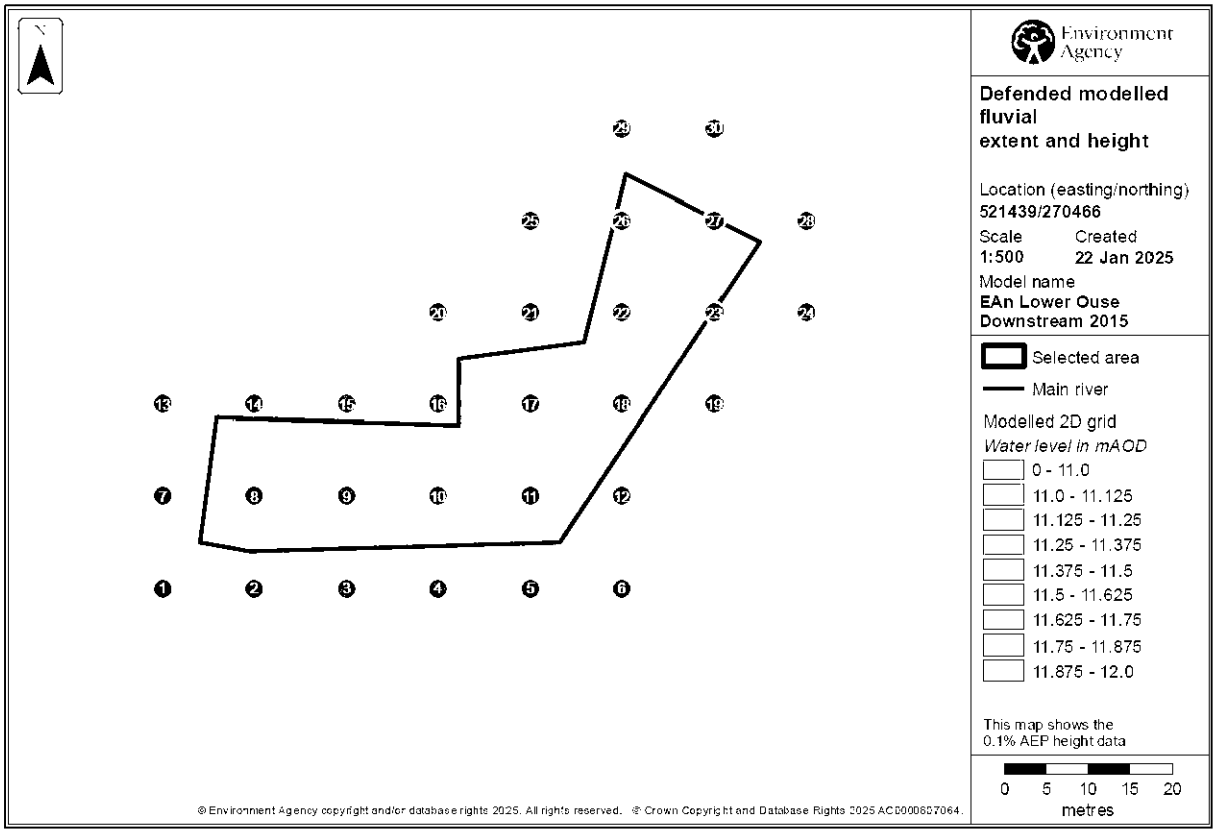


Figure 12: Node Point Locations (Source: EA)

Table 6 (below) shows the maximum reported fluvial 2D floodplain level at the site for each return period event.

The full list of flood levels and depths at the site along with in-channel flood levels and flows can be seen in Appendix C.

Return Period Event	Modelled Floodplain Levels at the Site (mAOD)	
	Defended	Undefended
50% (1 in 2) AEP	10.85	-
20% (1 in 5) AEP	10.94	-
10% (1 in 10) AEP	10.99	-
5% (1 in 20) AEP	11.04	11.04
4% (1 in 25) AEP	11.05	-
2% (1 in 50) AEP	11.11	-
1.33% (1 in 75) AEP	11.13	-
1% (1 in 100) AEP	11.15	11.15
1% (1 in 100) AEP +20%CC	11.25	-
0.5% (1 in 200) AEP	11.23	-
0.1% (1 in 1000) AEP	11.54	11.54

Table 6: Modelled Flood Levels at the Site (Source: Lower Ouse Downstream Model 2015)

As shown in Table 6 where modelled flood levels are available for both the defended and undefended scenarios the reported flood level for each return period is the same.

Comparison of the modelled 2D floodplain levels provided within the Environment Agency's Product 4 response with ground levels at the site (10.20mAOD to 11.60mAOD, taken from EA LiDAR data) indicate that parts of the application area could experience flooding during all modelled scenarios.

Based on plans provided by the applicant, the proposed rear extension will be constructed upon land with an approximate elevation of 11.20mAOD. Therefore, it is considered that the extension will be constructed upon land elevated above all modelled flood scenarios up to the 1 in 100yr +20% CC event.

Climate Change Uplifts

Since the Lower Ouse Downstream Flood Model was produced in 2015, the Environment Agency have issued revised climate change allowances for the study area.

In July 2021 the Environment Agency issued revised peak river flow allowances for management catchments in England. As part of the update the EA published the Peak River Flow Map which shows anticipated changes to peak river flows over time based on management catchment. Management catchments are sub-catchments of river basin districts.

According to the EA's Peak River Flow Map the development and the sections of watercourse within proximity to the site are located within the Upper and Bedford Ouse Management Catchment. Updated peak river flow allowances for this catchment are as follows:

Epoch	Central	Higher	Upper
2020s	5%	10%	24%
2050s	4%	11%	30%
2080s	19%	30%	58%

Table 7: Upper and Bedford Ouse Management Catchment Peak River Flow Allowances

The specific Climate Change allowance required to be assessed within the Flood Risk Assessment, to account for future change in peak river flows, is dependent on the development's design lifetime and vulnerability classification.

In accordance with the development lifetime guidance, residential developments should be considered to have a minimum lifetime of 100 years.

Additionally, residential developments are considered 'More Vulnerable' (refer to Table 3). In line with government guidance More Vulnerable developments located in flood zones 2 and 3a should use the Central Allowance to account for future climate change.

As such, considering the nature of the proposals, the development should be assessed against the 1 in 100 year plus 19% allowance for Climate Change fluvial event.

Whilst the Lower Ouse Downstream Flood Model does not include modelled outputs for the 1 in 100 year plus 19% Climate Change fluvial event, 2D floodplain heights have been provided for the 1 in 100 year plus 20% Climate Change scenario.

Adopting a conservative approach, the greatest 1 in 100 year plus 20% Climate Change 2D floodplain level at the site has been used to base this Flood Risk Assessment on.

Comparison of the defended 1 in 100 year (+20%) Climate Change floodplain level (11.25mAOD) with EA LiDAR data corresponding to the location of the extension footprint (11.20mAOD) indicates that the developable area is elevated approximately 0.05m below the modelled 1 in 100 year (+20%) Climate Change event.

Flood Defences

According to the Environment Agency's AIMS dataset, flood defences in the form of natural high ground are located along the banks of the watercourses within proximity to the site.

Environment Agency data suggests that the sections of natural high ground located along the banks of Brampton Brook (65m north) and the River Great Ouse (585m east) offer the site and the surrounding area a design standard of protection of 5 years.

Figure 13 shows the closest formal flood defences to the development based on the EA's AIMS Spatial Flood Defences dataset.

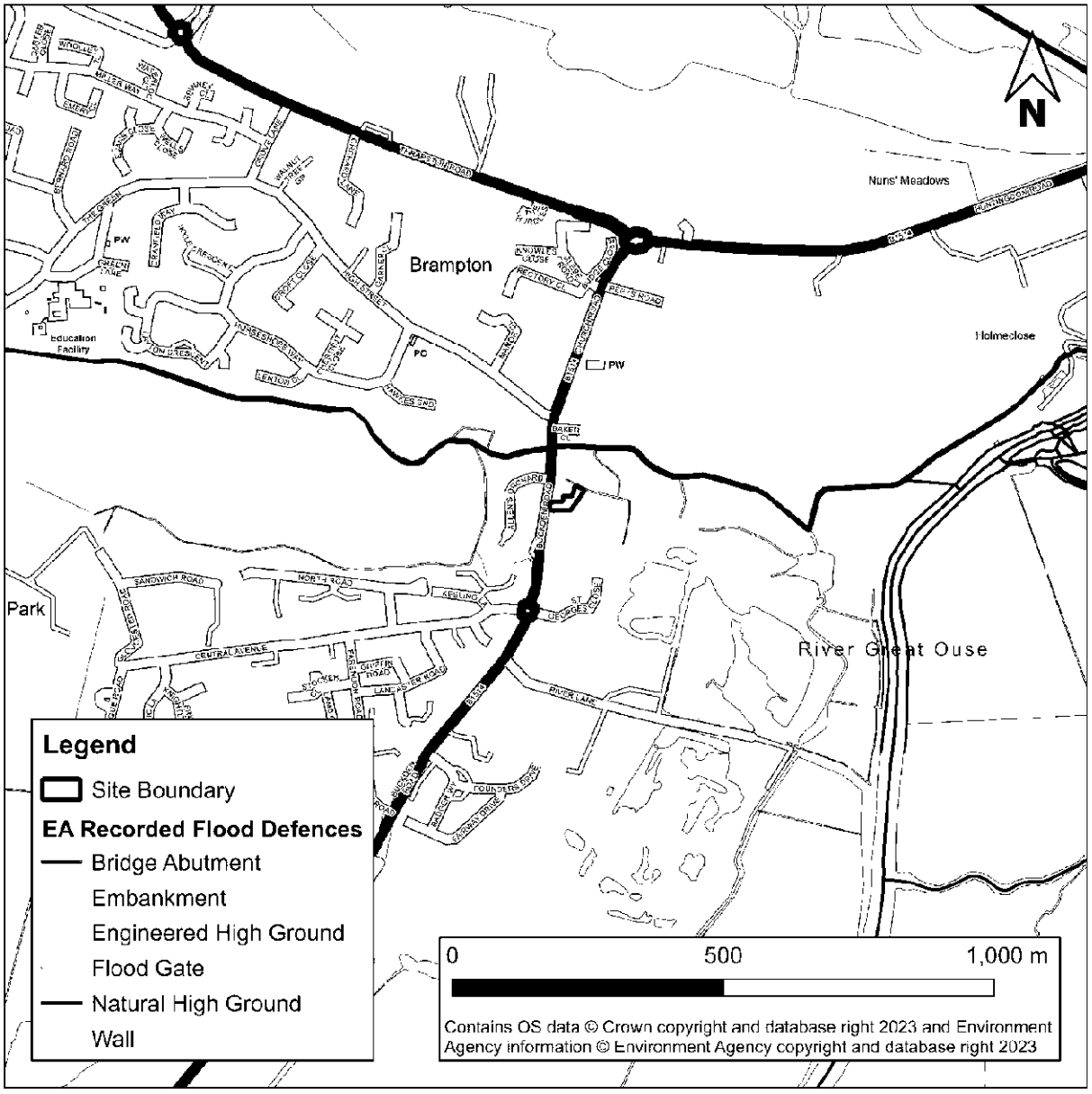


Figure 13: Formal Flood Defences Near the Site (Source: Environment Agency)

Pluvial (Surface Water)

Pluvial flooding occurs as a result of excess overland flow and stormwater ponding. Surface water flooding can happen when water does not have time to soak into the underlying ground or cannot infiltrate at all, for instance because the ground is already fully saturated.

This mechanism of flooding can also arise when the volume of precipitation exceeds the capacity of the drainage system meaning that water is unable to drain away through the sewer network and instead flows overland.

Overland flow will follow the local topography and can therefore pose a risk to both the development and surrounding third party land.

The risk posed to the site from surface water flooding has been assessed using the new National Flood Risk Assessment (NaFRA) 'Risk of Flooding from Surface Water' dataset. The updated Risk of Flooding from Surface Water maps were published on the 28th January 2025 by the Environment Agency. They are considered to represent a significant improvement on previous iterations of the surface water flood maps, both in terms of method and representation of the risk of flooding.

The NaFRA dataset was created by combining the best available flood models (including locally produced detailed model information and national flood modelling) to generate the probability of flood risk for each 2m grid square of land, with the aim of using the best available flood risk information in any one location.

Considerable improvements have been made when compared to the previous iterations of the RoFSW dataset including a more accurate representation of buildings within the model terrain to better capture the influence of built footprints on flow routes, the correction of misinterpretations in earlier surface water maps that wrongly suggested some buildings would remain dry, and a focus toward assessing flood risk to land rather than individual properties.

The new RoFSW dataset includes details of the annual chance of flooding to a specific depth. The dataset presents the likelihood (categorised as High, Medium or Low) of flooding to reach the following depth increments at a set location in any given year:

- 0.2m
- 0.3m
- 0.6m
- 0.9m
- 1.2m

Risk is displayed as one of the following likelihood categories:

High	An area which has more than 3.3% chance of flooding each year
Medium	An area which has between 1% and 3.3% chance of flooding each year
Low	An area which has between 0.1% and 1% chance of flooding each year
Very Low	An area which has less than a 0.1% chance of flooding each year

The 2025 RoFSW dataset includes modelled outputs for both the present day and climate change scenarios. The newly introduced climate change map shows the predicted impacts of climate change on future flood risk for the 2050's epoch (2040 – 2060) where the central allowances have been used to support short and medium-term decisions informed by the highest flood likelihood projections.

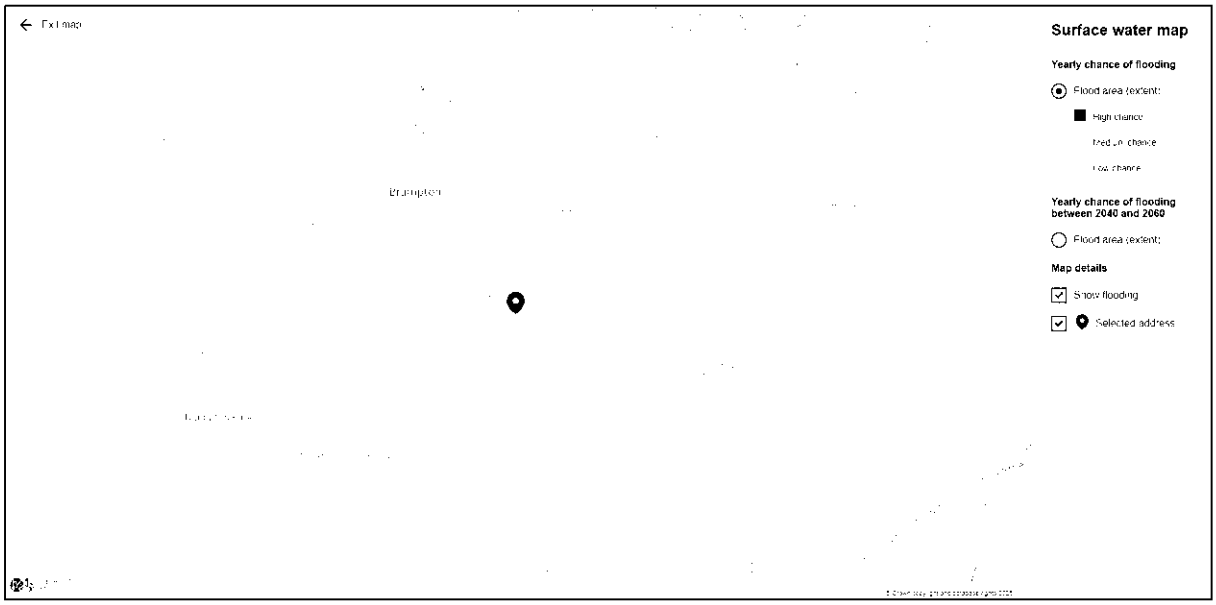


Figure 14: Present Day RoFSW Map (Source: EA)

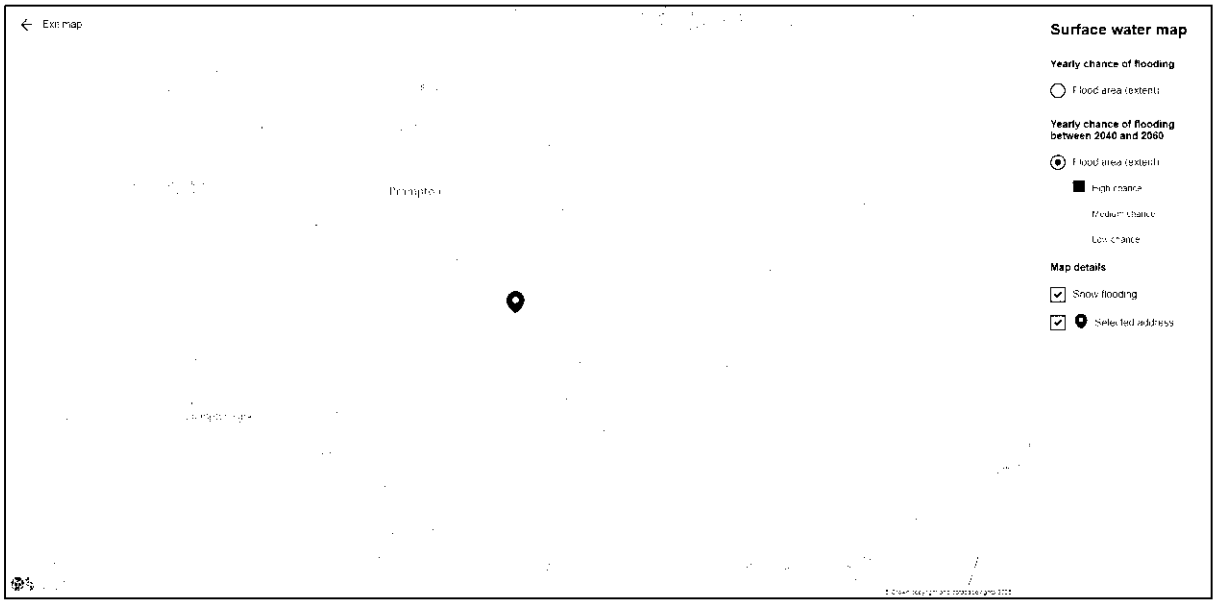


Figure 15: 2050's Epoch RoFSW Map (Source: EA)

According to the EA's Risk of Flooding from Surface Water maps, the yearly chance of surface water flooding at the site in the present day is modelled to be "Very Low" (less than a 0.1% chance of flooding in any given year).

The yearly chance of surface water flooding in the 2050's epoch (between 2040 and 2060) is modelled to remain "Very Low".

Groundwater

Groundwater flooding occurs when the water table rises up from the underlying rocks and emerges at the ground surface or within subsurface infrastructure (such as basements). Low lying areas that are underlain by permeable bedrock, superficial geology and aquifers are particularly susceptible to this form of flooding, especially during the winter months and after periods of heavy, sustained precipitation.

Unlike other mechanisms of flooding, groundwater flooding takes longer to dissipate as the water table needs to lower before any emerged flood water can soak back into the ground. As a result of this, whilst groundwater flooding does not pose a significant risk to life, flood waters can last for many months and can cause considerable damage to property.

Huntingdonshire Integrated Water Management Strategy L1 SFRA (2024) uses the national scale 5m resolution JBA Groundwater dataset to assess groundwater flood risk across the catchment.

The model involves simulating groundwater levels for a range of return periods including the 75, 100 and 200-year events. Groundwater levels are then compared to ground surface levels to determine the head difference in metres.

Having reviewed the JBA Groundwater dataset shown on the HDC interactive viewer, the site is located within an area where 'groundwater levels are either at or very near (within 0.025m of) the ground surface in the 100yr return period event (refer to Figure 16).

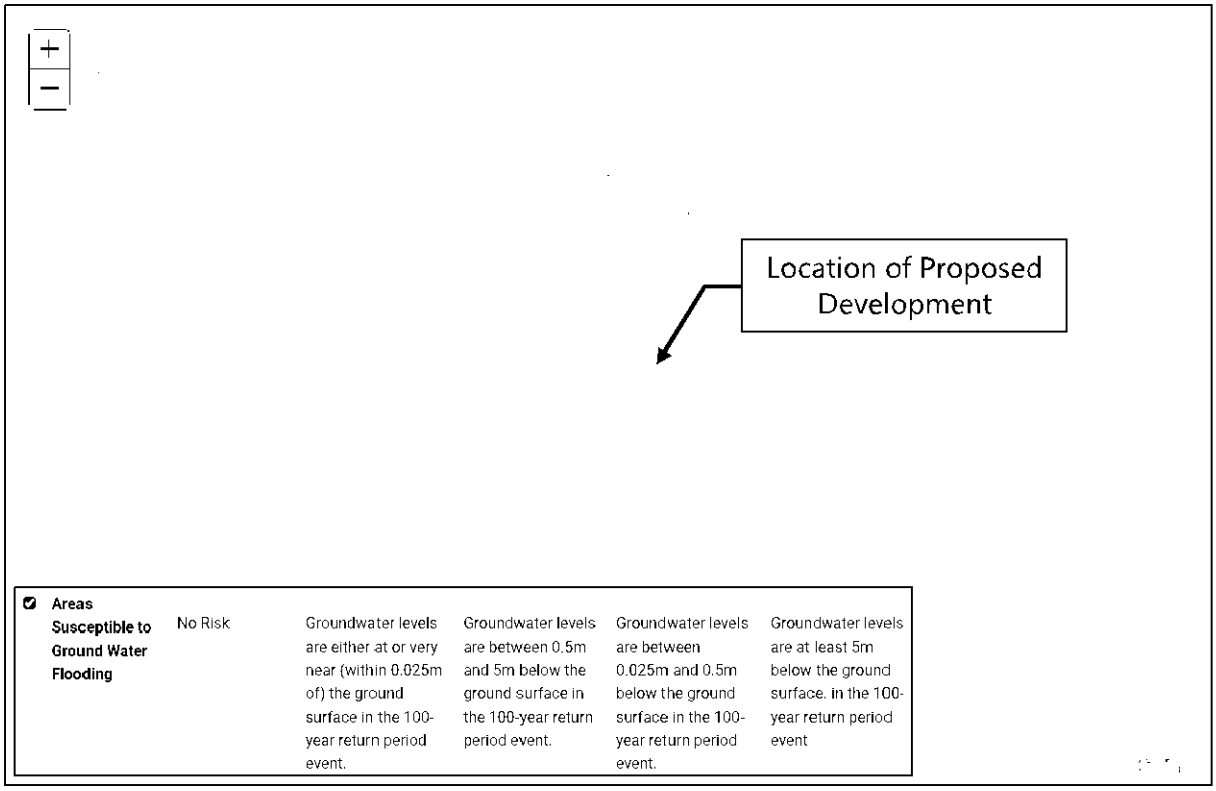


Figure 16: Groundwater Flood Risk Map (Source: HDC SFRA 2024)

Whilst the JBA dataset shows that there is the potential for groundwater levels to be within close proximity to the ground surface, a building is already present at the site and there have been no reports of flooding.

No further information has been provided to suggest that the site itself has historically been subject to groundwater flooding.

Sewer Surcharge

Sewer flooding occurs when the volume of water entering a drainage system is greater than the capacity of the sewer network. It is often experienced during periods of heavy rainfall, when a large amount of precipitation falls within a short period of time, and overloads the sewer system capacity causing a surcharge and localised short-term flooding.

Sewer flooding can also occur when the sewerage system is unable to discharge as intended. This is frequently caused by problems such as high water levels within the receiving watercourse, blockages, siltation and structural defects.

Having reviewed Huntingdonshire District Council's flood risk documentation, whilst sewer flood incidents have been reported within Huntingdon no information has been provided to suggest that the site itself has ever been subject to a sewer surcharge incident.

Reservoir

Reservoirs are artificially created lakes, typically formed by building a dam across an existing watercourse to hold water back. Whilst unlikely, flooding from reservoirs can occur as a result of water exceeding the reservoir capacity or structural failure of the dam or bank.

All large reservoirs are regulated under the Reservoirs Act 1975 and undergo regular maintenance to minimise the possibility of reservoir failure. This legislation is enforced by the Environment Agency and requires reservoirs to be routinely inspected and maintained to an appropriate standard. As an enforcement authority the Environment Agency is responsible for some 2,000 reservoirs in England and Wales.

