GeoSmart Information

FloodSmart Plus

Flood Risk Assessment

Site Address

Duffield Rackets and Fitness Club
23 Town Street
Duffield
Belper
DE56 4EH

Grid Reference

434564, 343406

Report Prepared for

Duffield Rackets and Fitness
23 Town Street
Duffield
Belper
DE56 4EH

Date

31/03/2026

Report Status

FINAL

Site Area

7,600 m^2

Report Reference

88257R1



RISK – Very Low to Medium

The Site is mapped within the EA's fluvial Flood Zones 2 and 3 (Medium to High probability), with the flood risk originating from the River Ecclesbourne.

According to the EA's RoFRS mapping, the Site has a risk of flooding ranging from Low to High from the River Ecclesbourne in both the present day and climate change (2036 to 2069) scenarios, taking flood defences into account. Detailed flood modelling indicates that the fluvial flood risk to the development is Medium.

Following analysis of the baseline data the Site is considered to be at a Very Low to Medium risk of surface water flooding, a Moderate risk of groundwater flooding and a Low risk of flooding from artificial sources (reservoirs, canals and sewers).

Mitigation measures are recommended in this report to reduce the risks to an acceptable level over the lifetime of the development.

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Version Control

Report Version	Date	Report Author	Report Checker	Report Reviewer
88257R1	31/03/2026	Toby Kay	Annabel Elleray	Bob Sargent

1. Executive summary

A review has been undertaken of national environmental data sets to assess the flood risk to the Site from all sources of flooding in accordance with the National Planning Policy Framework (NPPF) (2024) and National Planning Practice Guidance (NPPG) (published in 2014 and updated in September 2025). A site-specific flood risk assessment, to assess the flood risk to and from the development Site, is provided within this concise interpretative report written by an experienced GeoSmart consultant. Baseline flood risk and residual risks that remain after the flood risk management and mitigation measures are implemented are summarised in the table below.

Site analysis

Source of Flood Risk	Baseline[1]	After analysis[2]	After Mitigation[3]
River (fluvial) flooding	High	Medium	Low
Sea (coastal/tidal) flooding	Very Low		N/A
Surface water (pluvial) flooding	Very Low to High	Very Low to Medium	Very Low to Low
Groundwater flooding	Moderate		Low
Other flood risk factors present	Yes (Reservoir breach and bridge failure/blockage)		N/A
Is any other further work recommended?	Yes (see below)		

1 BASELINE risks assigned for the whole Site, using national risk maps, including the benefit of EA flood defences and the impacts of climate change.

2 AFTER ANALYSIS modification of risk assessment based on detailed site specific analysis including some or all of the following: flood model data, high resolution mapping, building location, access routes, topographic and CCTV surveys. Reasons for the change in classification are provided in the text.

3 AFTER MITIGATION risks include risks to proposed development / asset and occupants if mitigation measures recommended in this report are implemented, including the impacts of climate change.

*N/A indicates where mitigation is not required.

Summary of existing and proposed development

The Site is occupied by Duffield Rackets and Fitness Club. The development proposals comprise the replacement of an existing tennis court in the northeast of the Site with two canopy-covered padel courts. Site plans are included within Appendix A.

Summary of flood risks

The flood risks from all sources have been assessed as part of this report and are as follows:

River (fluvial) and Sea (Estuarine/Coastal) flooding

According to the EA's Flood Map for Planning Purposes (Figure 9, overleaf), the Site includes areas located within fluvial Flood Zones 2 and 3 and is therefore classified as having Medium to High probability of fluvial flooding from the River Ecclesbourne. Approximately 1% of the Site, located along the southwestern boundary, is located within Flood Zone 2. The remainder of the Site (approximately 99% of the Site area), including the area proposed for development, is located within Flood Zone 3.

The Site benefits from the presence of flood defences located along the northern Site boundary in good condition, designed to provide a 1 in 100 year event standard of protection.

According to the EA's Risk of Flooding from Rivers and Sea (RoFRS) map, which considers the type, condition and crest height of flood defences, the Site has a Low to High risk of flooding from the River Ecclesbourne during the present day scenario, increasing to Medium to High during the climate change (2036 to 2069) scenario.

Multiple historic instances of flooding occurred at the Site, with the most recent in October 2023. The flood events were attributed to the exceedance in channel capacity of the River Ecclesbourne.

Modelled flood data obtained from the EA has been analysed in line with the most up to date guidance on climate change (EA, 2022), to confirm a maximum "design" flood level at the Site.

- During a 1 in 100 year plus 29% climate change allowance event the flood level at the Site would be 55.96 mAOD.
- During this event, flood depths in the area proposed for development could be up to 1.00 m. Flood mitigation measures are included in the next section.

Surface water (pluvial) flooding

According to the EA's Risk of Flooding from Surface Water (pluvial) flood mapping, the Site has a risk of pluvial flooding ranging from Very Low to High during both the present day and climate change (2050s) scenarios.

Flooding would not affect the area proposed for development in the 1 in 100 year present day scenario, but may affect it in the 1 in 100 year plus climate change event.

Given that the area proposed for development is not affected by the High risk event, the after analysis pluvial risk has been reduced from Very Low – High, to Very Low – Medium.

Groundwater flooding

Groundwater Flood Risk screening data indicates there is a Moderate potential risk of groundwater flooding at the surface in the vicinity of the Site during a 1 in 100 year event.

The Site is underlain by permeable superficial deposits above permeable bedrock. Groundwater levels may rise in the bedrock and superficial aquifers in a seasonal response to prolonged rainfall recharge which may cause an unusually high peak in groundwater levels during some years. Groundwater levels may also rise in the superficial aquifer in response to high river events due to the potential hydraulic continuity with the River Ecclesbourne and River Derwent.

Artificial sources of flooding

The risk of flooding from artificial (man-made) sources such as reservoirs, sewers and canals has been assessed:

- The EA's Risk of Flooding from Reservoir map confirms the Site is at risk of reservoir flooding during a "dry day" and "wet day" scenario. The potential for a breach of a reservoir to occur and flooding affecting the Site is Low.
- Ordnance Survey (OS) data confirms there are no canals near to the Site.
- The Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2021) has identified 3 incidences of flooding as a result of surcharging sewers within the DE56 4 postcode.
- Multiple highway bridges have been identified crossing the River Ecclesbourne within the vicinity of the Site, with the closest located c. 40 m, 70 m and 200 m upstream (to the northwest). These structures may pose a flood risk to the Site should they become blocked or damaged.

The risk of flooding from artificial sources is considered to be Low.

Recommendations

Recommendations for flood mitigation are provided below, based upon the proposed development and the flood risk identified at the Site.

- Given that the proposed development is classed as Water Compatible, specific fluvial mitigation measures are not considered to be necessary. However, consideration should be given to the design of the padel court playing surface to ensure that future flood events do not result in significant costs of repair. In addition, any vulnerable assets such as power supplies and other related infrastructure should be raised above the expected 1 in 100 year plus 29% climate change flood level.
- The mesh side panels of the padel courts should be maintained to ensure that flow routes remain unobstructed and that no displacement of floodwater occurs. Following any flood event, appropriate maintenance should be undertaken to remove any debris from the mesh.
- A Moderate risk of groundwater flooding has been identified at the Site. In order to ensure the development includes sufficient flood mitigation measures to reduce the risk of

groundwater flooding over its lifetime, the installation of interceptor drains directing any groundwater seepage towards a surface water drainage network is recommended at the Site.

- Works within 8 m of a flood defence may require a flood risk activity permit (FRAP) from the EA. Given the proximity of the proposed development to a flood defence wall, it is recommended that the EA are contacted to confirm whether a FRAP is required.
- Owners and users of the Site should be signed up to receive EA Flood Alerts and Warnings.
- A Sustainable Drainage Strategy (SuDS) should be developed for the Site, for effective management of surface water runoff from the proposed development.
- The ongoing management and maintenance of existing and any proposed drainage networks, under the riparian ownership of the developer, should be undertaken in perpetuity with the development.

GeoSmart recommend the mitigation measures discussed within this report are considered as part of the proposed development where possible and evidence of this is provided to the Local Planning Authority as part of the planning application.

2. Introduction

Background and purpose

A site-specific flood risk assessment has been undertaken, to assess the flood risk to and from the development Site. This assessment has been undertaken by firstly compiling information concerning the Site and the surrounding area. The information gathered was then used to construct a 'conceptual site model', including an understanding of the appropriateness of the development as defined in the NPPF (2024) and the source(s) of any flood risk present, guided by the NPPG (Published in 2014 and updated in September 2025). Finally, a preliminary assessment of the steps that can be taken to manage flood risk to the development was undertaken.