The Environment Agency have produced a flood map which shows where water may go in the unlikely event of a dam or reservoir failure. Two flooding scenarios are shown on the reservoir flood maps:

- A 'dry-day' scenario which shows the predicted flood extents if a dam or reservoir failed when rivers are at normal levels
- A 'wet-day' scenario which shows how much greater the flood extent might be if a downstream river is already experiencing an extreme flood event

Review of the Environment Agency's Risk of Flooding from Reservoirs map indicates that the site is located within the 'maximum extent of flooding from reservoirs when river levels are normal'.

As such, whilst unlikely to occur, the site is considered to be susceptible to reservoir failure.

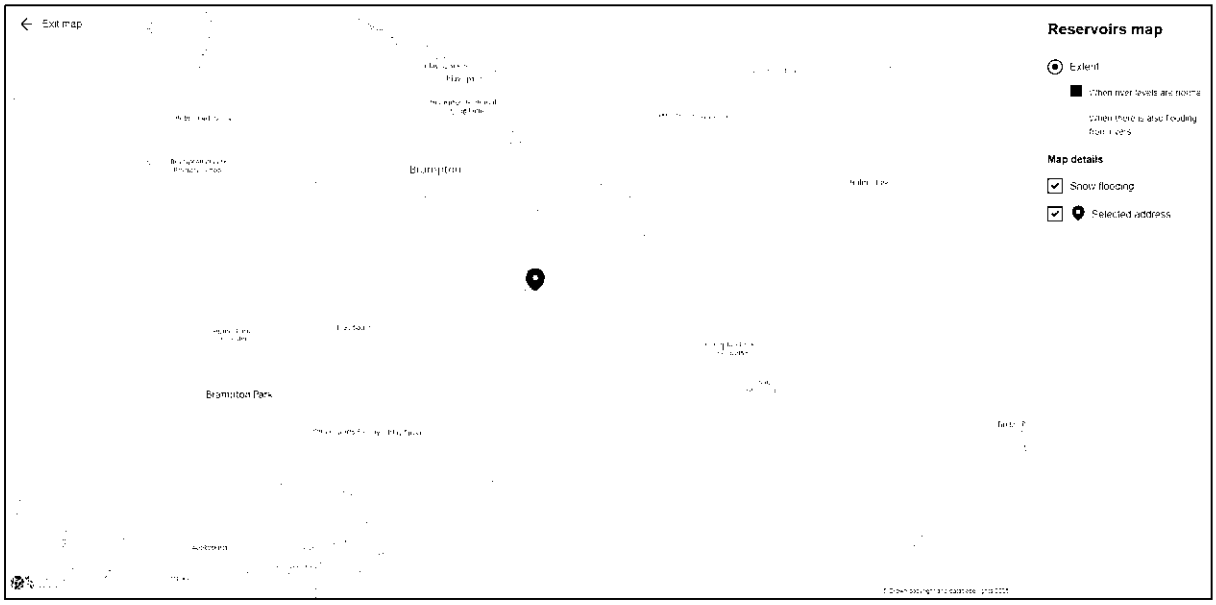


Figure 17: Risk of Flooding from Reservoirs Map (Source: Environment Agency)

Other Sources

No canals or other artificial infrastructure have been identified within the surrounding area which could pose a risk of flooding to the development.

Flood Risk Management

Finished Floor Levels

In accordance with EA Standing Advice for Minor Extensions, the Finished Floor Level (FFL) of the proposed extension should be set either:

- no lower than existing floor levels or
- 300 millimetres (mm) above the estimated flood level

The client has confirmed that the Finished Floor Level of the proposed extension will match the existing FFL of the current dwelling to allow for continuity across the ground floor.

As such, based on an estimated threshold and EA LiDAR data, it is assumed that the Finished Floor Level of the extension will be set at approximately 11.30mAOD, raised at least 100mm greater than the surrounding external ground levels.

In light of this, providing that the FFL is set at the same level as the existing house, the advice for minor extensions 'no lower than existing floor levels' will be met.

Mitigation Measures

According to information provided by the applicant the Finished Floor Level of the extension will be set at approximately 11.30mAOD, to match the existing ground floor FFL within the main house.

Comparison of the proposed FFL with the defended 1 in 100 year plus 20% Climate Change floodplain level (11.25mAOD) indicates that the FFL will be elevated approximately 50mm above the modelled 1 in 100 year plus 20% CC scenario.

Despite this, in order to offer further protection during an extreme flood event it is recommended that the following mitigation measures are considered in consultation with the Local Authority:

- Non-return valves fitted on drains and pipes
- Any chambers fitted with a double seal screw down cover and frame
- All new electrics and sockets within the extension are raised at least 300mm above the Finished Floor Level; thus 350mm above the 1 in 100 year plus 20% CC floodplain level. Installed at 11.60mAOD or above
- Any new boilers, gas meters and electrical incomer/meters are raised at least 300mm above the Finished Floor Level, set at 11.60mAOD or above
- The extension slab is constructed of solid concrete, with waterproof membrane
- Waterproof screed used on the floor of the extension with waterproof internal render
- External walls rendered resistant to flooding to first floor level
- Any cracks and holes in the external walls, including service and drainage entry points are sealed with mortar/sealant and made watertight
- Covers for airbricks, pet flaps and appliance vents
- Water resistant materials such as stainless steel, plastic or solid wood used for the ground floor level fitout
- Where possible, the use of MDF carpentry is avoided
- Ensure access to all spaces to enable drying and cleaning, should a flood event occur
- Install demountable flood defence barriers to protect ground floor entry thresholds against flood water ingress up to a maximum depth of 0.6m.

Additionally, important personal items and documents (including insurance policies and photographs) belonging to the residents should be stored above the design flood level.

Surface Water Flood Risk Mitigation

Review of the Environment Agency's RoFSW dataset indicates that the yearly chance of surface water flooding at the property in the present day is "Very Low" (less than a 0.1% chance of flooding in any given year). The yearly chance of surface water flooding in the 2050's epoch (between 2040 and 2060) is modelled to remain "Very Low".

Despite this, in line with Building Regulations, it is recommended that the Finished Floor Level of the extension should be set at least 150mm above the surrounding external ground levels to prevent water ingress from storm water flowing or ponding near doorways and other entry points.

Having reviewed the proposed site layout plans and the listing images of the property, the area proposed to be developed appears to be already predominantly underlain by hardstanding (comprised of the existing porch and patio area).

As such, it is considered that the development in its current form will not lead to a significant increase in surface water runoff rates and volumes when compared to the pre-developed situation, and a surface water drainage strategy is not required.

It is envisaged that post development runoff from the proposed extension will be discharged into the surface water drainage system which currently serves 15 Buckden Road.

Despite this, in order to reduce surface water runoff rates and further protect the property from existing overland flows the applicant may wish to consider the following surface water measures:

- Incorporating rainwater butts (to provide a source of non-potable water) and raingardens into the scheme
- Any external landscaping is designed to slope away from the built footprint
- Installing linear drains in front of all building entry points
- Any openings, such as air bricks, are designed to be at least 300mm above the surrounding external ground levels.

These measures will help mitigate against overland flows being directed towards the building during storm events and will reduce the risk of stormwater ponding at threshold entry points and stormwater ingress.

It is also recommended that if applicable any newly introduced areas of hardstanding are constructed of permeable paving.

Groundwater Flood Risk Mitigation

Whilst there is no information to suggest that the site has ever experienced groundwater flooding, it is recommended that the floor of the new extension is made of either solid construction materials or the ground beneath the suspended floor is sealed.

This mitigation measure will protect against the unlikely occurrence of groundwater ingress should water table levels fluctuate in the future.

Flood Warnings and Alerts

The site is located within an EA Flood Warning and Alert area.

Therefore it is recommended that the owners/occupants of the development sign up to the Environment Agency's free Targeted Flood Alert Service at https://www.gov.uk/sign-up-for-flood-warnings.

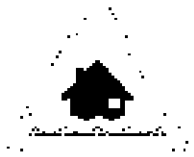
Flood Alert	Flood Warning	Severe Flood Warning
		
Flooding is possible. Be prepared	**Flooding is expected. Immediate action required**	**Severe flooding. Danger to life.**
• Be prepared to act on your Flood Plan. • Prepare a flood kit. • Monitor local water levels and flood forecasts.	• Move people, pets, valuables and vehicles to a safe place. • Turn off utilities if safe to do so. • Put flood protection equipment in place.	• Stay in a safe place with means of escape. • Be ready to evacuate. • Co-operate with the emergency services.

Table 8: EA Flood Warnings and Flood Alerts

Future owners/occupants should also be advised to monitor weather forecasts by signing up to the Met Office weather warnings.

Safe Access and Egress

The NPPF requires all new residential developments in areas at risk of flooding to demonstrate a route of safe escape for residents and site users which can be maintained for the lifetime of the development.

The development relates to extension of an existing residential dwelling. As such, a route of safe escape is not required.

Despite this, given that the Finished Floor Level of the residential dwelling is elevated above the 1 in 100 year plus 20% CC floodplain level, it is considered that safe refuge can be provided within the residential dwelling itself.

Safe access and egress to and from the development can be provided via Buckden Road adjacent west. It is recommended that residents travel south along Buckden Road.

This route is located entirely outside of Flood Zone 2, Flood Zone 3 and the 1 in 100 year (+20%) Climate Change flood extent from 440m south west of the dwelling onwards.

It is recommended that site users are made aware of the safe access and egress route.

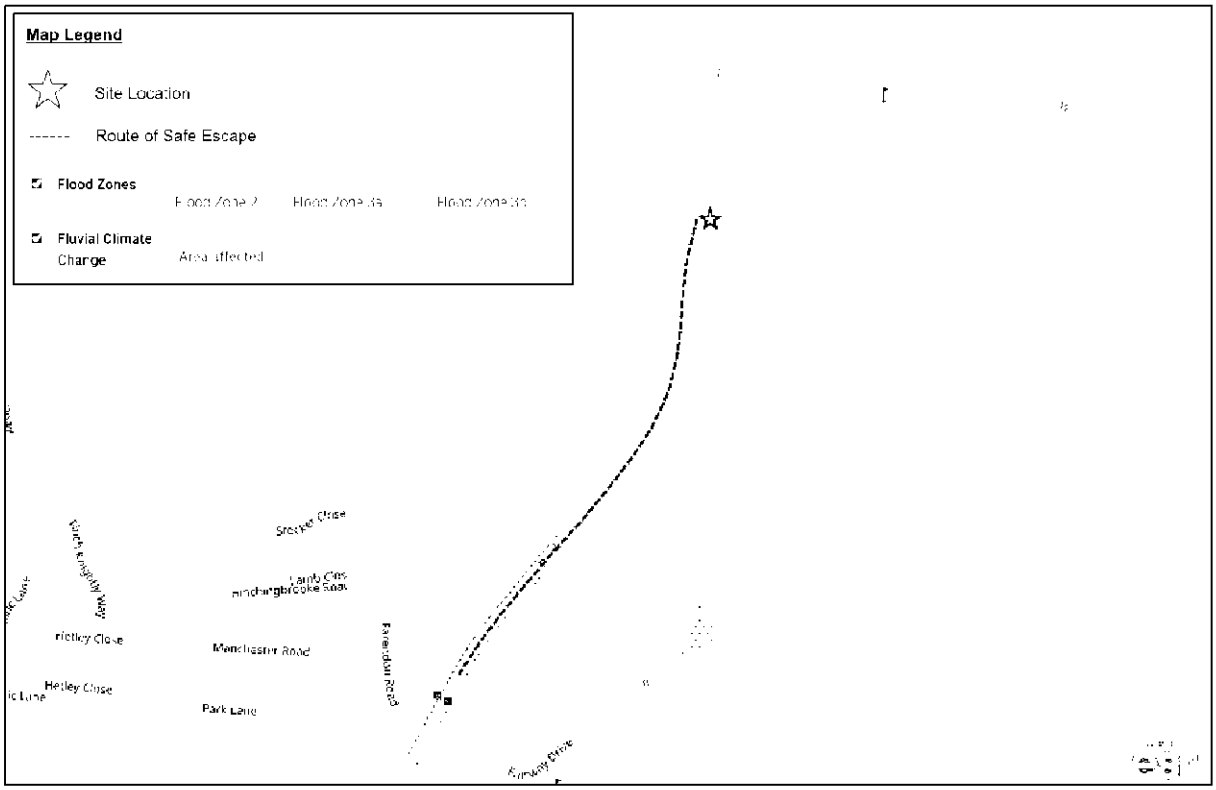


Figure 18: Route of Safe Access and Egress

Conclusions and Recommendations

Conclusions

GeoSon Limited have been instructed by Carmen Sutton to undertake a Site Specific Flood Risk Assessment (FRA) to support a proposed planning application for development at 15 Buckden Road, Brampton, Huntingdon.

This FRA has been undertaken in accordance with the revised National Planning Policy Framework (NPPF) December 2024 and the associated Planning Practice Guidance (PPG).

The proposed application site is located at 15 Buckden Road, Brampton, Huntingdon PE28 4PR. The site is approximately 1250m^2 in size and is occupied by a detached residential dwelling in the west. A soft landscaped garden, gravel driveway and several outbuildings are located in the east.

The proposed planning application is for demolition of an existing porch followed by construction of a two storey rear extension. The proposed extension will have a total built footprint of 60m^2. Therefore, it is considered that EA standing advice applies.

According to information held by the EA the site is located on the edge of an area that flooded in Easter 1998.

The Environment Agency's Flood Map for Planning shows the site to be located within Flood Zone 2 and 3. As such, a Product 4 enquiry was raised with the Environment Agency to obtain detailed flood model information in the relation to the site.

A Product 4 response (EA reference: UR3DM3HKR5E9) was received in February 2025 (refer to Appendix C). Within which the Environment Agency provided details of in-channel flood levels and flows as well as 2D floodplain levels extracted from three local flood models, including the 2015 Lower Ouse Downstream Model, the 2015 Lower Ouse Brampton Model, and the 2015 Lower Ouse Alconbury Brook Model.

The site is not impacted by modelled fluvial extents taken from Alconbury Brook Model element of the Lower Ouse model. Additionally, only the northern periphery of the site is shown to be at risk of flooding during the 1 in 1000yr event in the 2015 Lower Ouse Brampton Model.

The application area does however lie within several fluvial extents taken from the Lower Ouse Downstream Model.

As such, this Flood Risk Assessment focuses on the modelled outputs taken from the 2015 Lower Ouse Downstream Model.

Since the Lower Ouse Downstream Flood Model was produced in 2015, the Environment Agency have issued revised climate change allowances for the study area. In accordance with the latest guidance, considering the nature of the proposals, the development should be assessed against the 1 in 100 year plus 19% allowance for Climate Change fluvial event.

Whilst the Lower Ouse Downstream Flood Model does not include modelled outputs for the 1 in 100 year plus 19% Climate Change fluvial event, 2D floodplain heights have been provided for the 1 in 100 year plus 20% Climate Change scenario.

Adopting a conservative approach, the greatest 1 in 100 year plus 20% Climate Change 2D floodplain level at the site has been used to base this Flood Risk Assessment on.

Comparison of the defended 1 in 100 year (+20%) Climate Change floodplain level (11.25mAOD) with EA LiDAR data corresponding to the location of the extension footprint (11.20mAOD) indicates that the developable area is elevated approximately 0.05m below the modelled 1 in 100 year (+20%) Climate Change event.

The EA's Risk of Flooding from Surface Water maps show that the yearly chance of surface water flooding at the site in the present day is modelled to be "Very Low" (less than a 0.1% chance of flooding in any given year).

The yearly chance of surface water flooding in the 2050's epoch (between 2040 and 2060) is modelled to remain "Very Low".

Huntingdonshire Integrated Water Management Strategy L1 SFRA (2024) uses the JBA Groundwater dataset to assess of the risk of groundwater flooding across the catchment area. According to the JBA Groundwater map, the site is located within an area where 'groundwater levels are either at or very near (within 0.025m of) the ground surface in the 100yr return period event.

However, whilst the JBA dataset shows that there is the potential for groundwater levels to be within close proximity to the ground surface, a building is already present at the site and there have been no reports of flooding.

Having reviewed Huntingdonshire District Council's flood risk documentation, whilst sewer flood incidents have been reported within Huntingdon no information has been provided to suggest that the site itself has ever been subject to a sewer surcharge incident.

Review of the Environment Agency's Risk of Flooding from Reservoirs map indicates that the site is located within the 'maximum extent of flooding from reservoirs when river levels are normal'. As such, whilst unlikely to occur, the site is considered to be susceptible to reservoir failure.

No canals or other artificial infrastructure have been identified within the surrounding area which could pose a risk of flooding to the development.

Summary and Recommendations

- The client has confirmed that the Finished Floor Level of the proposed extension will match the existing FFL of the current dwelling to allow for continuity across the ground floor.
- Based on an estimated threshold and EA LiDAR data, it is assumed that the Finished Floor Level of the extension will be set at approximately 11.30mAOD, raised at least 100mm greater than the surrounding external ground levels.
- **Providing that the FFL is set at the same level as the existing house, the advice for minor extensions 'no lower than existing floor levels' will be met.**
- Comparison of the proposed FFL with the defended 1 in 100 year plus 20% Climate Change floodplain level (11.25mAOD) indicates that the FFL will be elevated approximately 50mm above the modelled 1 in 100 year plus 20% CC scenario.
- Despite this, in order to offer protection during an extreme flood event mitigation measures have been recommended for consideration within the development on Page 33.
- It is recommended that all new electrics and sockets within the extension are raised at least 300mm above the Finished Floor Level; thus 350mm above the 1 in 100 year plus 20% CC floodplain level. Installed at 11.60mAOD or above.
- Any external landscaping should be designed to slope away from the built footprint, where possible.
- Linear drains should be installed in front of all building entry points.
- It is also recommended that any openings, such as air bricks, are designed to be at least 300mm above the surrounding external ground levels.
- Whilst there is no information to suggest that the site has ever experienced groundwater flooding, it is recommended that the floor of the new extension is made of either solid construction materials or the ground beneath the suspended floor is sealed.
- The site is located within an EA Flood Warning and Alert area. Therefore, it is recommended that the owners/occupants of the development sign up to the Environment Agency's free Targeted Flood Warning Service at https://www.gov.uk/sign-up-for-flood-warnings.
- Future residents should also be advised to monitor weather forecasts by signing up to the Met Office weather warnings.
- The development relates to extension of an existing residential dwelling. As such, a route of safe escape is not required. Despite this, given that the Finished Floor Level of the residential dwelling is elevated above the 1 in 100 year plus 20% CC floodplain level, it is considered that safe refuge can be provided within the residential dwelling itself.
- Safe access and egress to and from the development can be provided via Buckden Road adjacent west. It is recommended that residents travel south along Buckden Road. This route is located entirely outside of Flood Zone 2, Flood Zone 3 and the 1 in 100 year (+20%) Climate Change flood extent from 440m south west of the dwelling onwards.

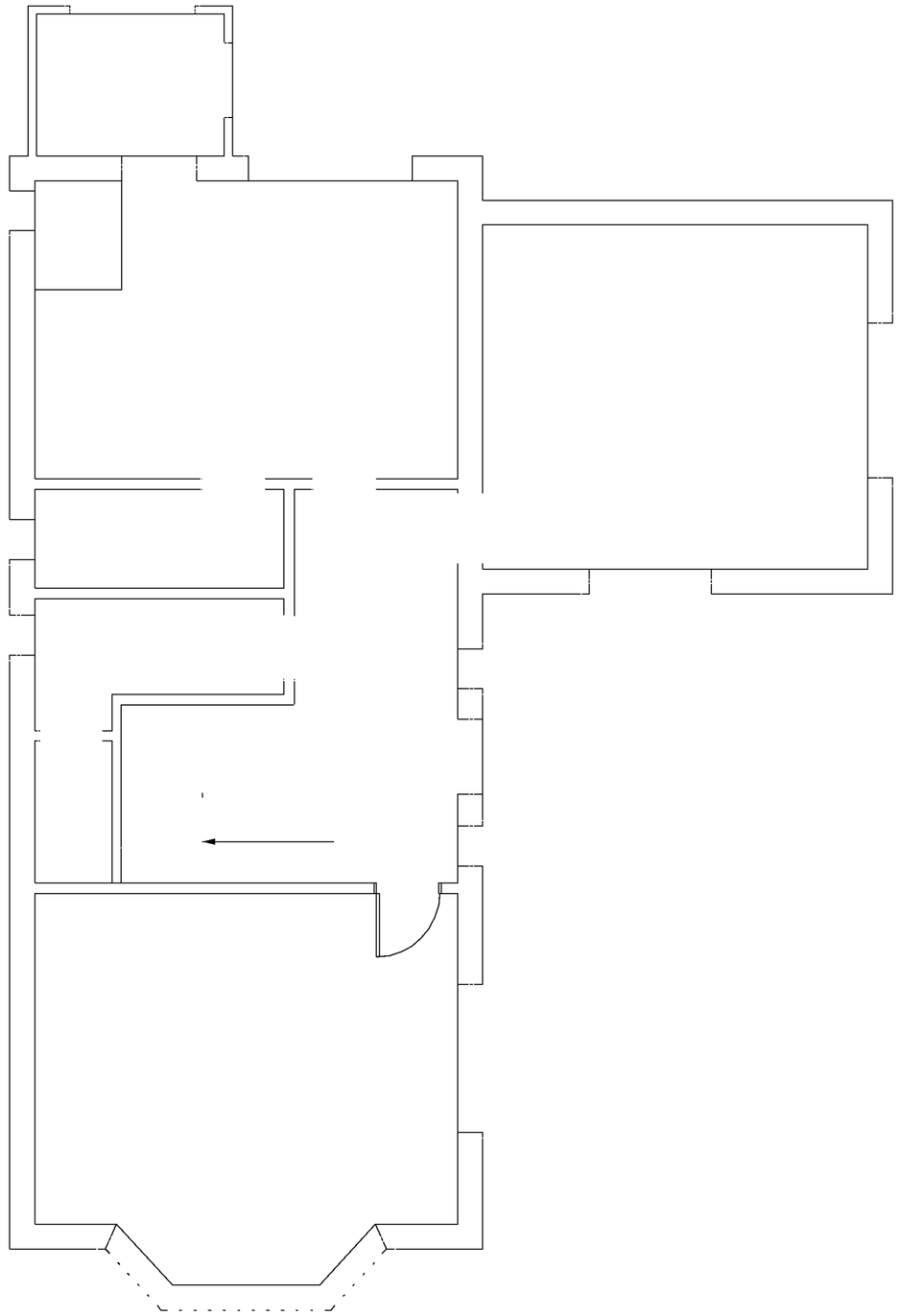
Appendix

A. Existing Site Layout Plan and Elevations

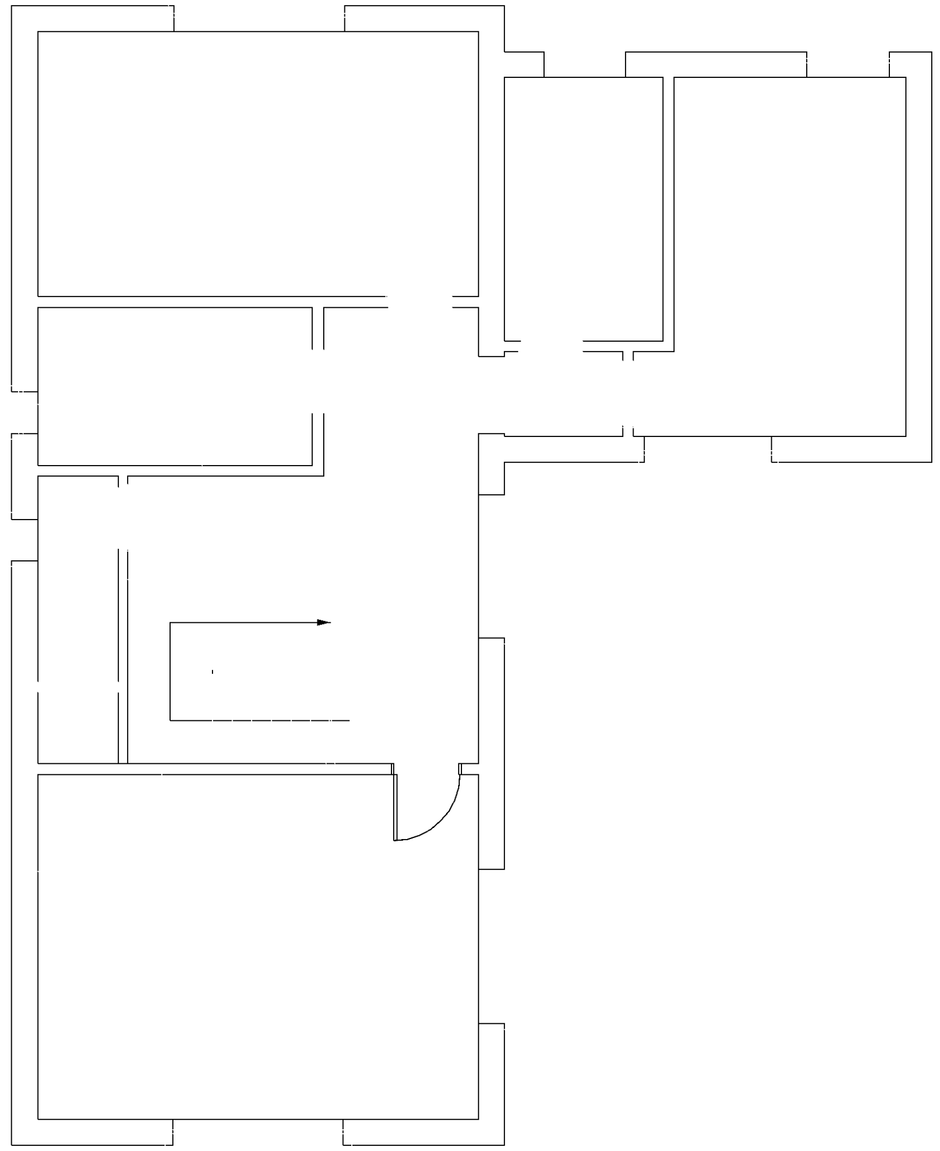
B. Proposed Site Layout Plan and Elevations