This report has been prepared with reference to the NPPF (2024) and NPPG (2025).

"*The National Planning Policy Framework set out the Government's planning policies for England and how these are expected to be applied*" (NPPF, 2024).

The NPPF (2024) and NPPG (2025) promote a sequential, risk based approach to the location of development. This also applies to locating a development within a Site which has a variable risk of flooding.

"*The approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. This means avoiding, so far as possible, development in current and future medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding*" (Paragraph: 023. NPPG, 2025).

The purpose of this report is to provide clear and pragmatic advice regarding the nature and potential significance of flood hazards which may be present at the Site.

Report scope

In accordance with the requirements set out within NPPG 2025 (Paragraph: 021 Reference ID: 7-021-20220825), a thorough review of publicly and commercially available flood risk data and EA supplied data indicating potential sources of flood risk to the Site from rivers and coastal sources, surface run-off (pluvial), groundwater and reservoirs, including historical flood information and modelled flood extent. Appropriate measures are recommended to manage and mitigate the flood risk to the property.

Information obtained from the EA and a review of the Amber Valley Borough Council Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2021) has been used to ascertain local flooding issues and, where appropriate, identify information to support a Sequential and/or Exception test required as part of the NPPF (2024).

The existing and future flood risk to and from the Site from all flood sources is assessed in line with current best practice using the best available data. The risk to the development has been assessed over its expected lifetime, including appropriate allowances for the impacts of climate change. Residual risks that remain after the flood risk management and mitigation

measures are implemented, are considered with an explanation of how these risks can be managed to keep the users of the development safe over its lifetime.

An indication of whether the Site will potentially increase flood risk elsewhere is provided, including where the proposed development increases the building footprint at the Site. A drainage strategy to control runoff can be commissioned separately if identified as a requirement within this report.

Report limitations

It is noted that the findings presented in this report are based on a desk study of information supplied by third parties. Whilst we assume that all information is representative of past and present conditions, we can offer no guarantee as to its validity and a proportionate programme of site investigations would be required to fully verify these findings.

The basemap used is the OS Street View 1:10,000 scale; however, the Site boundary has been drawn using BlueSky aerial imagery to ensure the correct extent and proportion of the Site is analysed.

This report excludes the consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

Datasets

The following table shows the sources of information that have been consulted as part of this report:

Table 1. Datasets consulted to obtain confirmation of sources of flooding and risk

Source of flooding	Datasets consulted			
	Commercial Flood Maps	Local Policy & Guidance Documents*	Environment Agency (Appendix B)	OS Data
Historical	X	X	X	
River (fluvial) / Sea (tidal/coastal)	X	X	X	
Surface water (pluvial)	X	X	X	

Source of flooding	Datasets consulted			
	Commercial Flood Maps	Local Policy & Guidance Documents*	Environment Agency (Appendix B)	OS Data
Groundwater	X	X		
Sewer		X		
Culvert/bridges		X		X
Reservoir		X	X	

*Local guidance and policy, referenced below, has been consulted to determine local flood conditions and requirements for flood mitigation measures.

Local policy and guidance

For this report, several documents have been consulted for local policy and guidance and relevant information is outlined below:

Amber Valley Borough Council Local Plan (2026):

Policy EN3 Flood Risk

The Borough Council will follow a sequential approach to flood risk management, giving priority to the development of sites with the lowest risk of flooding. In relation to sites with a greater risk of flooding where it has been demonstrated that the Sequential Test and Exception Test have been satisfied, development must:

a) be resilient to flooding through design and layout, and

b) incorporate appropriate mitigation measures, or where these are not possible, appropriate on or off-site measures as may be necessary.

New development shall look at opportunities to provide reductions in flood risk to the site and to others to help to mitigate against the impact of climate change on all types of future flood risk.

Suitable measures to deal with surface water arising from development proposals will be required, to minimise the impact to and from new development. All developments will be expected to be designed to achieve, where appropriate, a net decrease in surface water run-off rates.

All developments will be required to manage surface water through keeping the creation of non-permeable areas to a minimum and the incorporation of SuDS, which mimic natural

drainage patterns, are appropriate to the existing landscape character, are designed to improve water quality, contribute towards water recharge, improve biodiversity, and offer opportunities for recreation and connect to the existing Green Infrastructure network where possible.

Proposals for flood management or other infrastructure offering improvements that lower the risk of flooding will be supported.

Development proposals that are likely to impact on surface or ground water should demonstrate that they contribute positively to the water environment and its ecology where possible and do not adversely affect surface and ground water quality.

Amber Valley Borough Council Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2021):

5.4 Fluvial flood risk

The primary fluvial flood risk in the Amber Valley Borough is present along the flood plains of the River Derwent, the River Ecclesbourne, the River Amber, the River Erewash, the Bottle Brook and their unnamed tributaries. As a result, fluvial flood risk is posed to several of the main towns and settlements within Amber Valley, such as the Belper area seeing highest risk to property and infrastructure west of the A6 from the River Derwent. Also, Duffield seeing high risk at the confluence of the River Ecclesbourne and the River Derwent and Langley Mill on the eastern borough border, seeing risk from the River Erewash around the A608 and Cromford Road.

6.4 Major flood risk management assets in the borough

Duffield, located in the south of the borough, benefits from a number of defences. There are 24 flood walls located on the left and right banks of the River Ecclesbourne, through Duffield. The flood walls have a combined length of 1445m and have a 1:100-year design standard of protection. However, some parts of the defences have been identified as being lower than the design standard, particularly between the A6 and the railway, and this is typically where flooding occurs. Large parts of Duffield flood during the 1,000-year event.

Figure 6-4 shows the areas benefitting from defences in Amber Valley as designated by the Environment Agency, in the event of a river flood with a 1% chance of happening in any one year. If there were no defences, these areas would be flooded. The dataset shows that Duffield benefits from defences.

Guidance

Strategic Flood Risk Assessments are carried out by local authorities, in consultation with the Environment Agency, to assess the flood risk to the area from all sources both now and in the future due to climate change. They are used to inform planning decisions to ensure inappropriate development is avoided (NPPF, 2024).

3. Site analysis

Site information

The Site is located in Duffield in a setting of commercial and residential land use at National Grid Reference SK 34564 43406.

Figure 1. Aerial imagery of the Site (Bluesky, 2026)