C. Environment Agency Product 4 Response

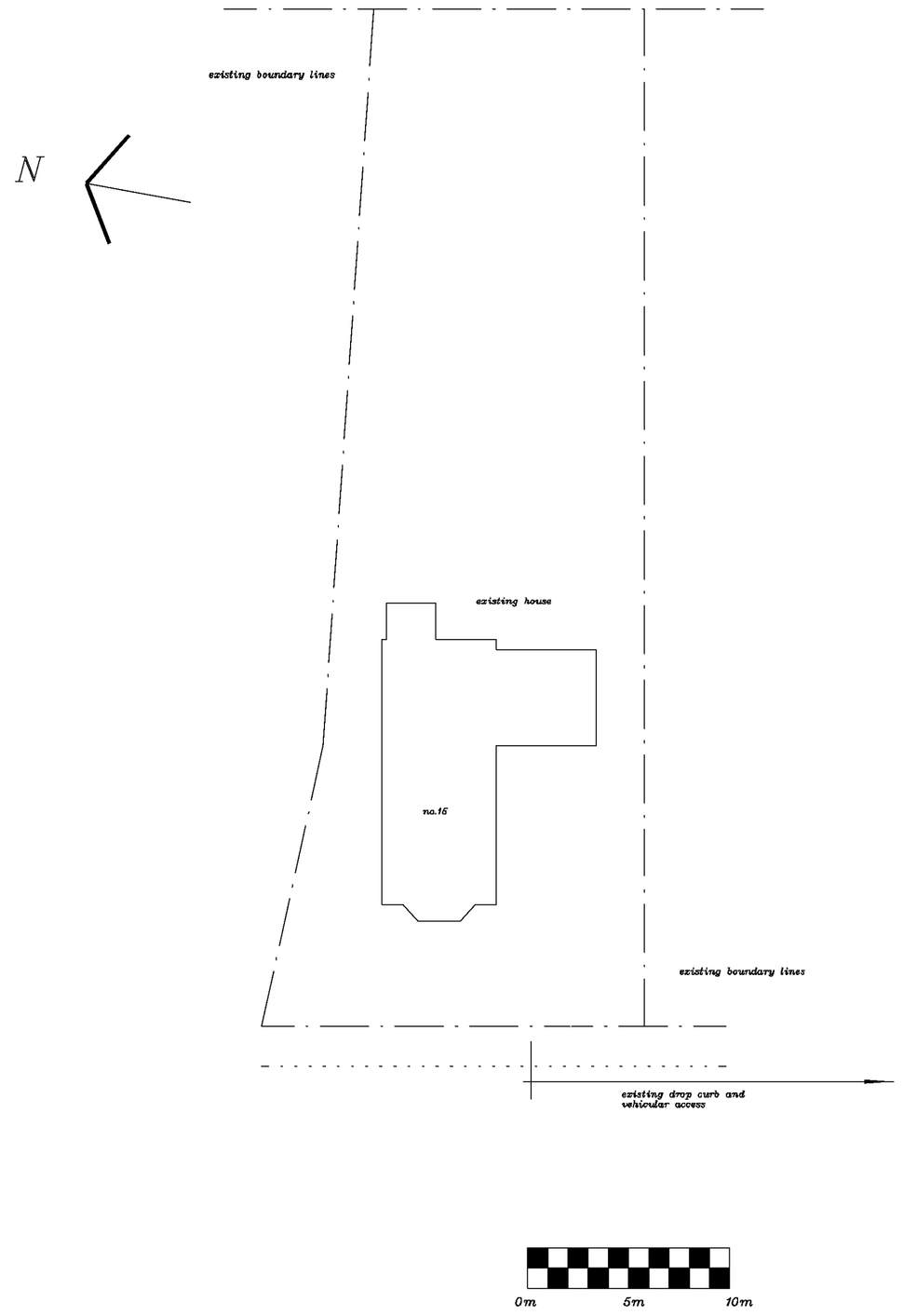
Appendix A



EXISTING GROUND FLOOR PLAN



EXISTING FIRST FLOOR PLAN



EXISTING BLOCK PLAN 1:200

©

Drawn by:
G P Melanie
Architectural Design

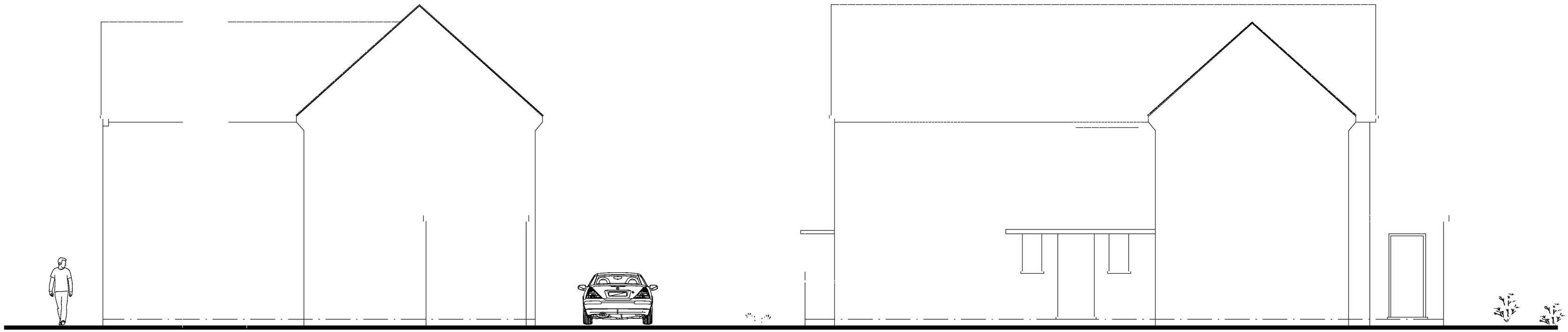
35 Beauchamp Close, Eaton Socon, Cambs PE198BU
email: ginomel@hotmail.com
web site: www.gpmelanie.co.uk
Phone: 01480 210993

NOTES

This drawing is to be read in conjunction with the construction notes provided. All dimensions to be checked on site by builder and not scaled from this drawing. This is an architectural drawing for submission to the local Planning Department only.

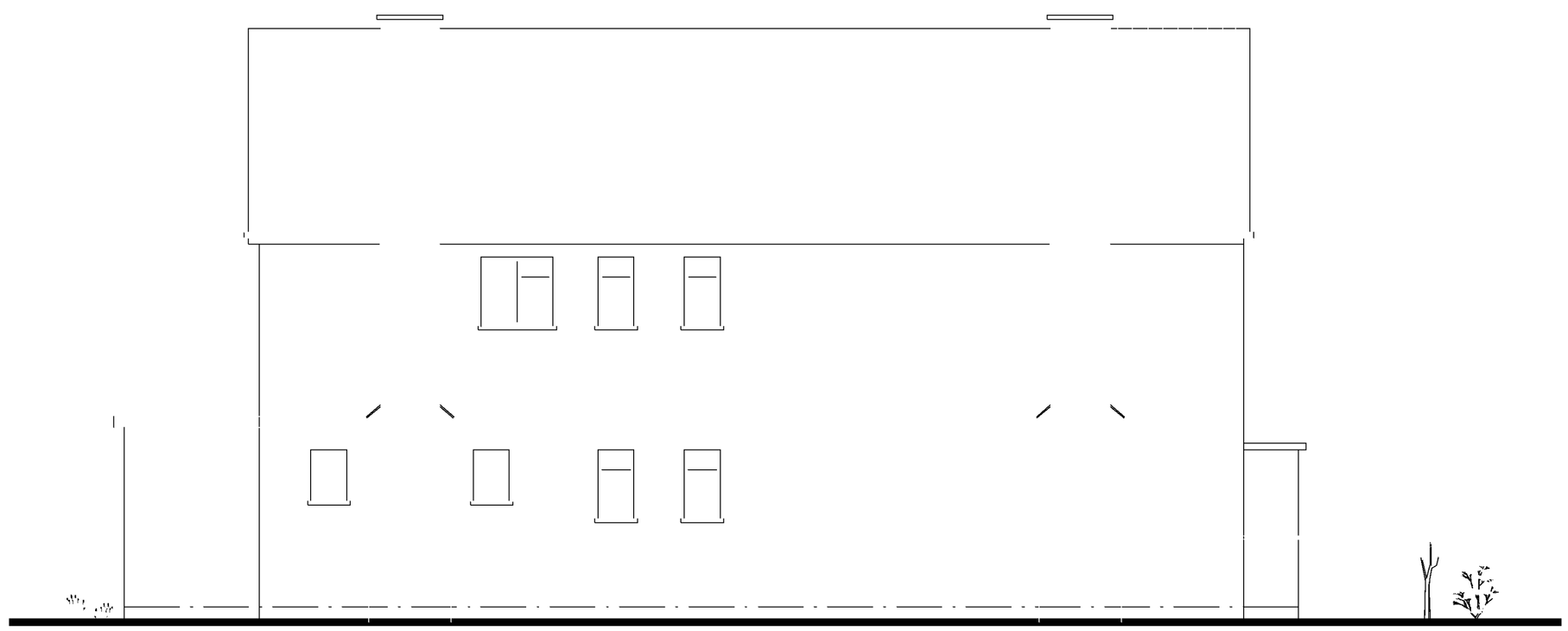
REVISIONS

Client:	Mr & Mrs Sutton
Location:	15 Buckden Road Brampton Huntingdon PE28 4PS
Project:	Proposed Rear Extension & Part Boundary wall demolition
Title:	Existing situation Plan drawing.
Scale:	1:50,1:200 at A1
Date:	Oct 2024
Drg.No.	DA/AJD/01



EXISTING REAR ELEVATION

EXISTING SIDE ELEVATION



EXISTING SIDE ELEVATION

©

NOTES

This drawing is to be read in conjunction with the construction notes provided. All dimensions to be checked on site by builder and not scaled from this drawing. This is an architectural drawing for submission to the Local Planning Department only.

REVISIONS

Drawn by:

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Phone: 01480 210993

Client: Mr & Mrs Sutton

Location: 15 Buckden Road
Brampton
Huntingdon
PE28 4PS

Project: Proposed Rear Extension
& Part Boundary wall demolition

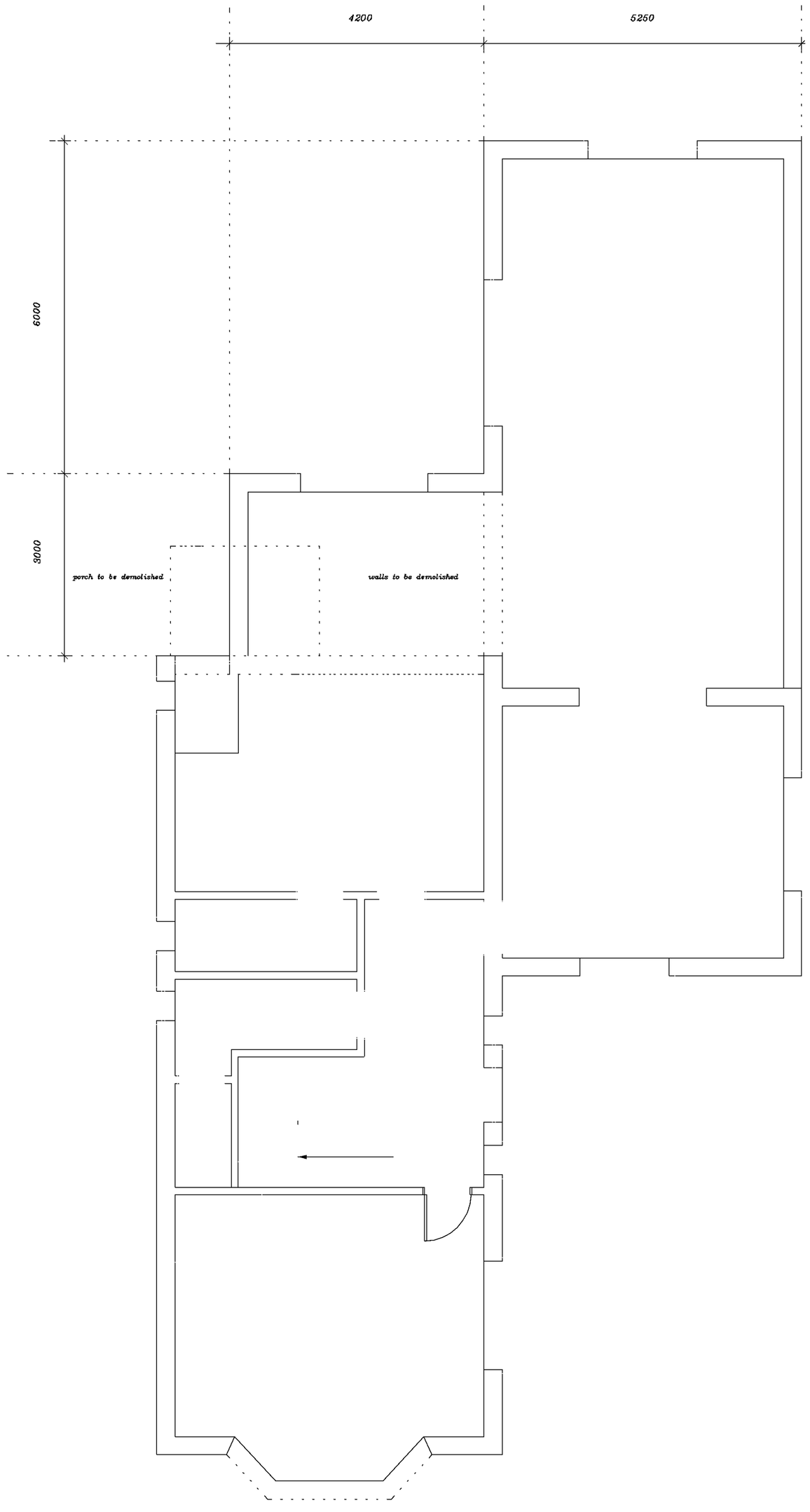
Title: Existing situation Elevation drawing.

Scale: 1:50,1:200 at A1

Date: Oct 2024

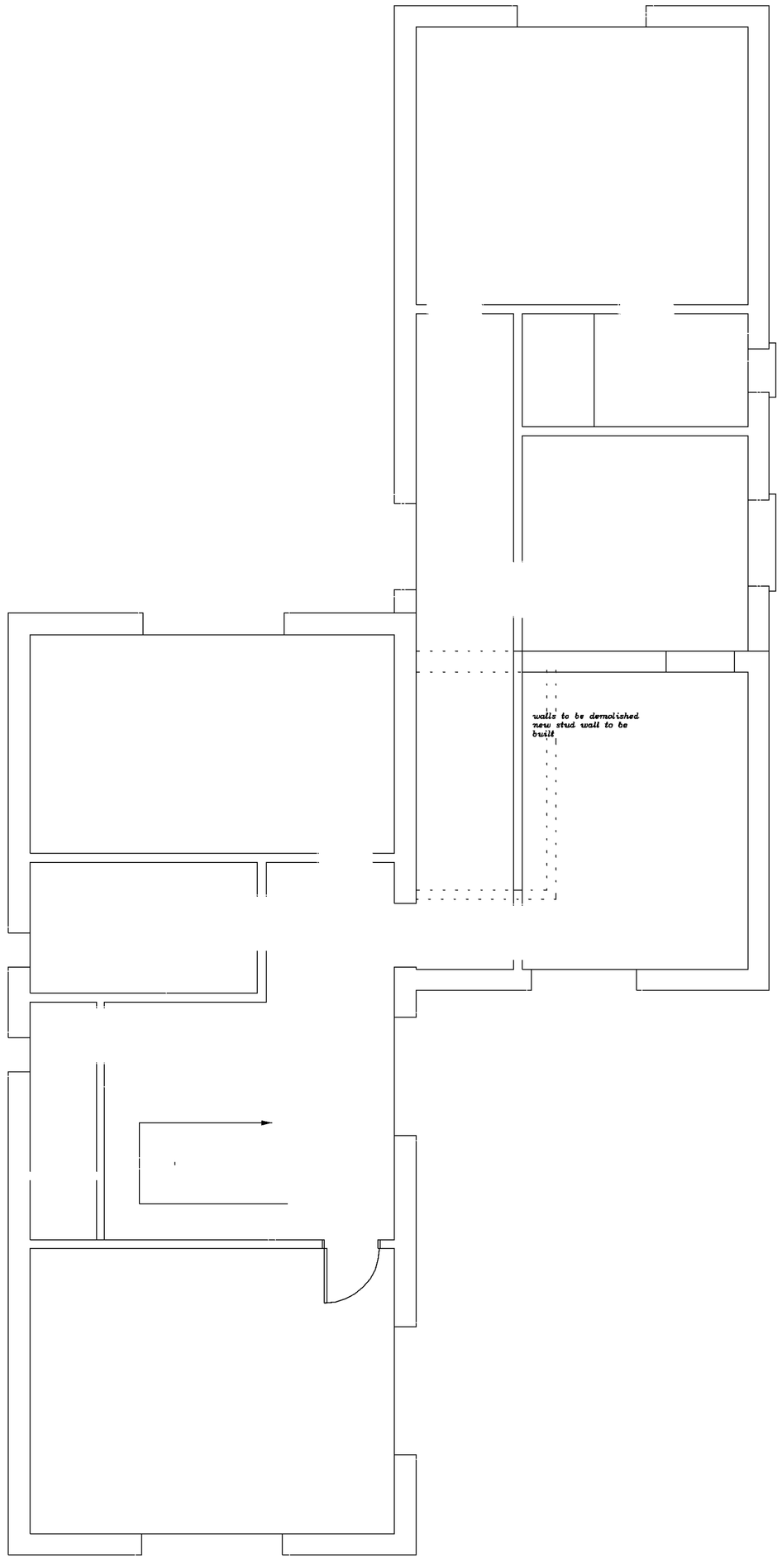
Drg.No. DA/AJD/02

Appendix B

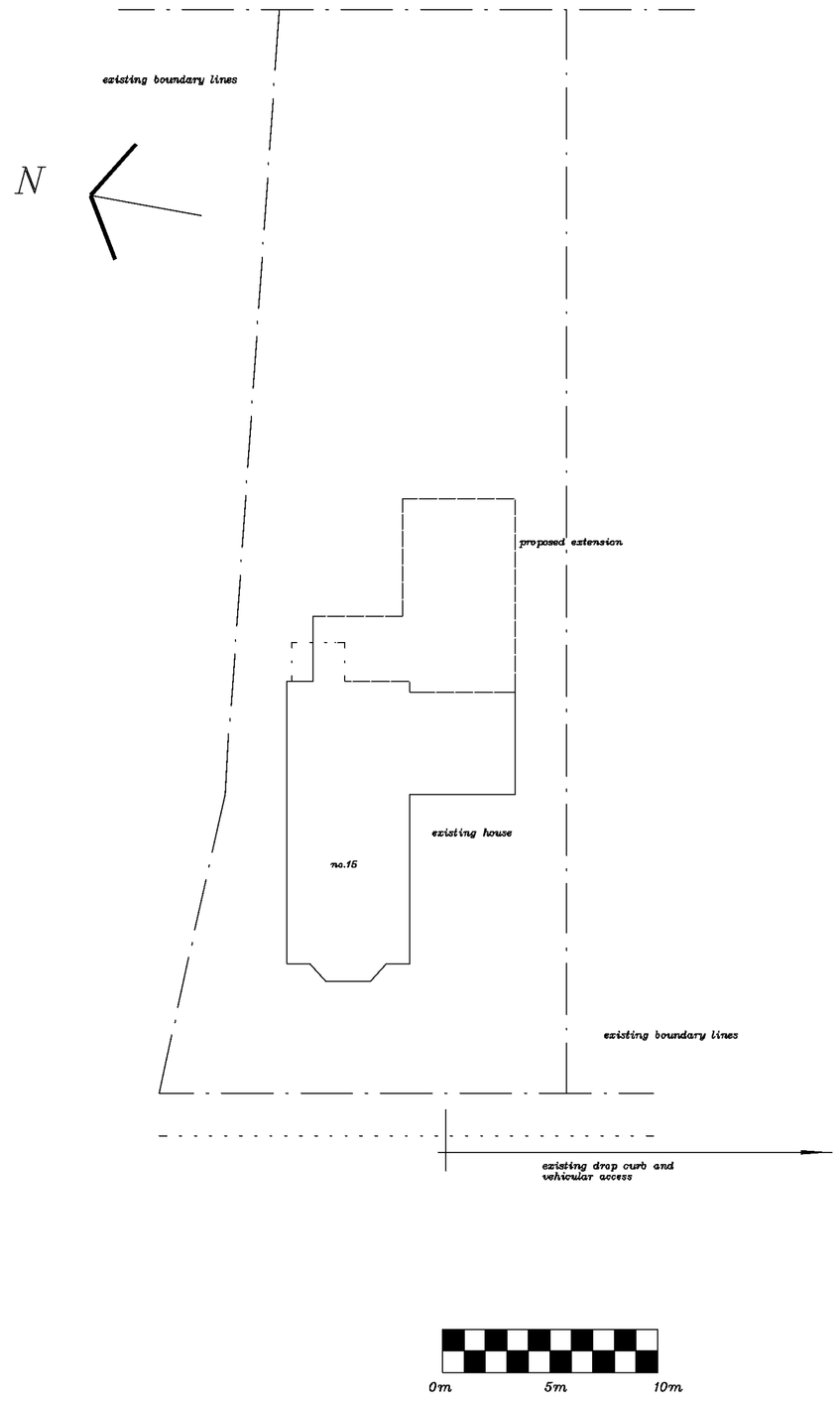


Builder to check all dimensions on site

PROPOSED GROUND FLOOR PLAN



PROPOSED FIRST FLOOR PLAN



PROPOSED BLOCK PLAN 1:200

©

Drawn by:
G P Melanie
Architectural Design

35 Beauchamp Close, Eaton Socon, Cambs PE198BU
email: ginomel@hotmail.com
web site: www.gpmelanie.co.uk
Phone: 01480 210993

NOTES

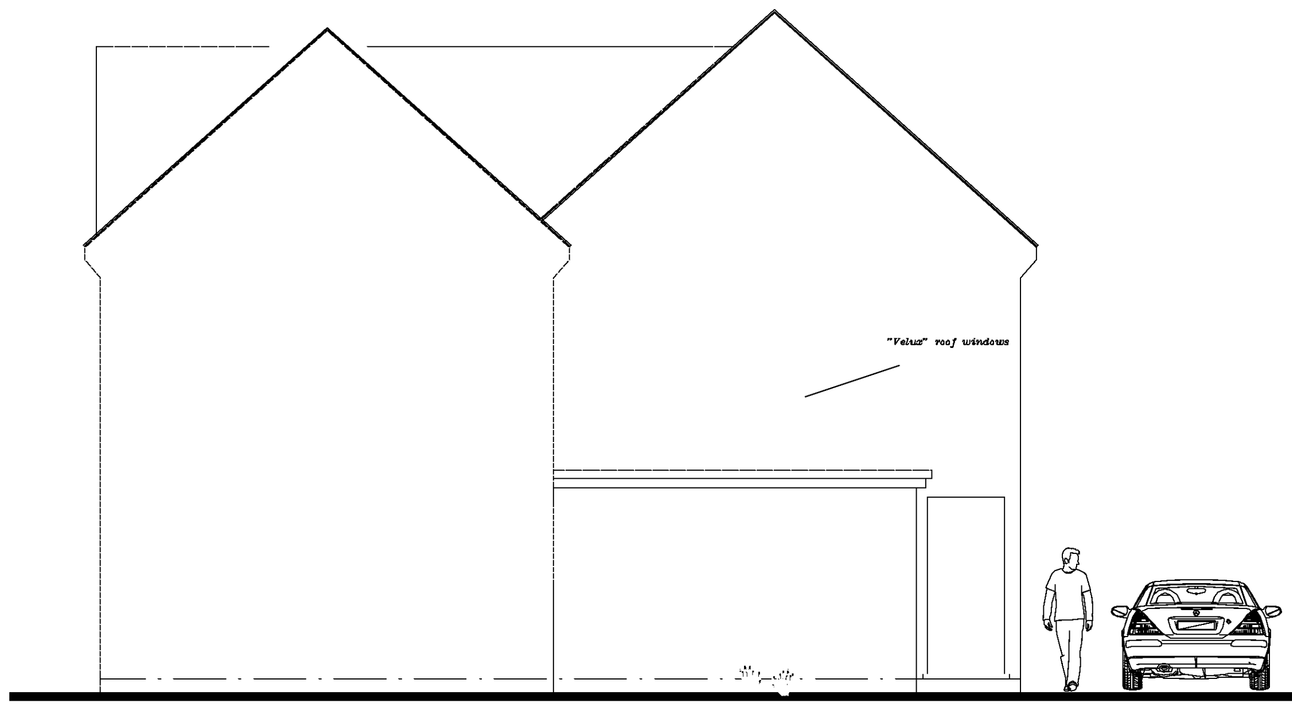
This drawing is to be read in conjunction with the construction notes provided. All dimensions to be checked on site by builder and not scaled from this drawing. This is an architectural drawing for submission to the Local Planning Department only.

REVISIONS

Client:	Mr & Mrs Sutton
Location:	15 Buckden Road Brampton Huntingdon PE28 4PS
Project:	Proposed Rear Extension & Part Boundary wall demolition
Title:	Proposed situation Plan drawing.
Scale:	1:50,1:200 at A1
Date:	Oct 2024
Drg.No.	DA/AJD/03

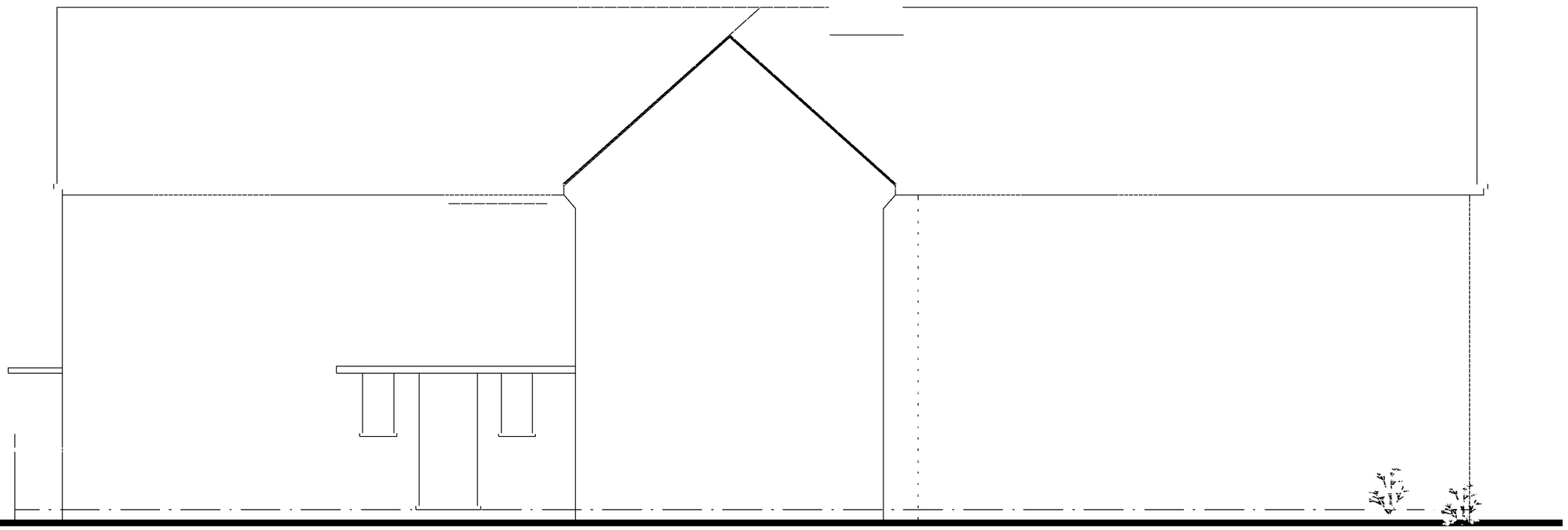
Brickwork to match existing
Windows to match existing
Roof tiles to match existing

"Velux" roof windows

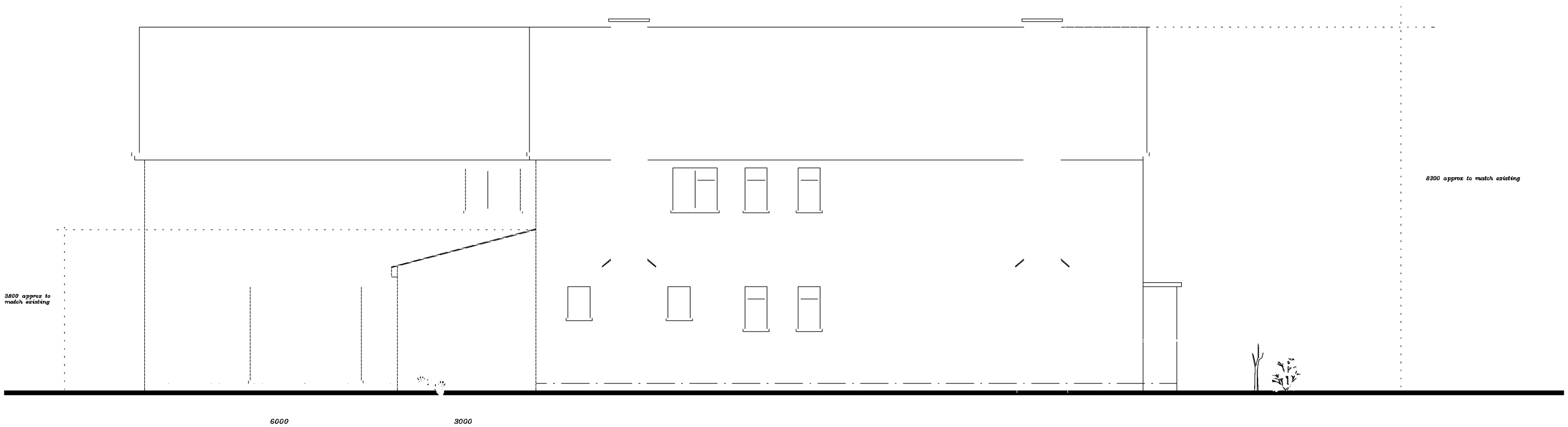


5250 4200

PROPOSED REAR ELEVATION



PROPOSED SIDE ELEVATION



PROPOSED SIDE ELEVATION

C

NOTES

This drawing is to be read in conjunction with the construction notes provided. All dimensions to be checked on site by builder and not scaled from this drawing. This is an architectural drawing for submission to the Local Planning Department only.

REVISIONS

Drawn by:
G P Melanie
Architectural Design

35 Beauchamp Close, Eaton Socon, Cambs PE198BU
email: ginomel@hotmail.com
web site: www.gpmelanie.co.uk
Phone: 01480 210993

Client: Mr & Mrs Sutton

Location: 15 Buckden Road
Brampton
Huntingdon
PE28 4PS

Project: Proposed Rear Extension
& Part Boundary wall demolition

Title: Existing situation Elevation drawing.

Scale: 1:50,1:200 at A1

Date: Oct 2024

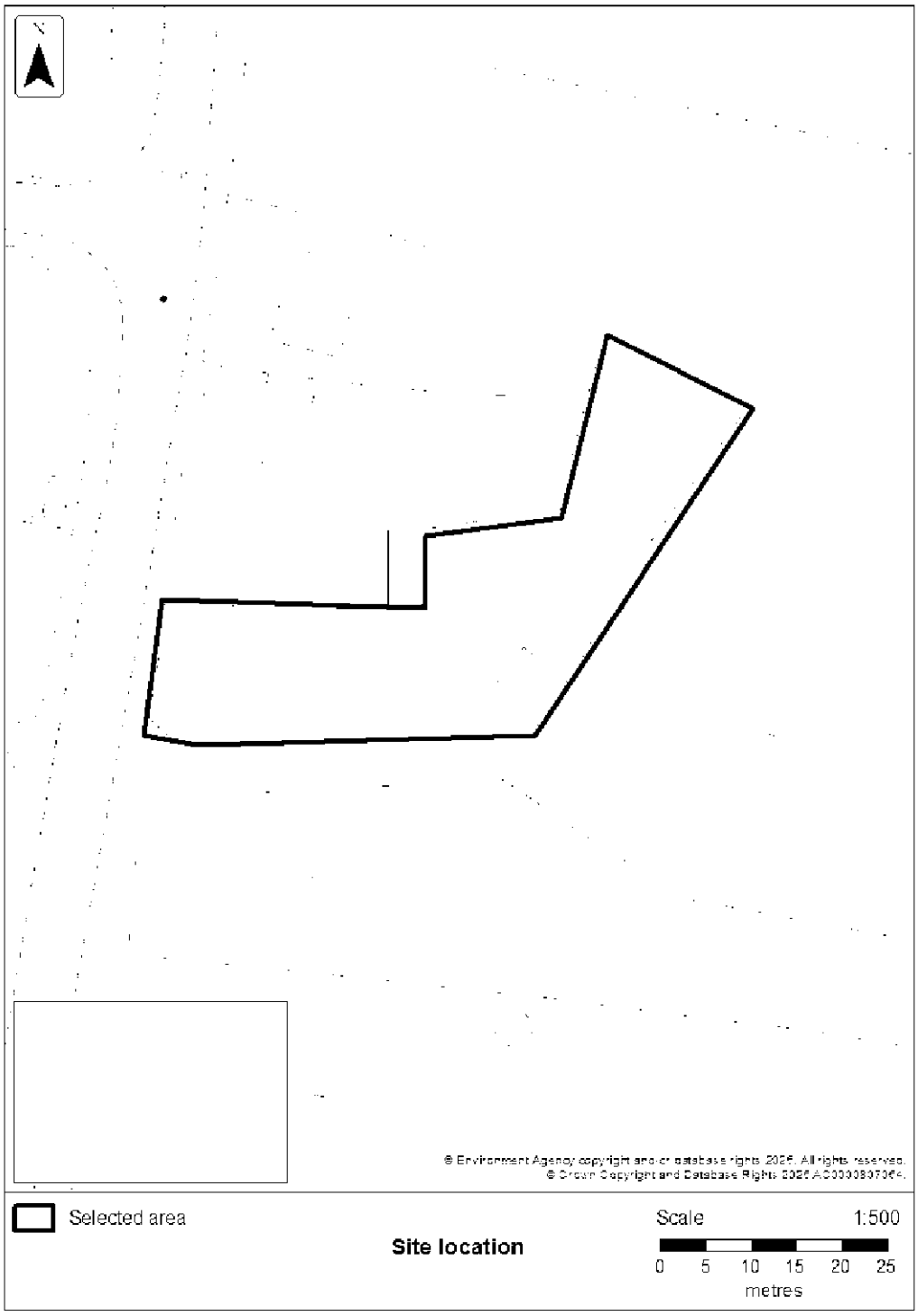
Drg.No. DA/AJD/02

Appendix C

Flood risk assessment data

Location of site: 521439 / 270466 (shown as easting and northing coordinates)
Document created on: 22 January 2025
This information was previously known as a product 4.
Customer reference number: UR3DM3HKR5E9

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:

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.

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 Cambridgeshire County.

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

About the models used

Model name: EAn_Lower Ouse_Alconbury Brook_2015
Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial
Date: 1 November 2015

Model name: EAn_Lower Ouse_Downstream_2015
Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial
Date: 1 December 2015

Model name: EAn_Lower Ouse_NMR_Brampton_2015
Scenario(s): No defences exist fluvial
Date: 1 December 2015

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

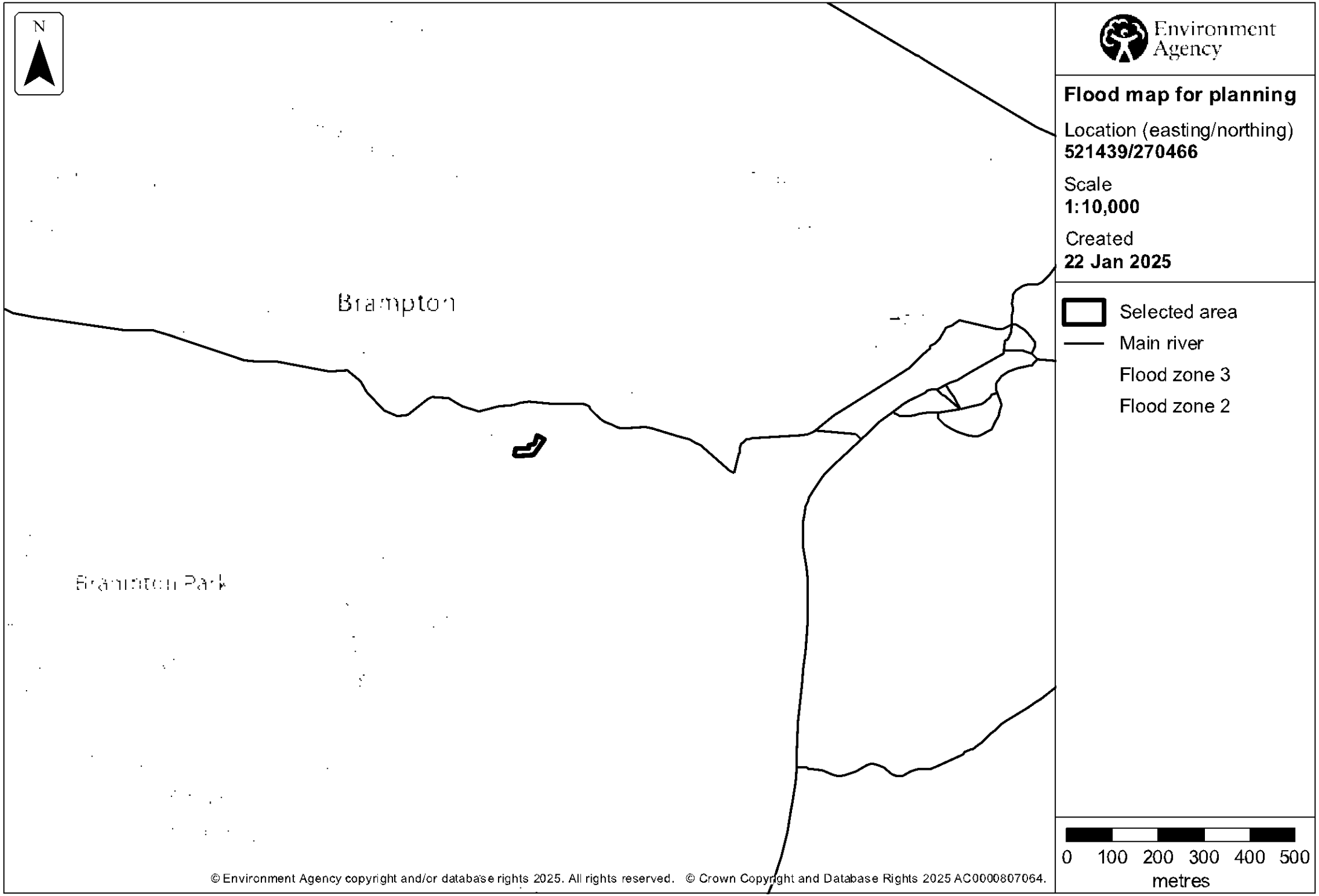
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- 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

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.



Environment Agency

Flood map for planning

Location (easting/northing)
521439/270466

Scale
1:10,000

Created
22 Jan 2025

Selected area
Main river
Flood zone 3
Flood zone 2

0 100 200 300 400 500
metres

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Recorded Flood Event Outlines
centred on 15 Buckden Road, Brampton, Huntingdon, PE28 4PR

NGR TL2143870466
Ref 394696
Created 28/01/2025



Environment Agency
Bromholme Lane,
Brampton,
Cambridgeshire
PE28 4NE

Environment Agency

Legend

- Site
- Main river
- Easter 1998
- March 1947

0 0.125 0.25 0.5 km

Information

Recorded Outlines - The recorded flood outlines provided are only indicative and may not accurately represent the area that flooded in the named events. Our historic flood event outlines do not provide a definitive record of flooding. It is possible that there will be an absence of datail in places where we have not been able to record the extent of flooding. It is also possible for errors occur in the digitisation of historic records of flooding.

Recorded Outlines - There may be other flood events that have occurred that we have not been able to produce an outline for.

Recorded Outlines - The historic flood event outlines are based on a combination of anecdotal evidence, Environment Agency staff observations and survey.

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Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Flood defences and attributes

There are no Environment Agency defences within 500m or which impact upon the area of interest.

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

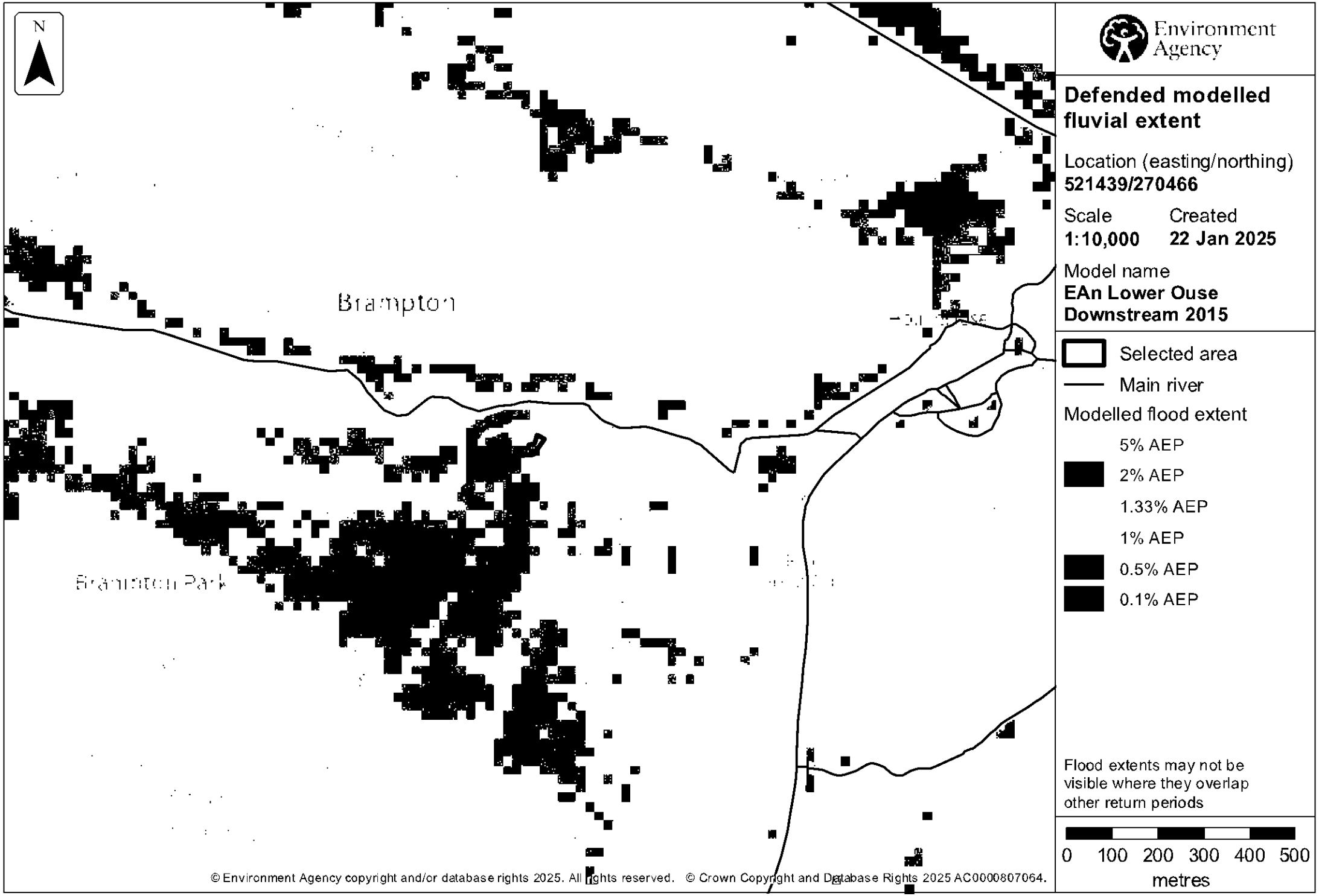
The climate change data included in the models may not include the latest flood risk assessment climate change allowances. Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

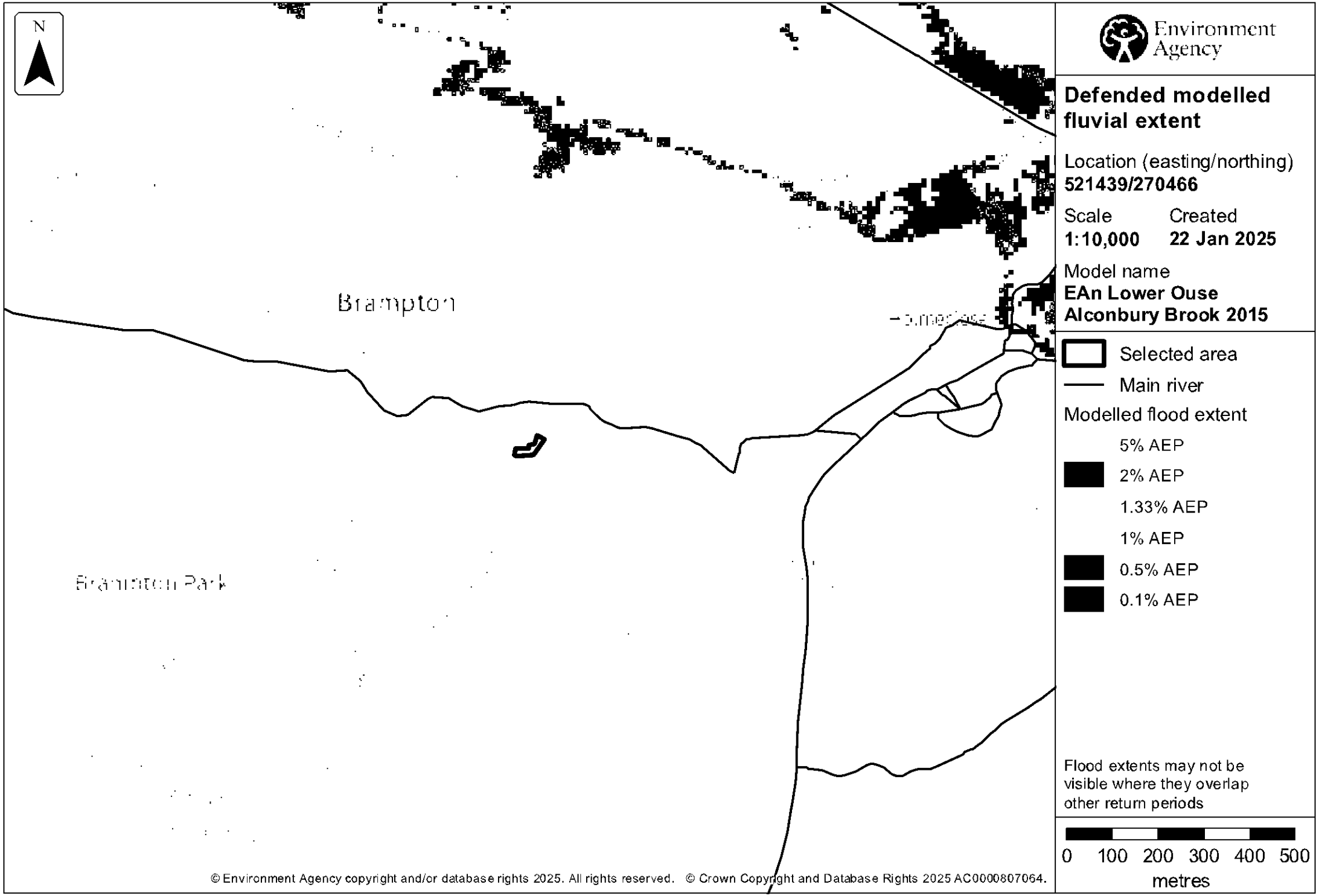
The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