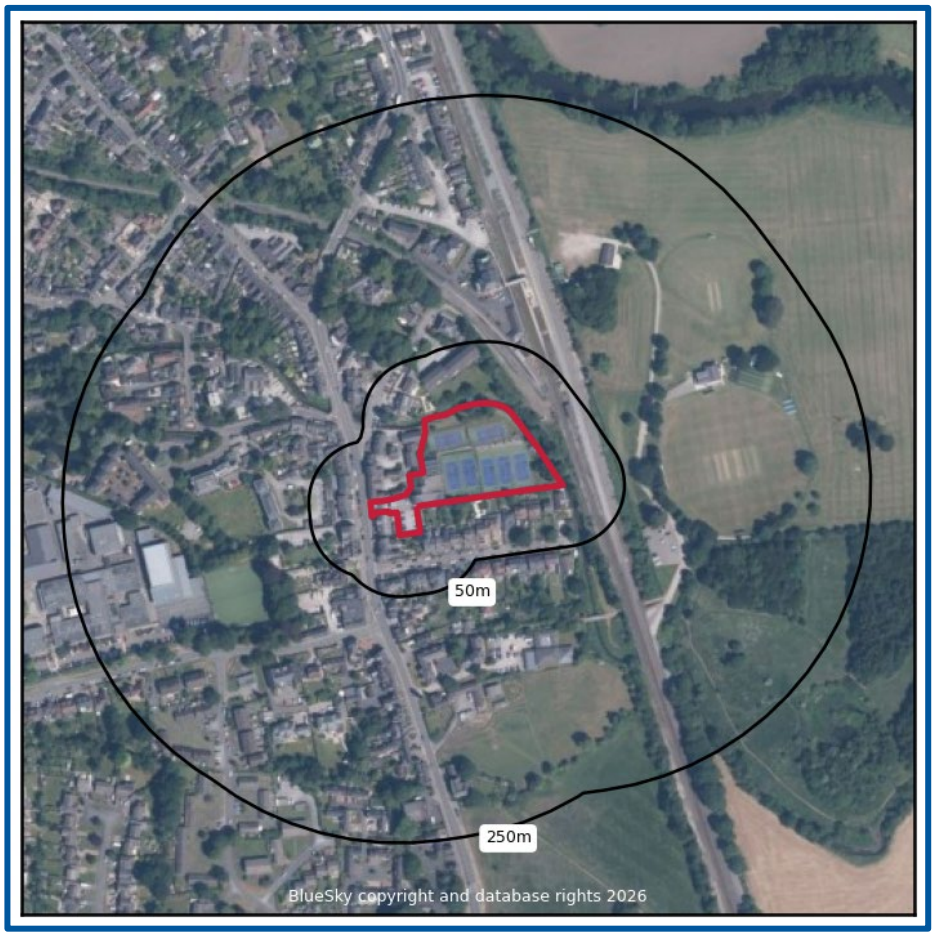


Figure 2 indicates ground levels within 500 m of the Site fall towards the channel of the River Derwent to the east of the Site.

Figure 2. Site Location and Relative Elevations (GeoSmart, 2026)

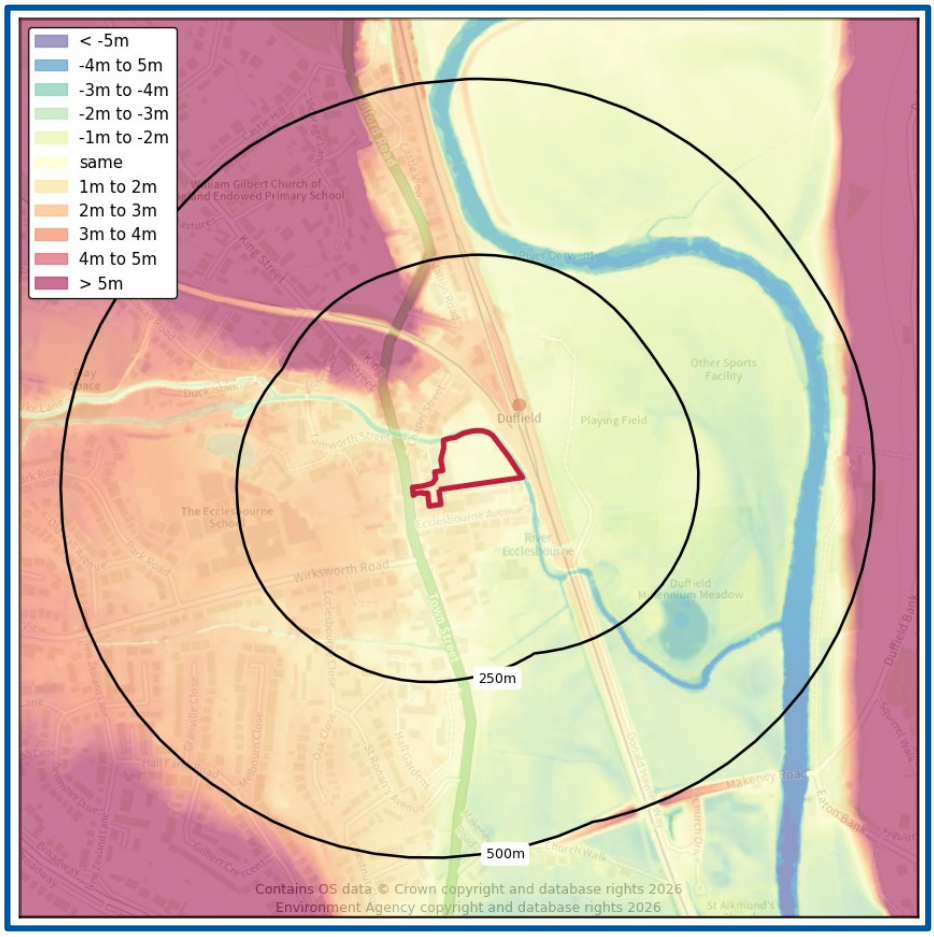
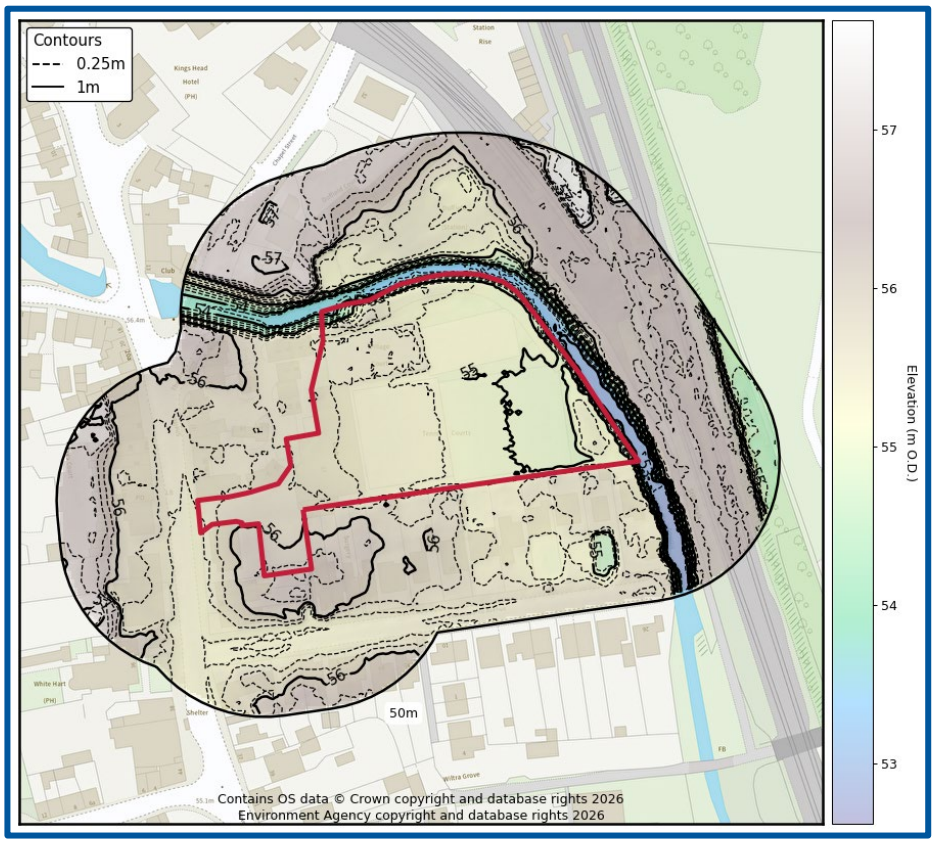