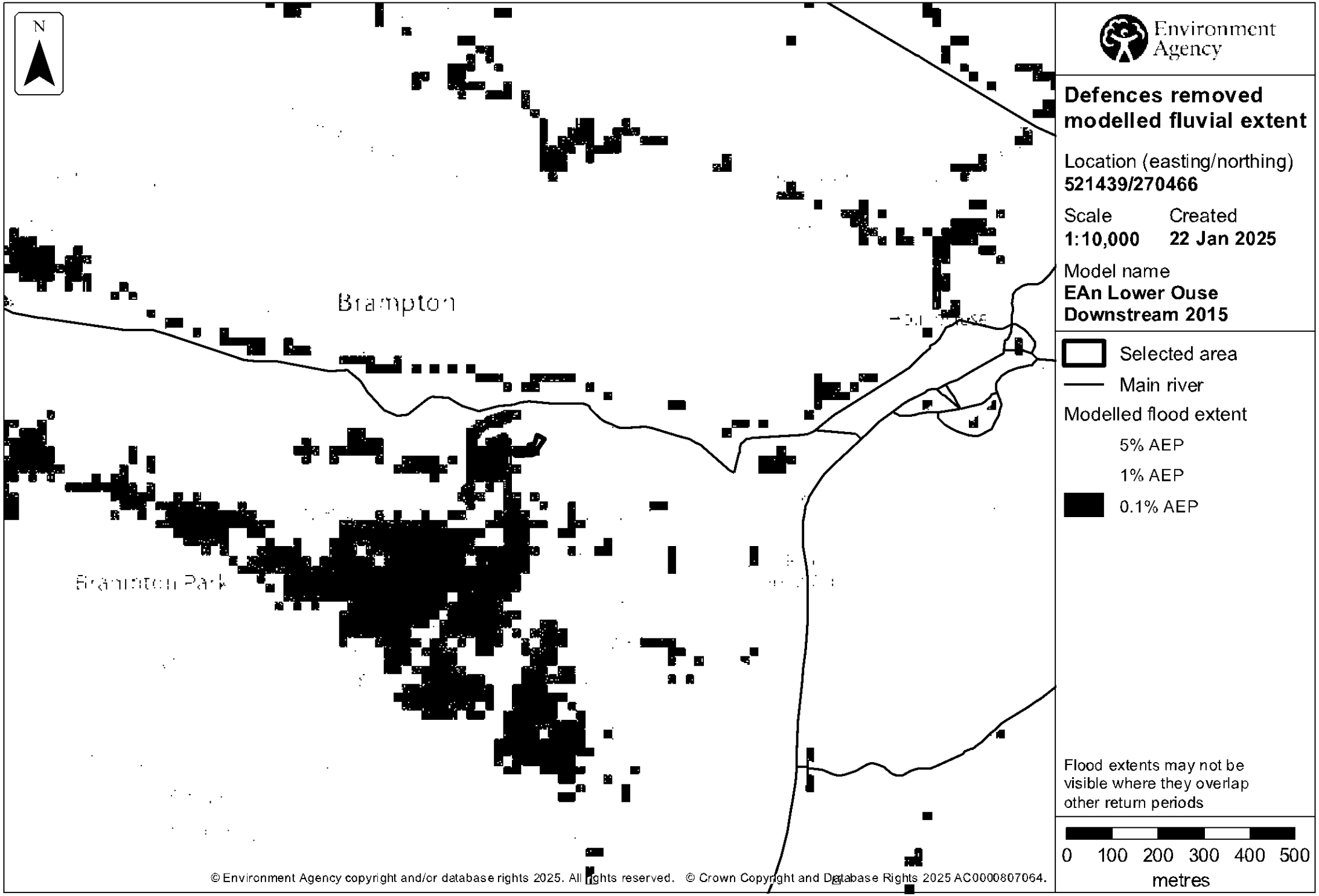
Modelled scenarios

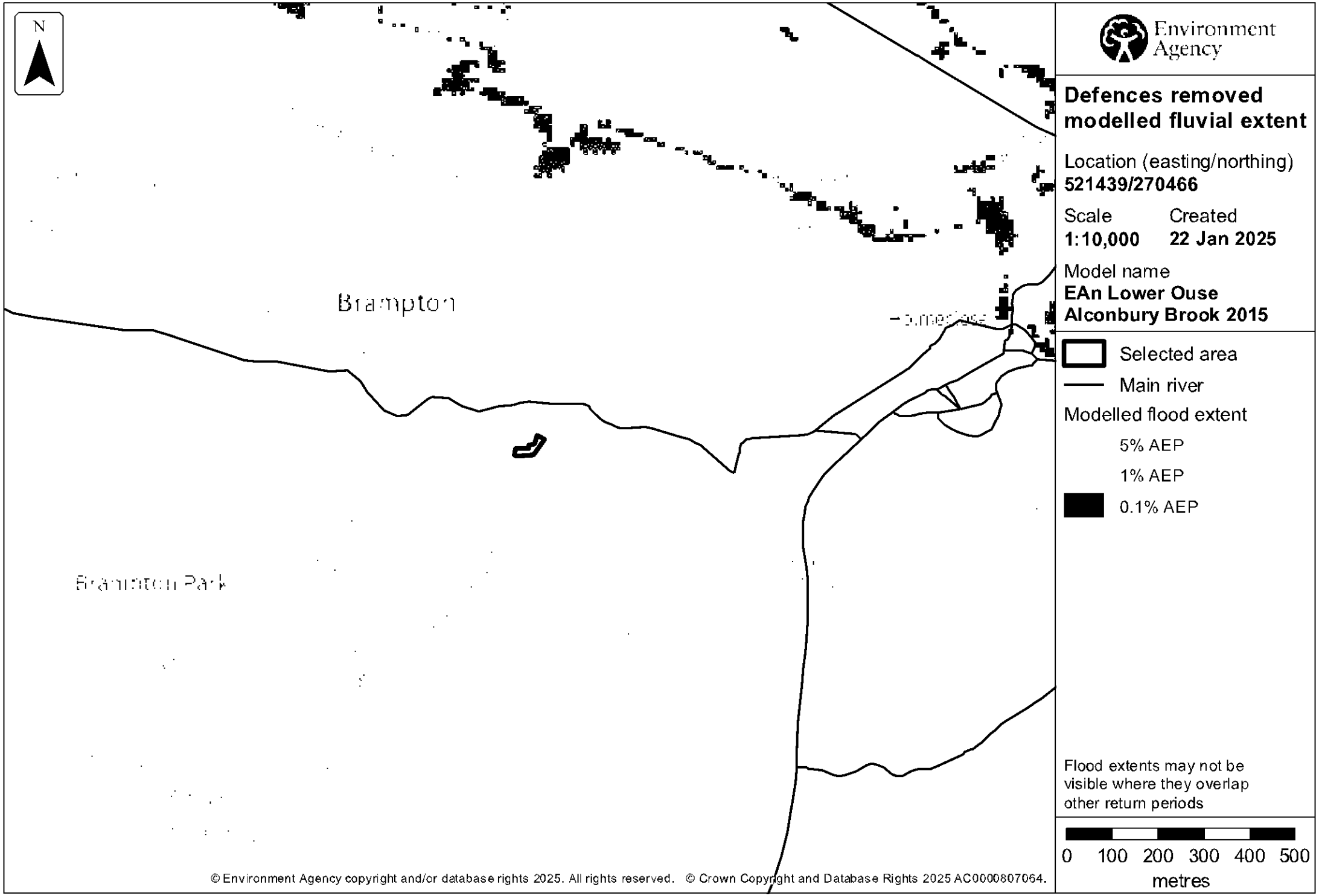
The following scenarios are included:

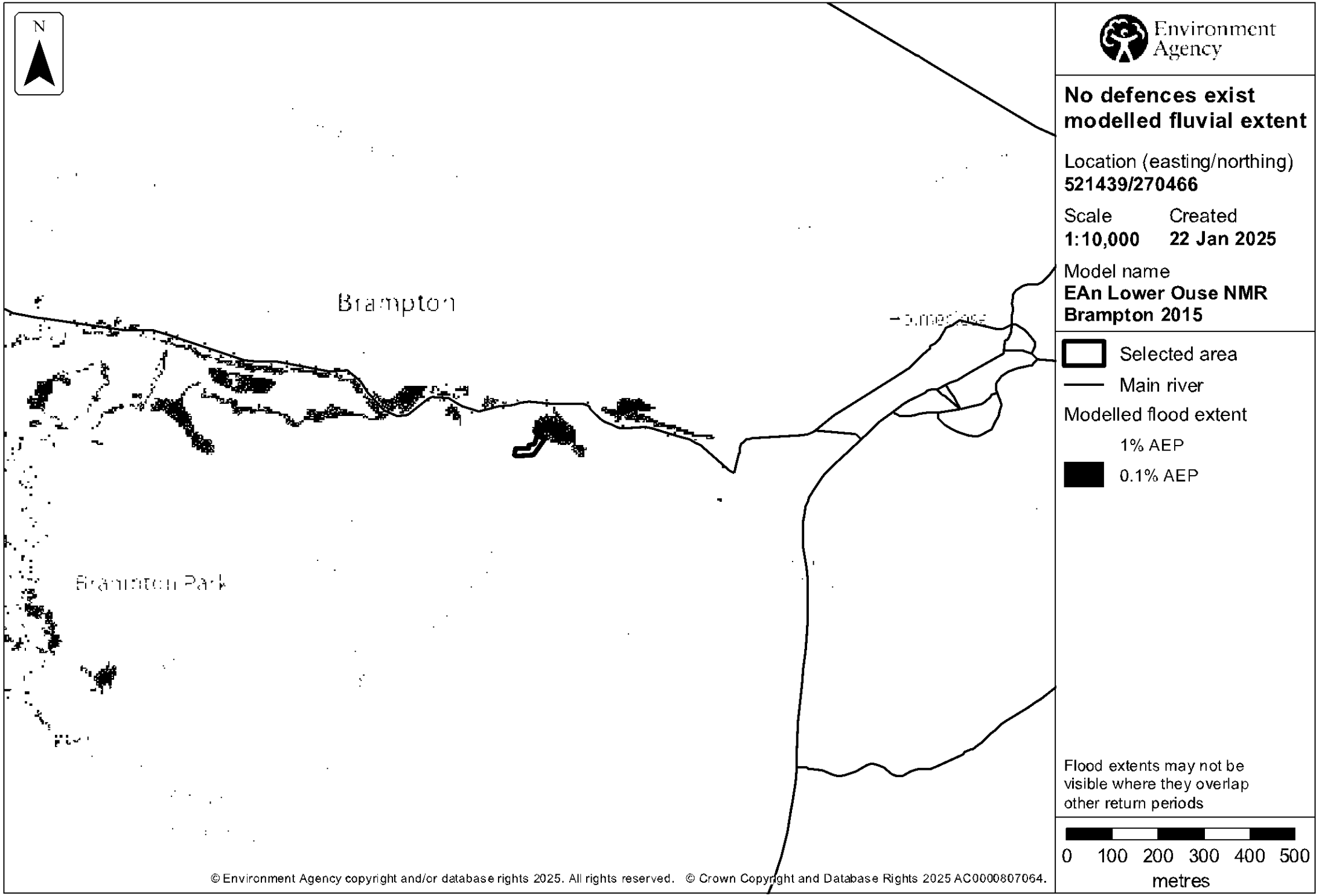
- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- Defended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


N
Brampton
Brampton Park
Environment Agency
Defended modelled fluvial extent
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Downstream 2015
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
0 100 200 300 400 500
metres
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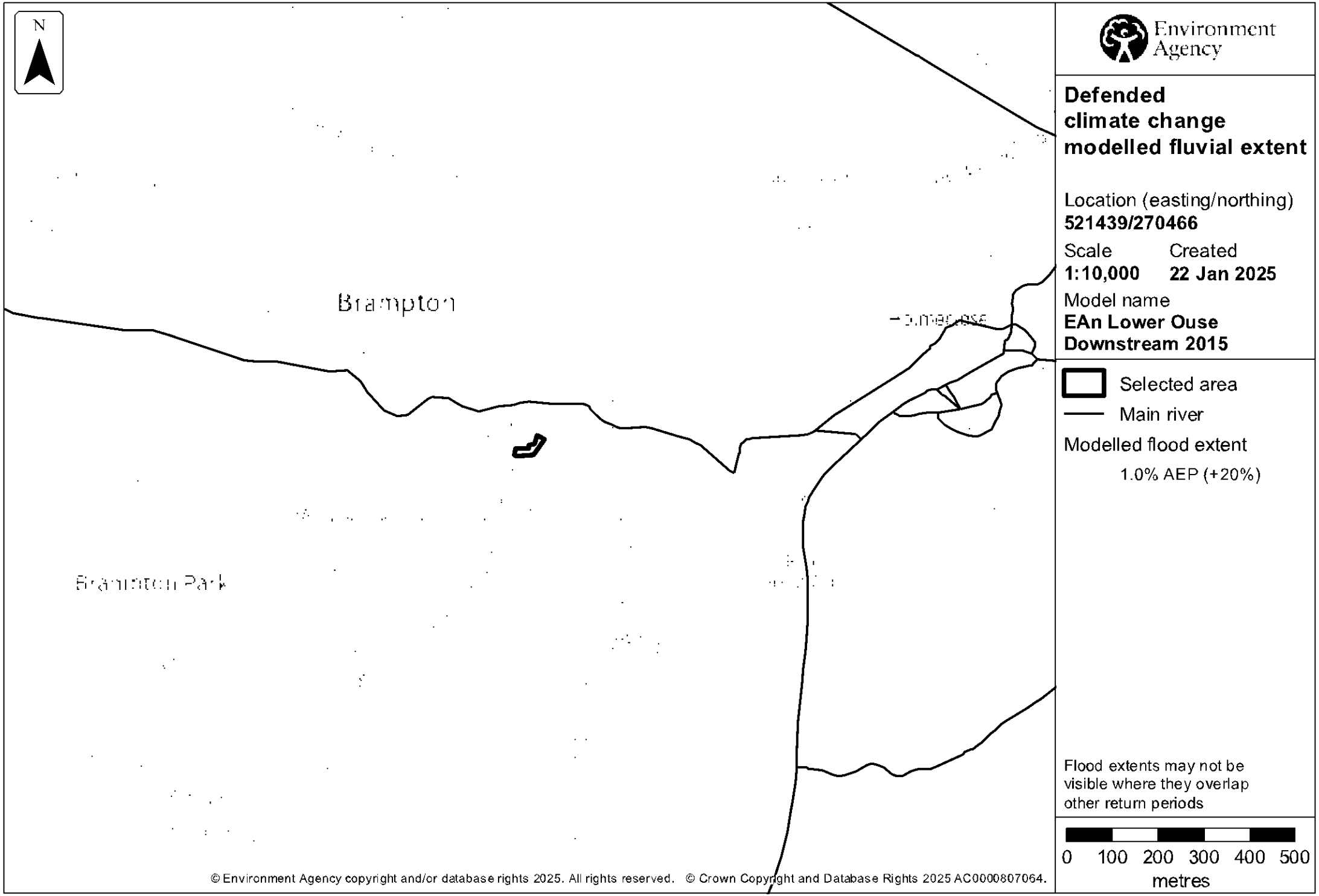

N
Brampton
Brampton Park
Environment Agency
Defended modelled fluvial extent
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Alconbury Brook 2015
Selected area
Main river
Modelled flood extent
5% AEP
2% AEP
1.33% AEP
1% AEP
0.5% AEP
0.1% AEP
Flood extents may not be visible where they overlap other return periods
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.

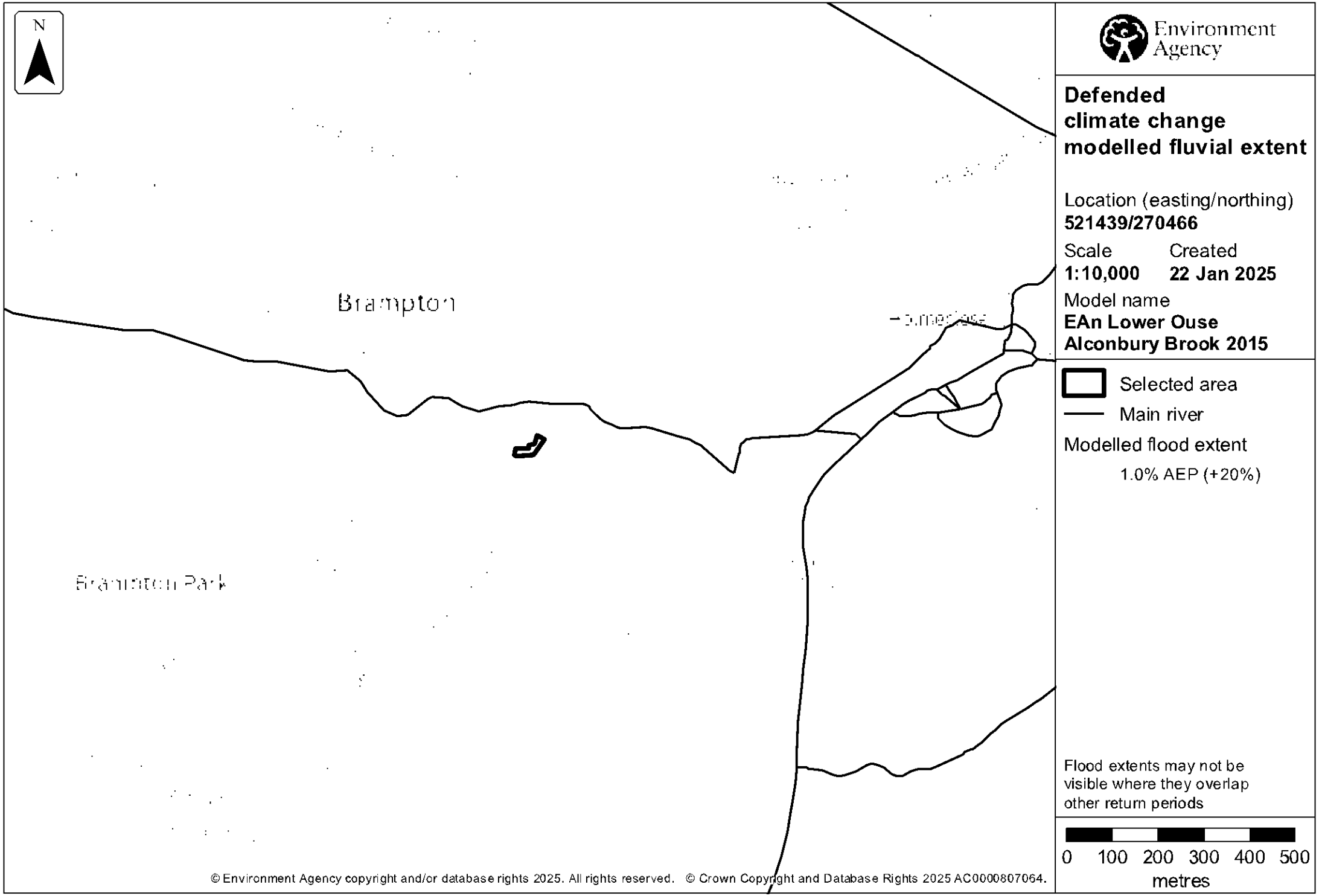

N
Brampton
Brampton Park
Environment Agency
Defences removed modelled fluvial extent
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Downstream 2015
Selected area
Main river
Modelled flood extent
5% AEP
1% AEP
0.1% AEP
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
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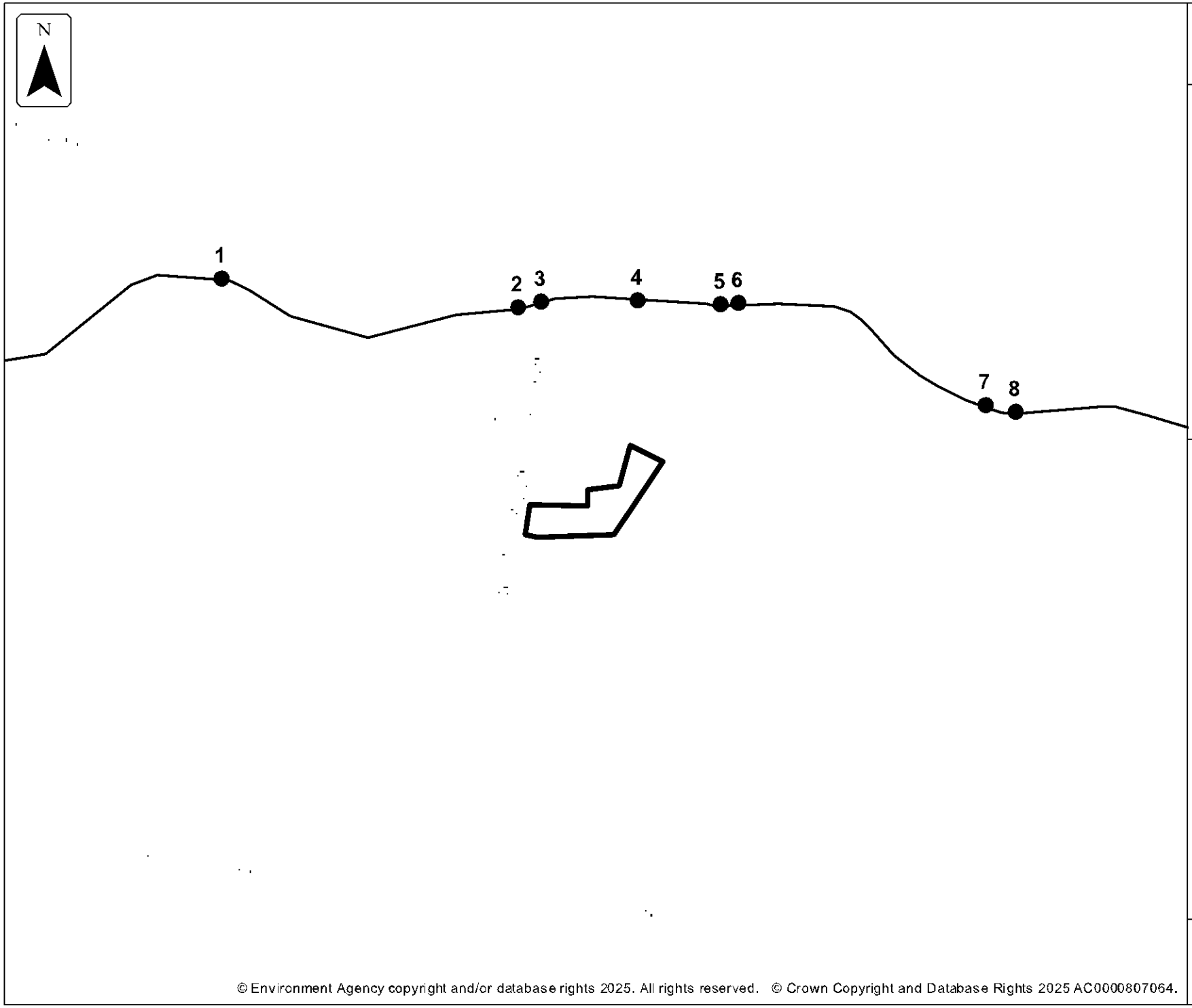

N
Brampton
Brampton Park
Environment Agency
Defences removed modelled fluvial extent
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Alconbury Brook 2015
Selected area
Main river
Modelled flood extent
5% AEP
1% AEP
0.1% AEP
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
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N
Brampton
Brampton Park
Environment Agency
Defended climate change modelled fluvial extent
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Downstream 2015
Selected area
Main river
Modelled flood extent
1.0% AEP (+20%)
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
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N
Brampton
Brampton Park
Environment Agency
Defended climate change modelled fluvial extent
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Alconbury Brook 2015
Selected area
Main river
Modelled flood extent
1.0% AEP (+20%)
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
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Environment Agency

Defended modelled fluvial node locations

Location (easting/northing)
521439/270466

Scale
1:2,500

Created
22 Jan 2025

Model name
EAn Lower Ouse Downstream 2015

Selected area

Modelled location

Main river

0 25 50 75 100
metres

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Modelled node locations data

Defended

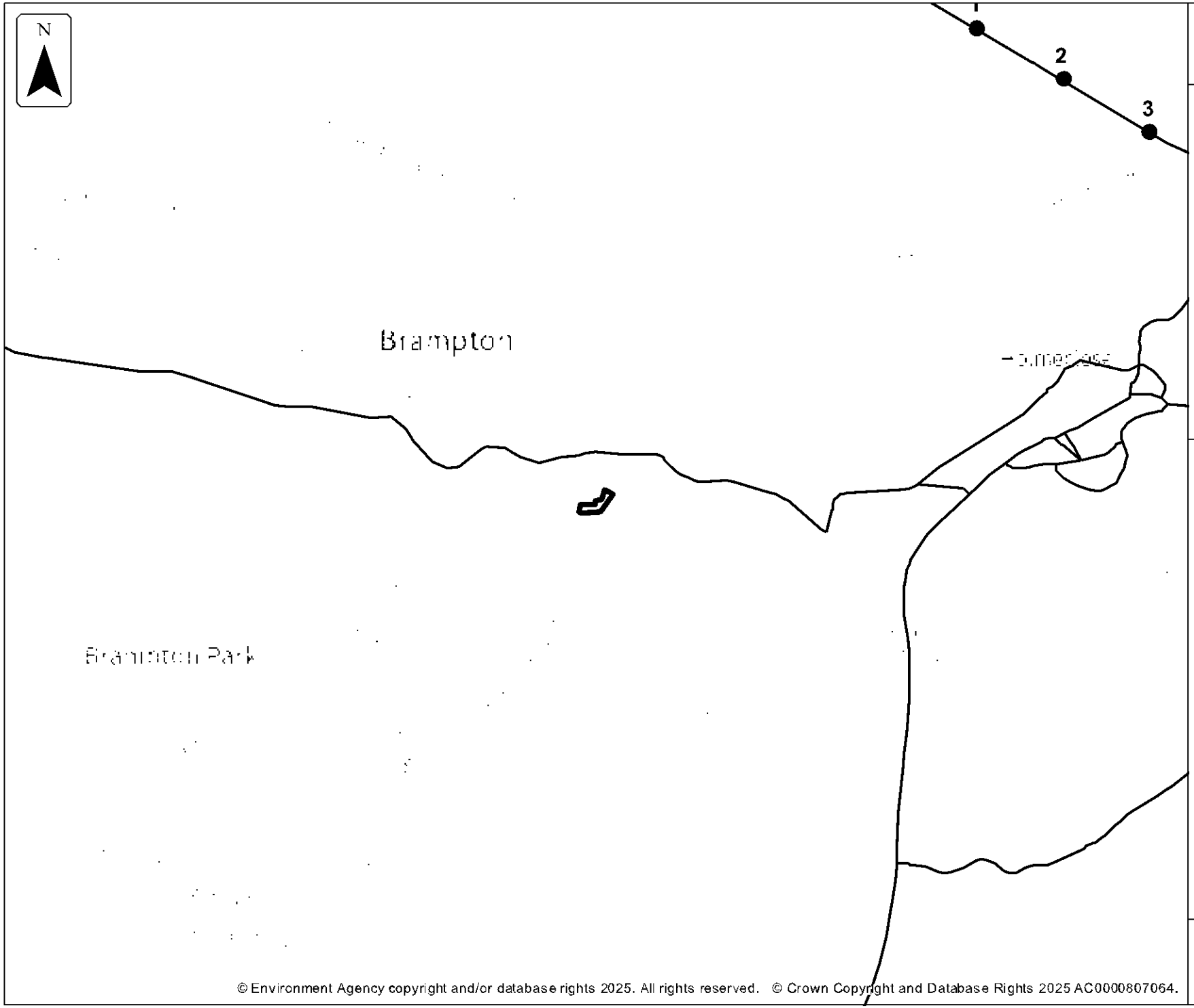
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
1	1278945	521258	270575	10.85	10.95	11.0	11.04	11.05	11.11	11.13	11.15	11.23	11.50
2	1279240	521402	270561	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.22	11.50
3	1279142	521413	270564	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.22	11.50
4	1279121	521459	270565	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.52
5	1279029	521500	270562	10.85	10.94	10.99	11.04	11.06	11.11	11.13	11.15	11.25	11.60
6	1278886	521509	270563	10.85	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.25	11.63
7	1279257	521629	270514	10.85	10.94	11.0	11.05	11.06	11.12	11.14	11.16	11.23	11.52
8	1278881	521643	270510	10.85	10.94	11.0	11.05	11.06	11.12	11.14	11.16	11.23	11.51

Data in this table comes from the EAn Lower Ouse Downstream 2015 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	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1278945	521258	270575	0.80	-2.17	-3.65	-4.60	-4.85	-5.23	-5.41	-5.47	-5.80	4.43
2	1279240	521402	270561	0.80	-2.22	-3.69	-4.65	-4.91	-5.29	-5.47	-5.53	-5.86	4.41
3	1279142	521413	270564	0.80	-2.23	-3.69	-4.66	-4.91	-5.29	-5.48	-5.54	-5.87	4.41
4	1279121	521459	270565	0.80	-2.24	-3.70	-4.67	-4.92	-5.30	-5.50	-5.55	-5.88	4.41
5	1279029	521500	270562	0.80	-2.25	-3.71	-4.68	-4.93	-5.31	-5.50	-5.56	-5.89	8.12
6	1278886	521509	270563	0.80	-2.26	-3.59	-4.42	-4.64	-4.94	-5.06	-5.06	-5.28	4.41
7	1279257	521629	270514	0.91	-2.38	-3.31	-3.17	-3.15	-2.71	2.33	2.38	3.0	4.29
8	1278881	521643	270510	0.79	-3.55	-5.26	-5.83	-5.83	-5.08	-5.09	-5.15	-5.41	4.19

Data in this table comes from the EAn Lower Ouse Downstream 2015 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.



Environment Agency

Defended modelled fluvial node locations

Location (easting/northing)
521439/270466

Scale
1:10,000

Created
22 Jan 2025

Model name
EAn Lower Ouse Alconbury Brook 2015

Selected area
Modelled location
Main river

0 100 200 300 400 500
metres

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Modelled node locations data

Defended

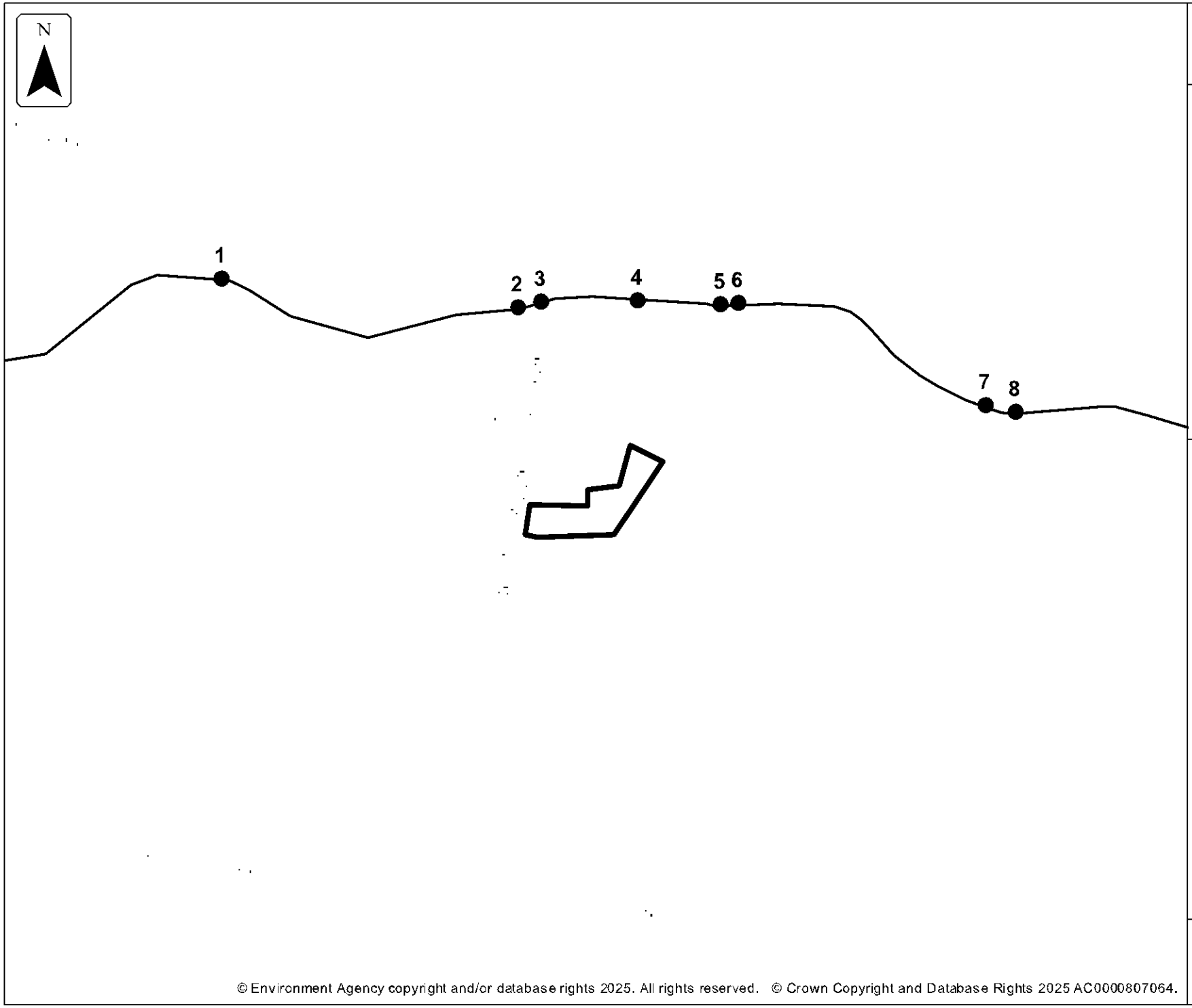
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
1	942726	522180	271391	10.10	10.30	10.37	10.50	10.56	10.66	10.70	10.72	10.83	11.19
2	942727	522348	271292	10.0	10.20	10.29	10.39	10.47	10.60	10.65	10.68	10.82	11.19
3	942728	522516	271190	9.97	10.15	10.24	10.35	10.39	10.51	10.56	10.61	10.76	11.18

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	942726	522180	271391	17.86	18.20	18.62	18.87	18.90	18.93	18.94	18.96	19.0	19.20
2	942727	522348	271292	17.83	18.70	21.52	23.01	23.10	23.15	23.19	23.18	23.24	23.54
3	942728	522516	271190	17.84	21.41	28.19	38.92	44.45	55.02	58.68	61.18	71.74	97.14

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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.



Environment Agency

Defences removed modelled fluvial node locations

Location (easting/northing)
521439/270466

Scale
1:2,500

Created
22 Jan 2025

Model name
EAn Lower Ouse Downstream 2015

Selected area

Modelled location

Main river

0 25 50 75 100
metres

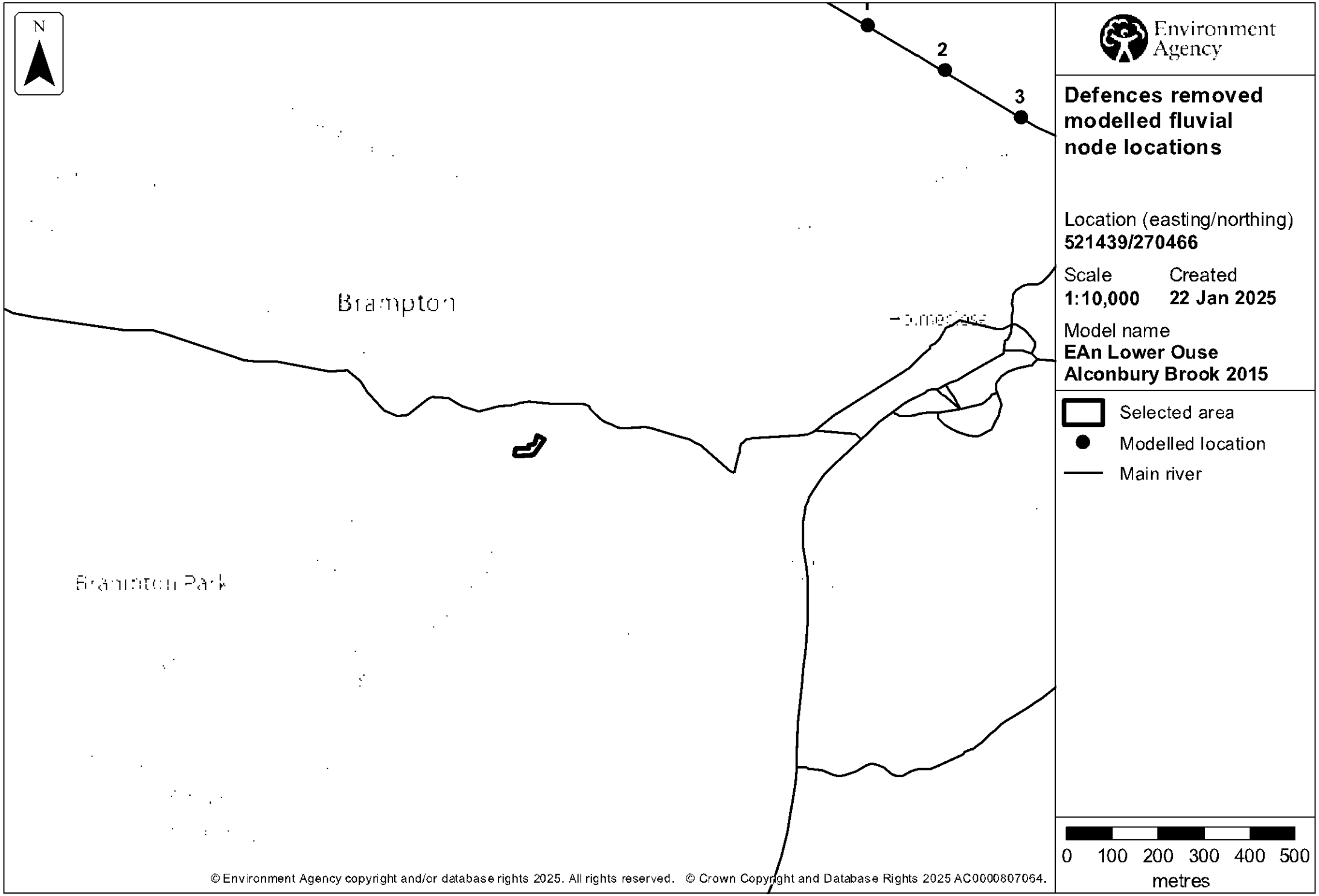
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Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	5% AEP Level	1% AEP Level	0.1% AEP Level	5% AEP Flow	1% AEP Flow	0.1% AEP Flow
1	1278945	521258	270575	11.04	11.04	11.50	-2.11	2.29	4.43
2	1279240	521402	270561	11.04	11.04	11.50	-2.15	2.29	4.41
3	1279142	521413	270564	11.04	11.04	11.50	-2.16	2.29	4.41
4	1279121	521459	270565	11.04	11.04	11.52	-2.16	2.29	4.41
5	1279029	521500	270562	11.04	11.04	11.63	-2.17	2.29	8.12
6	1278886	521509	270563	11.04	11.04	11.65	-2.09	2.29	4.41
7	1279257	521629	270514	11.05	11.05	11.52	1.69	2.41	4.29
8	1278881	521643	270510	11.05	11.05	11.52	-1.82	2.28	4.19

Data in this table comes from the EAn Lower Ouse Downstream 2015 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.

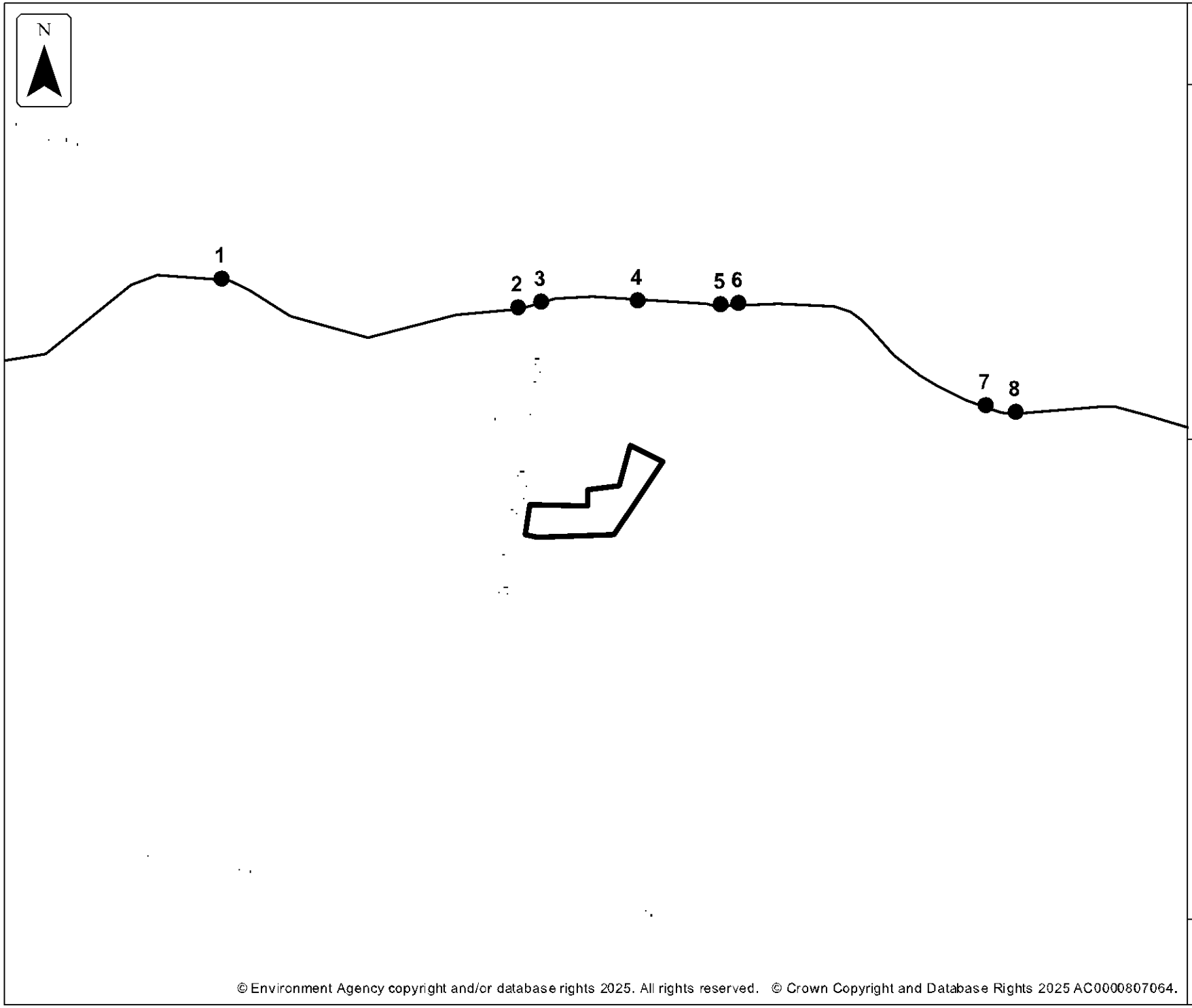

N
2
3
Brampton
Brampton Park
Environment Agency
Defences removed modelled fluvial node locations
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Alconbury Brook 2015
Selected area
Modelled location
Main river
0 100 200 300 400 500
metres
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Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	5% AEP Level	1% AEP Level	0.1% AEP Level	5% AEP Flow	1% AEP Flow	0.1% AEP Flow
1	942726	522180	271391	10.50	10.72	11.19	18.87	18.95	19.20
2	942727	522348	271292	10.39	10.68	11.19	23.01	23.18	23.54
3	942728	522516	271190	10.35	10.61	11.18	38.91	61.16	97.03

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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.



Environment Agency

Defended climate change modelled fluvial node locations

Location (easting/northing)
521439/270466

Scale
1:2,500

Created
22 Jan 2025

Model name
EAn Lower Ouse Downstream 2015

Selected area

Modelled location

Main river

0 25 50 75 100
metres

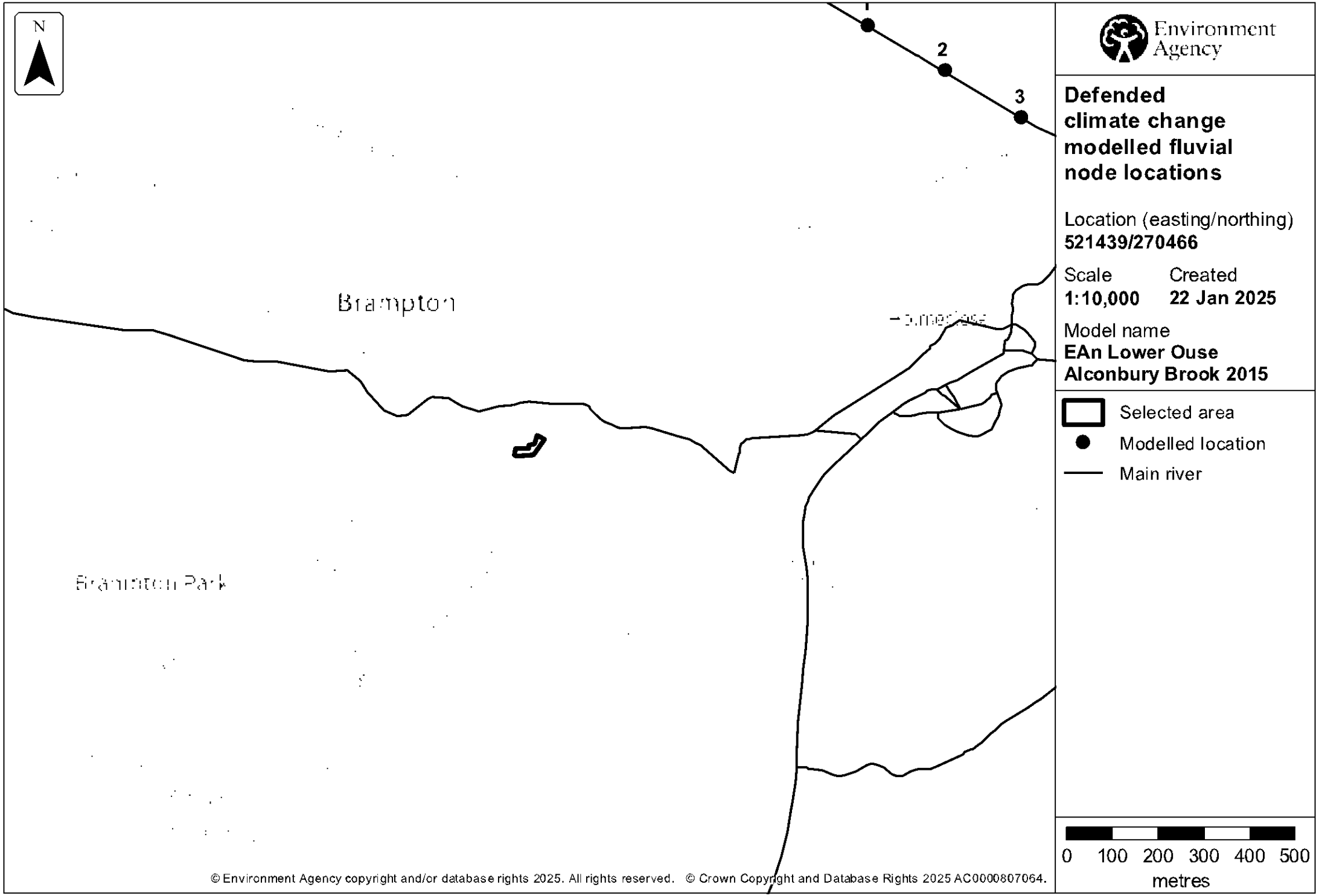
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Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+20%)
				Level	Flow
1	1278945	521258	270575	11.25	-5.72
2	1279240	521402	270561	11.25	-5.78
3	1279142	521413	270564	11.24	-5.79
4	1279121	521459	270565	11.25	-5.81
5	1279029	521500	270562	11.27	-5.81
6	1278886	521509	270563	11.27	-5.22
7	1279257	521629	270514	11.25	2.89
8	1278881	521643	270510	11.26	-5.33

Data in this table comes from the EAn Lower Ouse Downstream 2015 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.