Figure 3 (overleaf) indicates that the general ground levels on the Site are between 52.86 and 56.50 mAOD, with the Site falling to the north and east towards the channel of the River Ecclesbourne. This is based on EA elevation data obtained for the Site to a 1 m resolution with a vertical accuracy of ±0.15 m.

Figure 3. Environment Agency LiDAR ground elevation data (GeoSmart, 2026)



Development

The Site is occupied by Duffield Rackets and Fitness Club. The development proposals comprise the replacement of an existing tennis court in the northeast of the Site with two canopy-covered padel courts. Site plans are included within Appendix A.

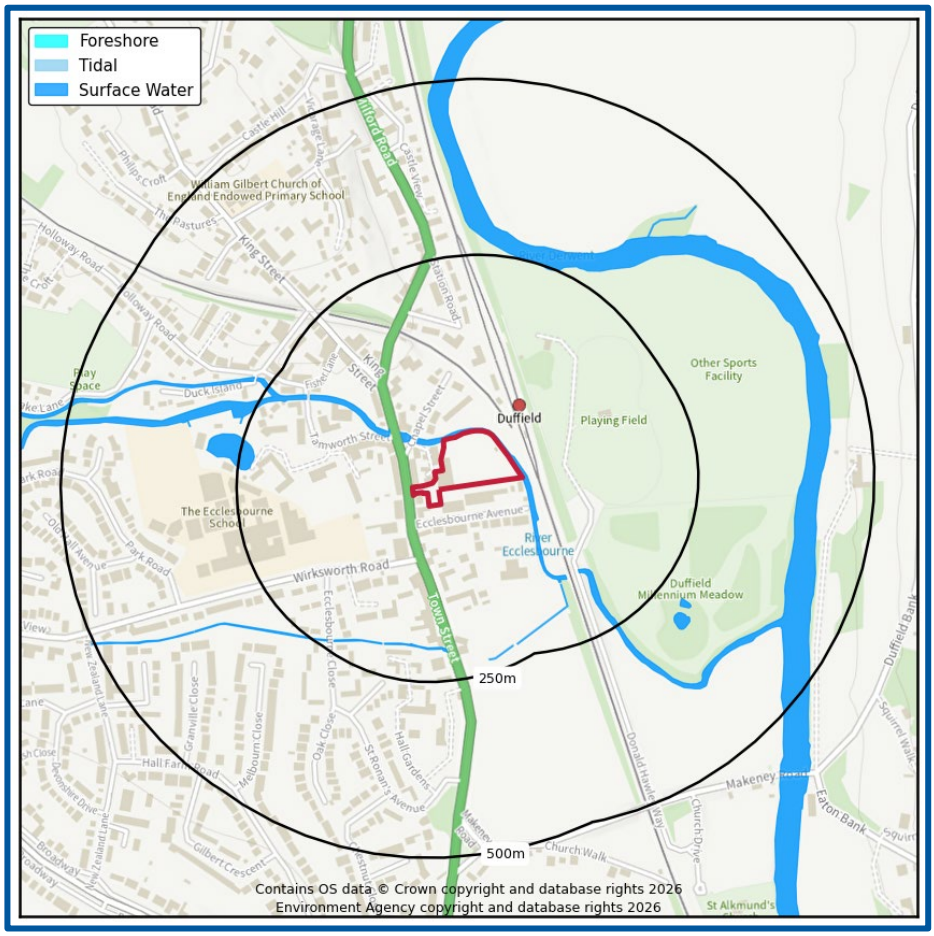
The effect of the overall development will not result in an increase in number of or users of the Site and will not result in the change of use, nature or times of occupation. According to Annex 3 of the NPPF (2024), the vulnerability classification of the existing development is Water Compatible and proposed development is Water Compatible. The estimated lifespan of the development is 75 years.