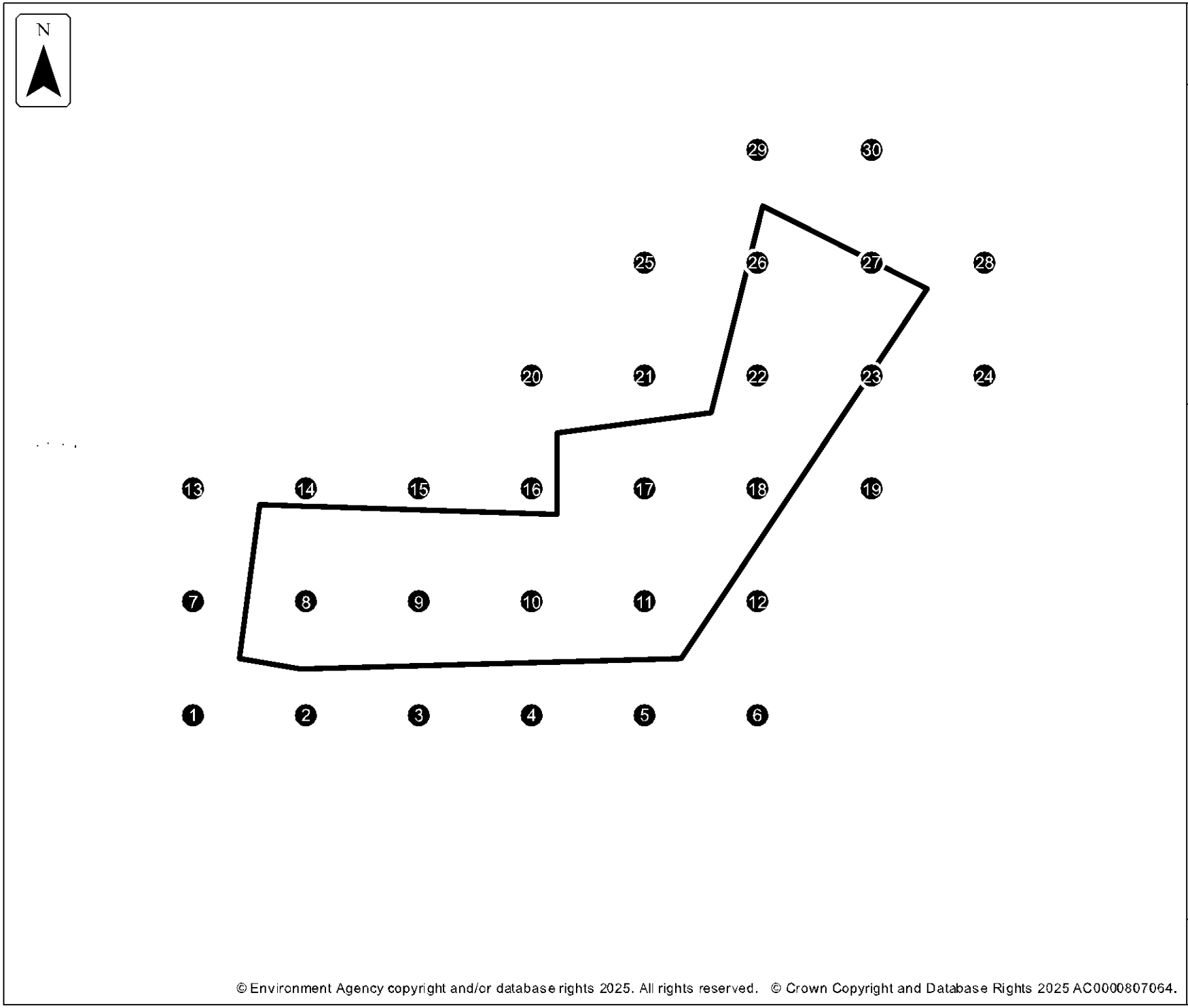

N
2
3
Brampton
Brampton Park
Environment Agency
Defended climate change modelled fluvial node locations
Location (easting/northing)
521439/270466
Scale
1:10,000
Created
22 Jan 2025
Model name
EAn Lower Ouse Alconbury Brook 2015
Selected area
Modelled location
Main river
0 100 200 300 400 500
metres
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Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+20%)
				Level	Flow
1	942726	522180	271391	10.83	19.02
2	942727	522348	271292	10.82	23.26
3	942728	522516	271190	10.80	71.81

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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.



Environment Agency

Defended modelled fluvial extent and height

Location (easting/northing)
521439/270466

Scale
1:500

Created
22 Jan 2025

Model name
EAn Lower Ouse Downstream 2015

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 11.0
- 11.0 - 11.125
- 11.125 - 11.25
- 11.25 - 11.375
- 11.375 - 11.5
- 11.5 - 11.625
- 11.625 - 11.75
- 11.75 - 11.875
- 11.875 - 12.0

This map shows the 0.1% AEP height data

0 5 10 15 20
metres

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Sample point data

Defended

Label	Easting	Northing	50% AEP Depth	20% AEP Depth	10% AEP Depth	5% AEP Depth	4% AEP Depth	2% AEP Depth	1.33% AEP Depth	1% AEP Depth	0.5% AEP Depth	0.1% AEP Depth
1	521400	270445	NoData	NoData	NoData	NoData	NoData	0.03	0.04	0.05	0.08	0.28
2	521411	270445	NoData	NoData	NoData	NoData	NoData	0.03	0.04	0.05	0.08	0.28
3	521422	270445	NoData	NoData	NoData	0.04	0.05	0.10	0.12	0.13	0.20	0.48
4	521433	270445	NoData	NoData	NoData	0.04	0.05	0.10	0.12	0.13	0.20	0.48
5	521444	270445	NoData	0.02	0.02	0.03	0.03	0.04	0.06	0.08	0.15	0.44
6	521455	270445	NoData	0.02	0.02	0.03	0.03	0.04	0.06	0.08	0.15	0.44
7	521400	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.14	0.42
8	521411	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.14	0.42
9	521422	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07	0.35
10	521433	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07	0.35
11	521444	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.53
12	521455	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.53
13	521400	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.14	0.42
14	521411	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.14	0.42
15	521422	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07	0.35
16	521433	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07	0.35

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
17	521444	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.53
18	521455	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.53
19	521466	270467	0.09	0.12	0.15	0.20	0.21	0.27	0.29	0.31	0.39	0.69
20	521433	270478	NoData	NoData	0.05	0.08	0.09	0.15	0.17	0.19	0.27	0.55
21	521444	270478	0.12	0.20	0.26	0.31	0.32	0.37	0.40	0.41	0.49	0.78
22	521455	270478	0.12	0.20	0.26	0.31	0.32	0.37	0.40	0.41	0.49	0.78
23	521466	270478	0.10	0.19	0.25	0.30	0.31	0.37	0.39	0.41	0.49	0.79
24	521477	270478	0.10	0.19	0.25	0.30	0.31	0.37	0.39	0.41	0.49	0.79
25	521444	270489	0.59	0.67	0.72	0.77	0.78	0.84	0.86	0.88	0.96	1.26
26	521455	270489	0.59	0.67	0.72	0.77	0.78	0.84	0.86	0.88	0.96	1.26
27	521466	270489	0.68	0.77	0.83	0.88	0.89	0.95	0.97	0.99	1.07	1.37
28	521477	270489	0.68	0.77	0.83	0.88	0.89	0.95	0.97	0.99	1.07	1.37
29	521455	270500	0.59	0.67	0.72	0.77	0.78	0.84	0.86	0.88	0.96	1.26
30	521466	270500	0.68	0.77	0.83	0.88	0.89	0.95	0.97	0.99	1.07	1.37
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	0.14	0.53

Data in this table comes from the EAn Lower Ouse Downstream 2015 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.

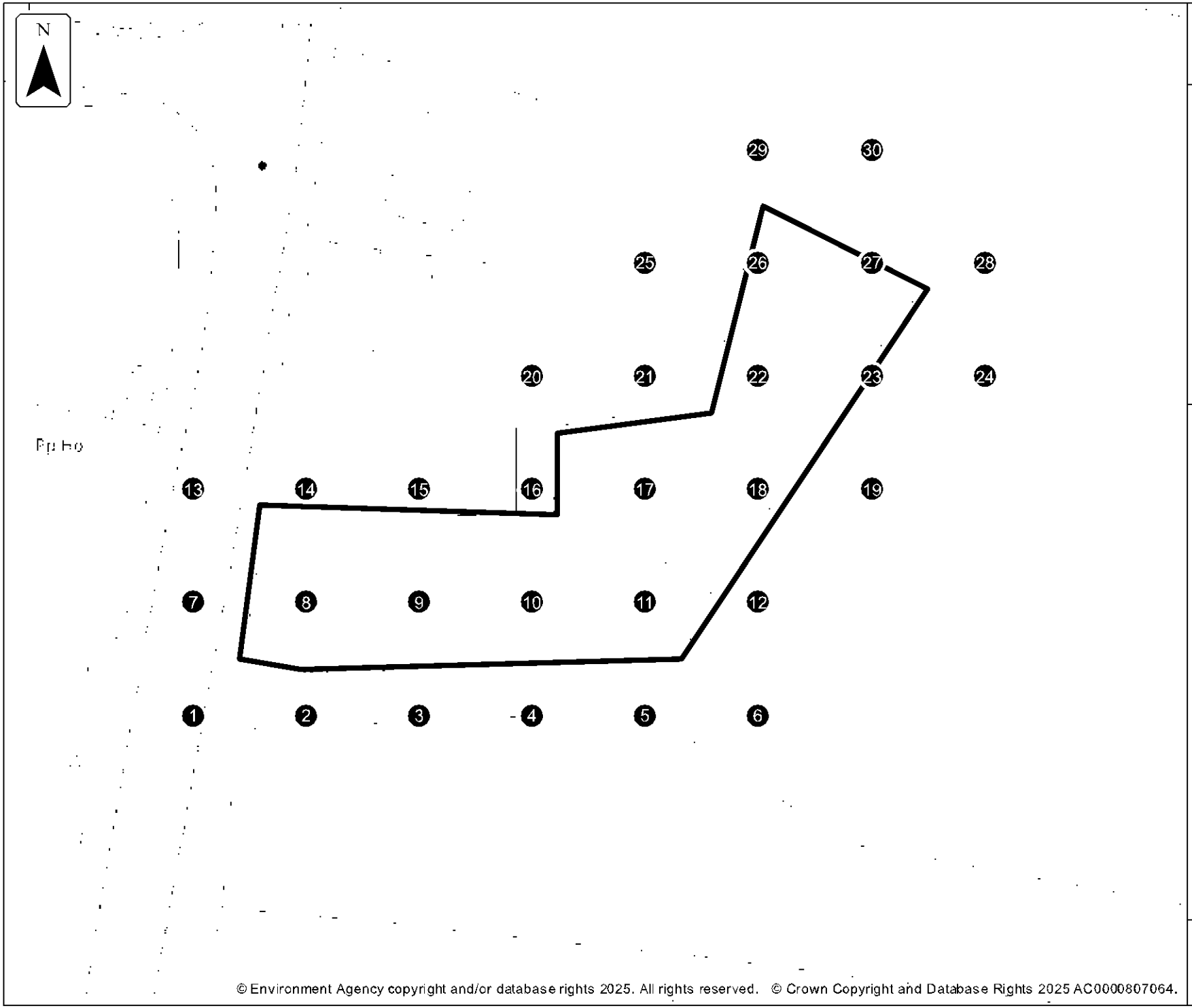
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defended

Label	Easting	Northing	50% AEP Height	20% AEP Height	10% AEP Height	5% AEP Height	4% AEP Height	2% AEP Height	1.33% AEP Height	1% AEP Height	0.5% AEP Height	0.1% AEP Height
1	521400	270445	NoData	NoData	NoData	NoData	NoData	11.11	11.13	11.15	11.22	11.50
2	521411	270445	NoData	NoData	NoData	NoData	NoData	11.11	11.13	11.15	11.22	11.50
3	521422	270445	NoData	NoData	NoData	11.04	11.05	11.11	11.13	11.15	11.22	11.50
4	521433	270445	NoData	NoData	NoData	11.04	11.05	11.11	11.13	11.15	11.22	11.50
5	521444	270445	NoData	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.22	11.51
6	521455	270445	NoData	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.22	11.51
7	521400	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
8	521411	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
9	521422	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
10	521433	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
11	521444	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.51
12	521455	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.51
13	521400	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
14	521411	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
15	521422	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
16	521433	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.22	11.50
17	521444	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.51
18	521455	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	11.51

Label	Easting	Northing	50% AEP Height	20% AEP Height	10% AEP Height	5% AEP Height	4% AEP Height	2% AEP Height	1.33% AEP Height	1% AEP Height	0.5% AEP Height	0.1% AEP Height
19	521466	270467	10.85	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.53
20	521433	270478	NoData	NoData	10.99	11.04	11.05	11.11	11.13	11.15	11.22	11.51
21	521444	270478	10.85	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.22	11.52
22	521455	270478	10.85	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.22	11.52
23	521466	270478	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.53
24	521477	270478	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.53
25	521444	270489	10.85	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.52
26	521455	270489	10.85	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.52
27	521466	270489	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.54
28	521477	270489	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.54
29	521455	270500	10.85	10.93	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.52
30	521466	270500	10.85	10.94	10.99	11.04	11.05	11.11	11.13	11.15	11.23	11.54
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	11.22	11.51

Data in this table comes from the EAn Lower Ouse Downstream 2015 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.



Environment Agency

Defended modelled fluvial extent and height

Location (easting/northing)
521439/270466

Scale
1:500

Created
22 Jan 2025

Model name
EAn Lower Ouse Alconbury Brook 2015

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 31
- 31 - 31.5
- 31.5 - 32
- 32 - 32.5
- 32.5 - 33
- 33 - 33.5
- 33.5 - 34
- 34 - 34.5
- 34.5 - 35

This map shows the 0.1% AEP height data

0 5 10 15 20
metres

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Sample point data

Defended

Label	Easting	Northing	50% AEP Depth	20% AEP Depth	10% AEP Depth	5% AEP Depth	4% AEP Depth	2% AEP Depth	1.33% AEP Depth	1% AEP Depth	0.5% AEP Depth	0.1% AEP Depth
1	521400	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
2	521411	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
3	521422	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	521433	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
5	521444	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
6	521455	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
7	521400	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	521411	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	521422	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	521433	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
11	521444	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
12	521455	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
13	521400	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
14	521411	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
15	521422	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	521433	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
17	521444	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
18	521455	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
19	521466	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
20	521433	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	521444	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
22	521455	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
23	521466	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	521477	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
25	521444	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
26	521455	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
27	521466	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
28	521477	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
29	521455	270500	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
30	521466	270500	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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.

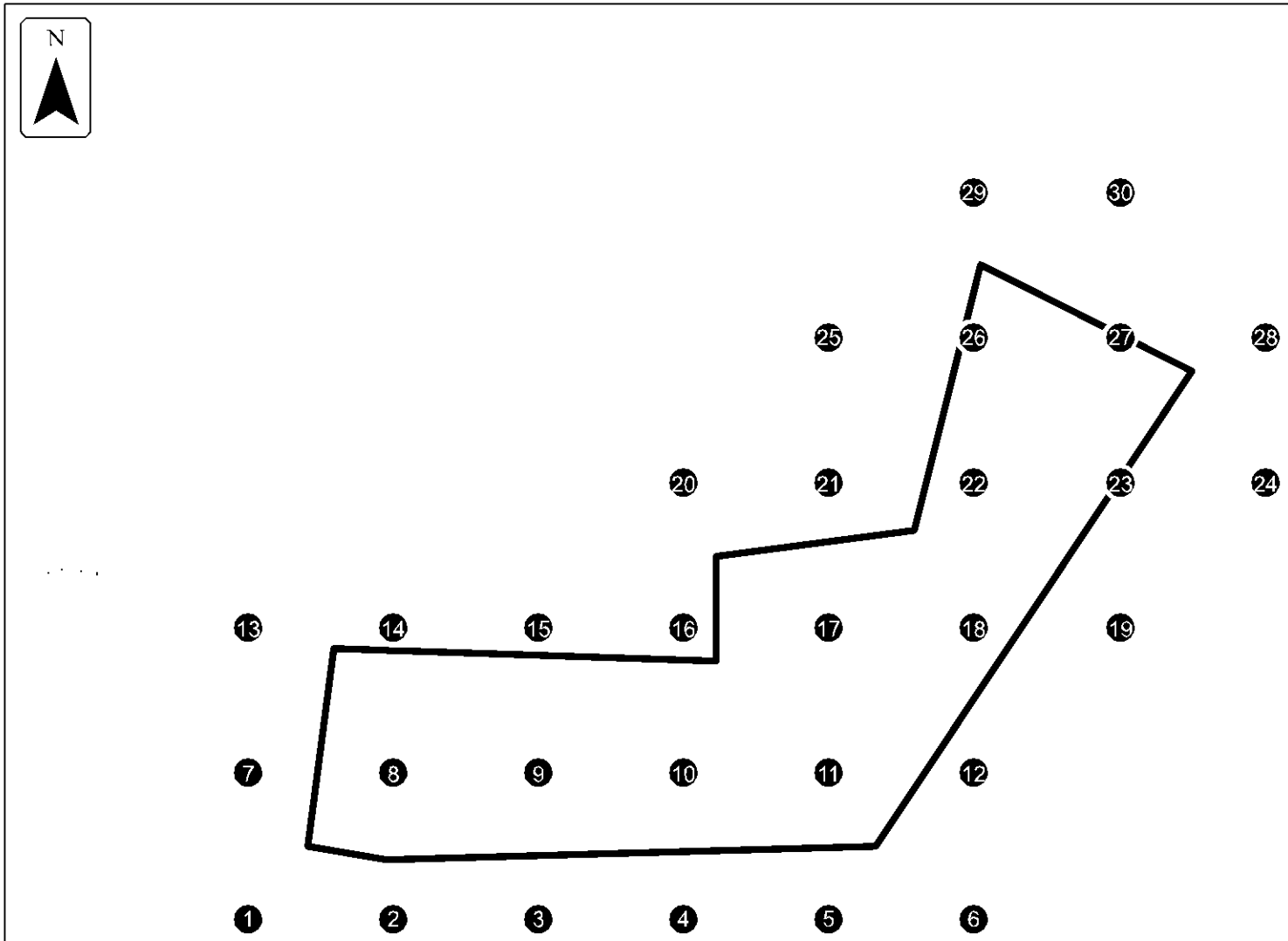
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defended

Label	Easting	Northing	50% AEP Height	20% AEP Height	10% AEP Height	5% AEP Height	4% AEP Height	2% AEP Height	1.33% AEP Height	1% AEP Height	0.5% AEP Height	0.1% AEP Height
1	521400	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
2	521411	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
3	521422	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	521433	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
5	521444	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
6	521455	270445	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
7	521400	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	521411	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	521422	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	521433	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
11	521444	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
12	521455	270456	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
13	521400	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
14	521411	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
15	521422	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	521433	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
17	521444	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
18	521455	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
19	521466	270467	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
20	521433	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	521444	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
22	521455	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
23	521466	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	521477	270478	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
25	521444	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
26	521455	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
27	521466	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
28	521477	270489	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
29	521455	270500	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
30	521466	270500	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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.



Environment Agency

Defences removed modelled fluvial extent and height

Location (easting/northing)
521439/270466

Scale
1:500

Created
22 Jan 2025

Model name
EAn Lower Ouse Downstream 2015

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 11.0
- 11.0 - 11.125
- 11.125 - 11.25
- 11.25 - 11.375
- 11.375 - 11.5
- 11.5 - 11.625
- 11.625 - 11.75
- 11.75 - 11.875
- 11.875 - 12.0

This map shows the 0.1% AEP height data

0 5 10 15 20
metres

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Sample point data

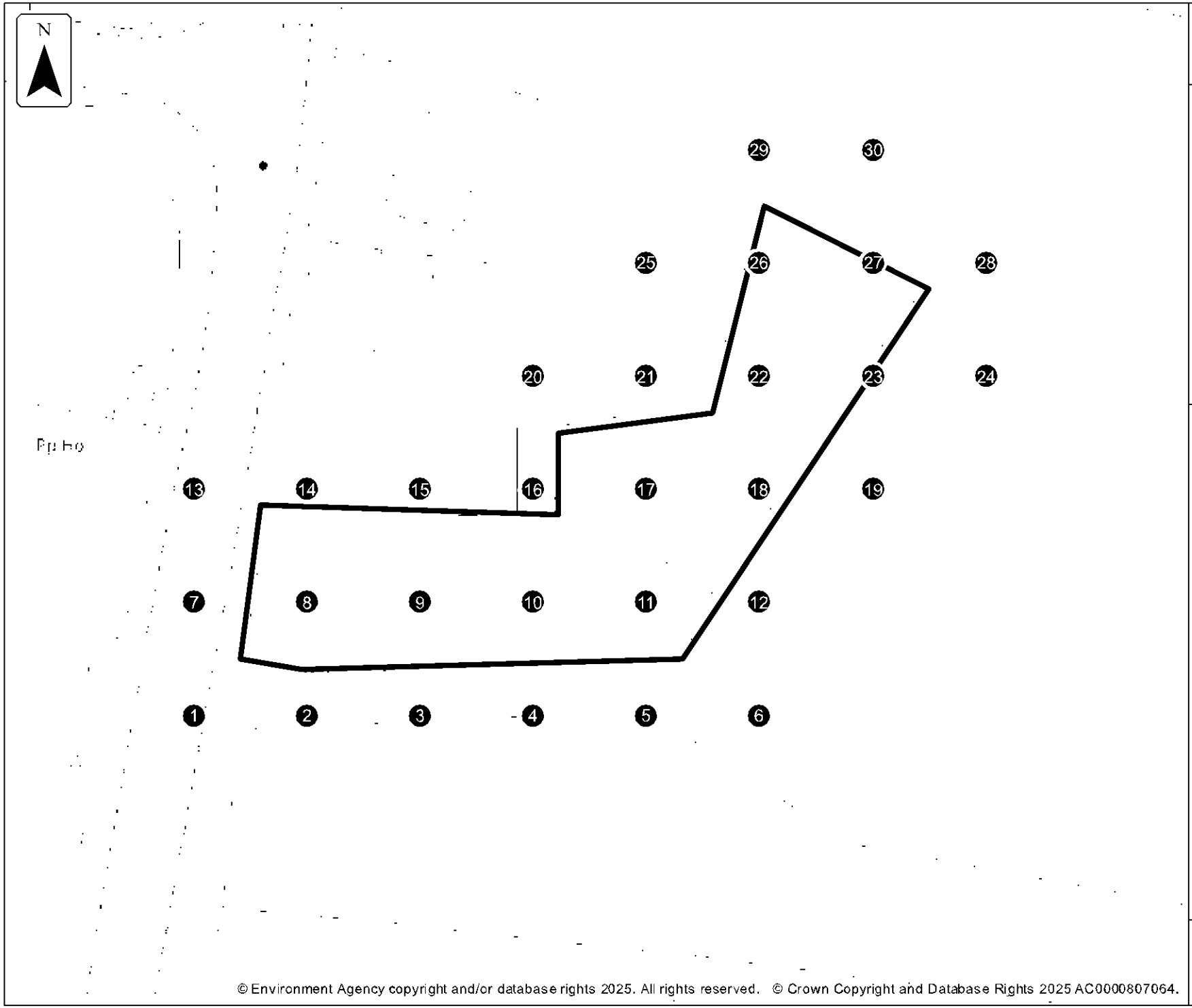
Defences removed

Label	Easting	Northing	5% AEP Depth	1% AEP Depth	0.1% AEP Depth	5% AEP Height	1% AEP Height	0.1% AEP Height
1	521400	270445	NoData	0.05	0.28	NoData	11.15	11.50
2	521411	270445	NoData	0.05	0.28	NoData	11.15	11.50
3	521422	270445	0.04	0.13	0.49	11.04	11.15	11.51
4	521433	270445	0.04	0.13	0.49	11.04	11.15	11.51
5	521444	270445	0.03	0.08	0.44	11.04	11.15	11.51
6	521455	270445	0.03	0.08	0.44	11.04	11.15	11.51
7	521400	270456	NoData	NoData	0.42	NoData	NoData	11.50
8	521411	270456	NoData	NoData	0.42	NoData	NoData	11.50
9	521422	270456	NoData	NoData	0.35	NoData	NoData	11.51
10	521433	270456	NoData	NoData	0.35	NoData	NoData	11.51
11	521444	270456	NoData	NoData	0.54	NoData	NoData	11.51
12	521455	270456	NoData	NoData	0.54	NoData	NoData	11.51
13	521400	270467	NoData	NoData	0.42	NoData	NoData	11.50
14	521411	270467	NoData	NoData	0.42	NoData	NoData	11.50
15	521422	270467	NoData	NoData	0.35	NoData	NoData	11.51
16	521433	270467	NoData	NoData	0.35	NoData	NoData	11.51

Label	Easting	Northing	5% AEP Depth	1% AEP Depth	0.1% AEP Depth	5% AEP Height	1% AEP Height	0.1% AEP Height
17	521444	270467	NoData	NoData	0.54	NoData	NoData	11.51
18	521455	270467	NoData	NoData	0.54	NoData	NoData	11.51
19	521466	270467	0.20	0.31	0.69	11.04	11.15	11.53
20	521433	270478	0.08	0.19	0.55	11.04	11.15	11.51
21	521444	270478	0.31	0.41	0.78	11.04	11.15	11.52
22	521455	270478	0.31	0.41	0.78	11.04	11.15	11.52
23	521466	270478	0.30	0.41	0.79	11.04	11.15	11.53
24	521477	270478	0.30	0.41	0.79	11.04	11.15	11.53
25	521444	270489	0.77	0.88	1.26	11.04	11.15	11.53
26	521455	270489	0.77	0.88	1.26	11.04	11.15	11.53
27	521466	270489	0.88	0.99	1.38	11.04	11.15	11.54
28	521477	270489	0.88	0.99	1.38	11.04	11.15	11.54
29	521455	270500	0.77	0.88	1.26	11.04	11.15	11.53
30	521466	270500	0.88	0.99	1.38	11.04	11.15	11.54
	Max value in selected area:		Could not determine	Could not determine	0.54	Could not determine	Could not determine	11.51

Data in this table comes from the EAn Lower Ouse Downstream 2015 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.



Environment Agency

Defences removed modelled fluvial extent and height

Location (easting/northing)
521439/270466

Scale
1:500

Created
22 Jan 2025

Model name
EAn Lower Ouse Alconbury Brook 2015

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 31
- 31 - 31.5
- 31.5 - 32
- 32 - 32.5
- 32.5 - 33
- 33 - 33.5
- 33.5 - 34
- 34 - 34.5
- 34.5 - 35

This map shows the 0.1% AEP height data

0 5 10 15 20
metres

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Sample point data

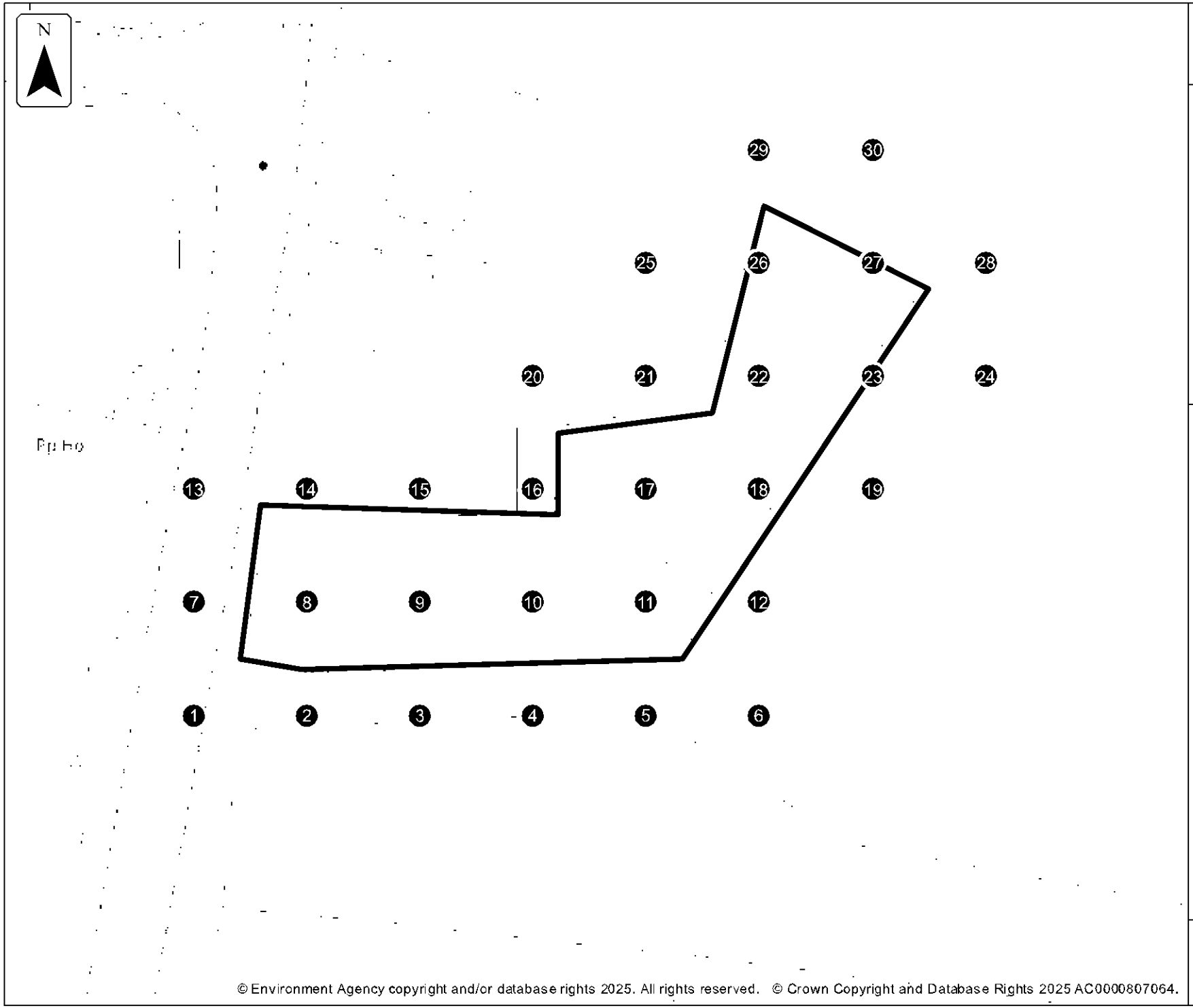
Defences removed

Label	Easting	Northing	5% AEP Depth	1% AEP Depth	0.1% AEP Depth	5% AEP Height	1% AEP Height	0.1% AEP Height
1	521400	270445	NoData	NoData	NoData	NoData	NoData	NoData
2	521411	270445	NoData	NoData	NoData	NoData	NoData	NoData
3	521422	270445	NoData	NoData	NoData	NoData	NoData	NoData
4	521433	270445	NoData	NoData	NoData	NoData	NoData	NoData
5	521444	270445	NoData	NoData	NoData	NoData	NoData	NoData
6	521455	270445	NoData	NoData	NoData	NoData	NoData	NoData
7	521400	270456	NoData	NoData	NoData	NoData	NoData	NoData
8	521411	270456	NoData	NoData	NoData	NoData	NoData	NoData
9	521422	270456	NoData	NoData	NoData	NoData	NoData	NoData
10	521433	270456	NoData	NoData	NoData	NoData	NoData	NoData
11	521444	270456	NoData	NoData	NoData	NoData	NoData	NoData
12	521455	270456	NoData	NoData	NoData	NoData	NoData	NoData
13	521400	270467	NoData	NoData	NoData	NoData	NoData	NoData
14	521411	270467	NoData	NoData	NoData	NoData	NoData	NoData
15	521422	270467	NoData	NoData	NoData	NoData	NoData	NoData
16	521433	270467	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	5% AEP Depth	1% AEP Depth	0.1% AEP Depth	5% AEP Height	1% AEP Height	0.1% AEP Height
17	521444	270467	NoData	NoData	NoData	NoData	NoData	NoData
18	521455	270467	NoData	NoData	NoData	NoData	NoData	NoData
19	521466	270467	NoData	NoData	NoData	NoData	NoData	NoData
20	521433	270478	NoData	NoData	NoData	NoData	NoData	NoData
21	521444	270478	NoData	NoData	NoData	NoData	NoData	NoData
22	521455	270478	NoData	NoData	NoData	NoData	NoData	NoData
23	521466	270478	NoData	NoData	NoData	NoData	NoData	NoData
24	521477	270478	NoData	NoData	NoData	NoData	NoData	NoData
25	521444	270489	NoData	NoData	NoData	NoData	NoData	NoData
26	521455	270489	NoData	NoData	NoData	NoData	NoData	NoData
27	521466	270489	NoData	NoData	NoData	NoData	NoData	NoData
28	521477	270489	NoData	NoData	NoData	NoData	NoData	NoData
29	521455	270500	NoData	NoData	NoData	NoData	NoData	NoData
30	521466	270500	NoData	NoData	NoData	NoData	NoData	NoData
	Max value in selected area:		Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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.



Environment Agency

No defences exist modelled fluvial extent and height

Location (easting/northing)
521439/270466

Scale
1:500

Created
22 Jan 2025

Model name
EAn Lower Ouse NMR Brampton 2015

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 10.0
- 10.0 - 10.125
- 10.125 - 10.25
- 10.25 - 10.375
- 10.375 - 10.5
- 10.5 - 10.625
- 10.625 - 10.75
- 10.75 - 10.875
- 10.875 - 11.0

This map shows the 0.1% AEP height data

0 5 10 15 20
metres

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Sample point data

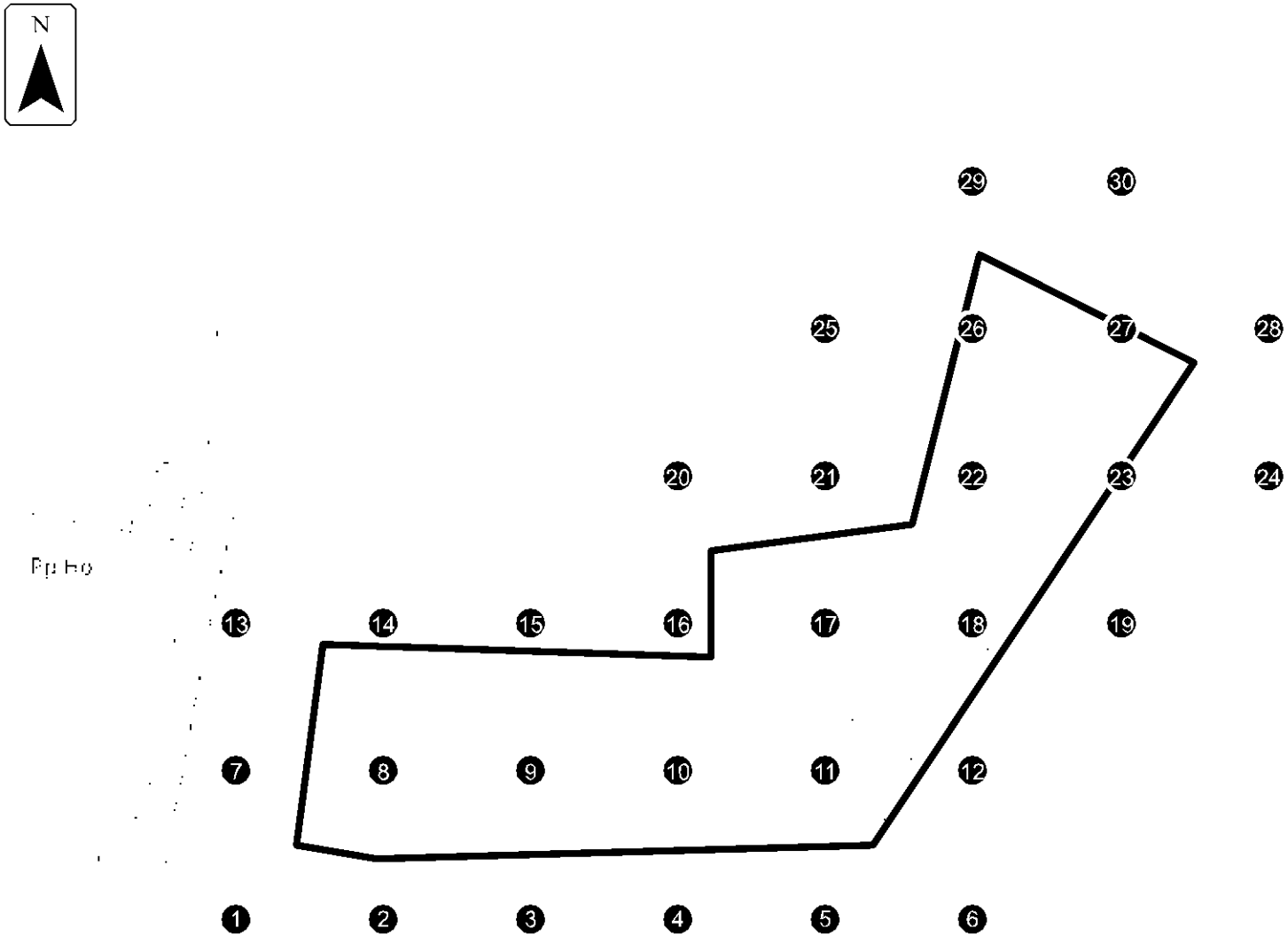
No defences exist

Label	Easting	Northing	1% AEP Depth	0.1% AEP Depth	1% AEP Height	0.1% AEP Height
1	521400	270445	NoData	NoData	NoData	NoData
2	521411	270445	NoData	NoData	NoData	NoData
3	521422	270445	NoData	NoData	NoData	NoData
4	521433	270445	NoData	NoData	NoData	NoData
5	521444	270445	NoData	NoData	NoData	NoData
6	521455	270445	NoData	NoData	NoData	NoData
7	521400	270456	NoData	NoData	NoData	NoData
8	521411	270456	NoData	NoData	NoData	NoData
9	521422	270456	NoData	NoData	NoData	NoData
10	521433	270456	NoData	NoData	NoData	NoData
11	521444	270456	NoData	NoData	NoData	NoData
12	521455	270456	NoData	NoData	NoData	NoData
13	521400	270467	NoData	NoData	NoData	NoData
14	521411	270467	NoData	NoData	NoData	NoData
15	521422	270467	NoData	NoData	NoData	NoData
16	521433	270467	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP Depth	0.1% AEP Depth	1% AEP Height	0.1% AEP Height
17	521444	270467	NoData	NoData	NoData	NoData
18	521455	270467	NoData	NoData	NoData	NoData
19	521466	270467	NoData	NoData	NoData	NoData
20	521433	270478	NoData	NoData	NoData	NoData
21	521444	270478	NoData	NoData	NoData	NoData
22	521455	270478	NoData	NoData	NoData	NoData
23	521466	270478	NoData	NoData	NoData	NoData
24	521477	270478	NoData	NoData	NoData	NoData
25	521444	270489	NoData	NoData	NoData	NoData
26	521455	270489	NoData	NoData	NoData	NoData
27	521466	270489	NoData	0.24	NoData	10.29
28	521477	270489	NoData	0.43	NoData	10.29
29	521455	270500	NoData	0.14	NoData	10.29
30	521466	270500	NoData	0.14	NoData	10.29
	Max value in selected area:		Could not determine	0.16	Could not determine	10.29

Data in this table comes from the EAn Lower Ouse NMR Brampton 2015 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.



Environment Agency

Defended climate change modelled fluvial extent and height

Location (easting/northing)
521439/270466

Scale
1:500

Created
22 Jan 2025

Model name
EAn Lower Ouse Downstream 2015

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 11.0
- 11.0 - 11.125
- 11.125 - 11.25
- 11.25 - 11.375
- 11.375 - 11.5
- 11.5 - 11.625
- 11.625 - 11.75
- 11.75 - 11.875
- 11.875 - 12.0

This map shows the 1.0% AEP +20% height data

0 5 10 15 20
metres

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Sample point data

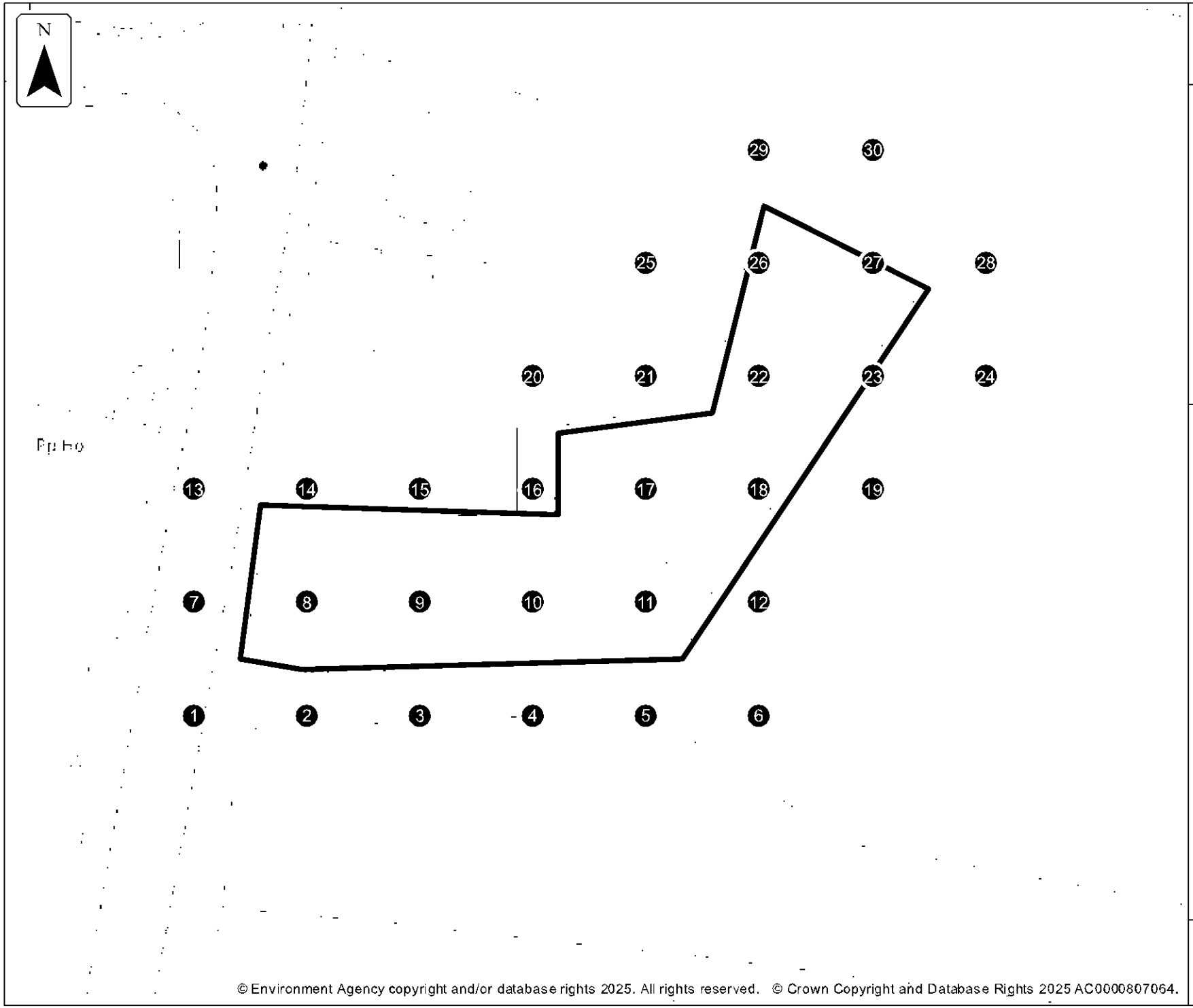
Defended climate change

Label	Easting	Northing	1% AEP (+20%) Depth	1% AEP (+20%) Height
1	521400	270445	0.09	11.24
2	521411	270445	0.09	11.24
3	521422	270445	0.22	11.24
4	521433	270445	0.22	11.24
5	521444	270445	0.18	11.24
6	521455	270445	0.18	11.24
7	521400	270456	0.16	11.24
8	521411	270456	0.16	11.24
9	521422	270456	0.09	11.24
10	521433	270456	0.09	11.24
11	521444	270456	NoData	NoData
12	521455	270456	NoData	NoData
13	521400	270467	0.16	11.24
14	521411	270467	0.16	11.24
15	521422	270467	0.09	11.24
16	521433	270467	0.09	11.24

Label	Easting	Northing	1% AEP (+20%) Depth	1% AEP (+20%) Height
17	521444	270467	NoData	NoData
18	521455	270467	NoData	NoData
19	521466	270467	0.41	11.25
20	521433	270478	0.29	11.24
21	521444	270478	0.51	11.25
22	521455	270478	0.51	11.25
23	521466	270478	0.51	11.25
24	521477	270478	0.51	11.25
25	521444	270489	0.98	11.25
26	521455	270489	0.98	11.25
27	521466	270489	1.09	11.25
28	521477	270489	1.09	11.25
29	521455	270500	0.98	11.25
30	521466	270500	1.09	11.25
	Max value in selected area:		0.16	11.24

Data in this table comes from the EAn Lower Ouse Downstream 2015 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.



Environment Agency

Defended climate change modelled fluvial extent and height

Location (easting/northing)
521439/270466

Scale
1:500

Created
22 Jan 2025

Model name
EAn Lower Ouse Alconbury Brook 2015

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 31
- 31 - 31.5
- 31.5 - 32
- 32 - 32.5
- 32.5 - 33
- 33 - 33.5
- 33.5 - 34
- 34 - 34.5
- 34.5 - 35

This map shows the 1.0% AEP +20% height data

0 5 10 15 20
metres

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Sample point data

Defended climate change

Label	Easting	Northing	1% AEP (+20%) Depth	1% AEP (+20%) Height
1	521400	270445	NoData	NoData
2	521411	270445	NoData	NoData
3	521422	270445	NoData	NoData
4	521433	270445	NoData	NoData
5	521444	270445	NoData	NoData
6	521455	270445	NoData	NoData
7	521400	270456	NoData	NoData
8	521411	270456	NoData	NoData
9	521422	270456	NoData	NoData
10	521433	270456	NoData	NoData
11	521444	270456	NoData	NoData
12	521455	270456	NoData	NoData
13	521400	270467	NoData	NoData
14	521411	270467	NoData	NoData
15	521422	270467	NoData	NoData
16	521433	270467	NoData	NoData

Label	Easting	Northing	1% AEP (+20%) Depth	1% AEP (+20%) Height
17	521444	270467	NoData	NoData
18	521455	270467	NoData	NoData
19	521466	270467	NoData	NoData
20	521433	270478	NoData	NoData
21	521444	270478	NoData	NoData
22	521455	270478	NoData	NoData
23	521466	270478	NoData	NoData
24	521477	270478	NoData	NoData
25	521444	270489	NoData	NoData
26	521455	270489	NoData	NoData
27	521466	270489	NoData	NoData
28	521477	270489	NoData	NoData
29	521455	270500	NoData	NoData
30	521466	270500	NoData	NoData
	Max value in selected area:		Could not determine	Could not determine

Data in this table comes from the EAn Lower Ouse Alconbury Brook 2015 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 Cambridgeshire 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 Anglia Environment Agency team at enquiries_eastanglia@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