Hydrological features

According to Ordnance Survey (OS) mapping included in Figure 4, there are numerous surface water features within 500 m of the Site.

- The River Ecclesbourne forms the northern and eastern Site boundaries, flowing in a southeasterly direction towards its confluence with the River Derwent c. 410 m southeast of the Site.
- An ordinary watercourse is located c. 200 m to the south of the Site, flowing in an easterly direction.
- A pond is located c. 230 m to the west at a higher elevation than the Site. Other ponds are located c. 290 m to the southeast of the Site at lower elevations.
- The River Derwent is located c. 250 m to the northeast of the Site at its closest point, flowing in a generally southerly direction.

Figure 4. Surface water features (EA, 2026)



Proximity to relevant infrastructure

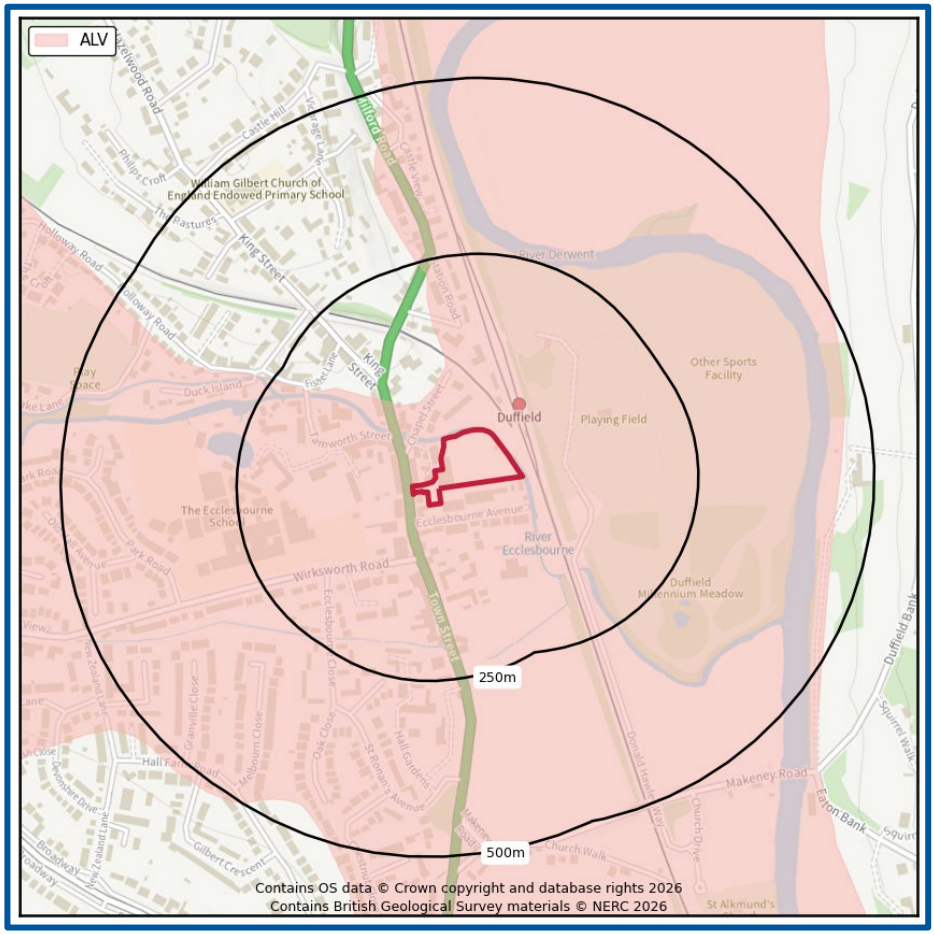
Infrastructure has been identified within proximity of the Site which could influence the risks of flooding to existing or future occupants. These include:

- The Midland Main Line is located c. 10 m to the east on the opposite bank of the River Ecclesbourne with a minor associated embankment. A bridge carries the railway line over the River Ecclesbourne c. 150 m downstream of the Site (to the southeast).
- Multiple highway bridges cross the River Ecclesbourne within the vicinity of the Site, with the closest located c. 40 m, 70 m and 200 m upstream (to the northwest).
- A weir is located c. 280 m upstream of the Site on the River Ecclesboune.

Hydrogeological features

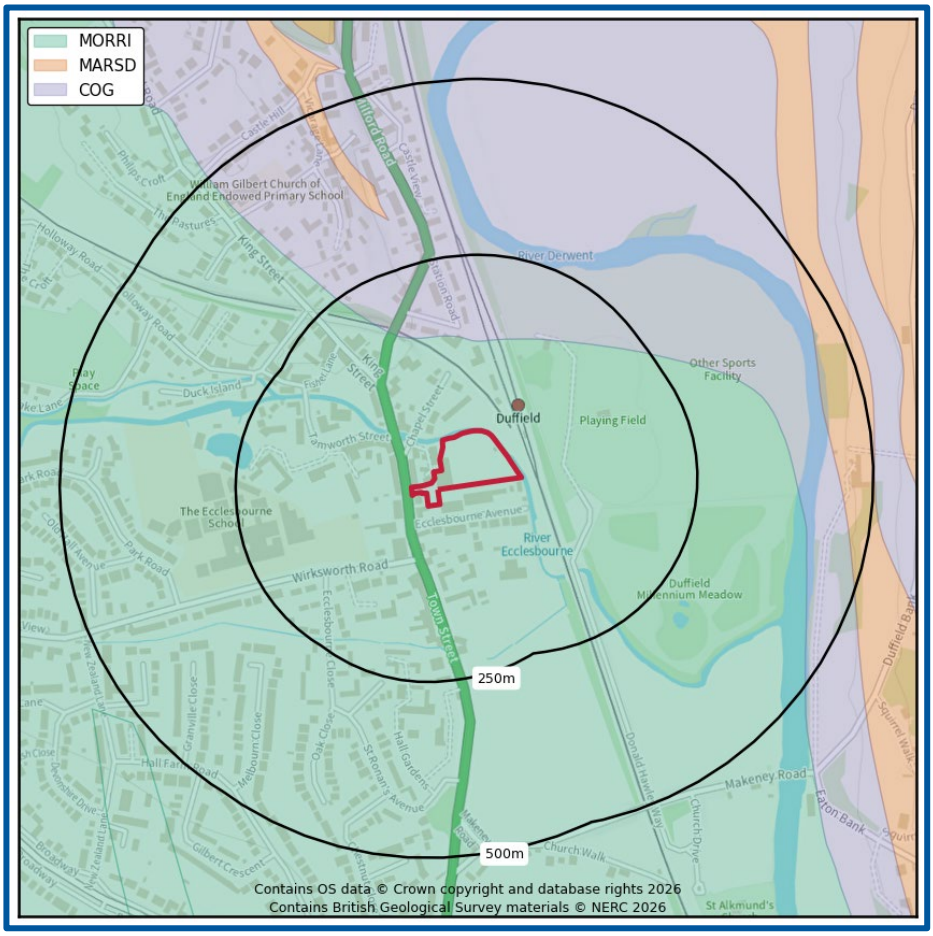
British Geological Survey (BGS) mapping indicates the underlying superficial geology (Figure 5) consists of Alluvium (ALV), which comprises clay, silt, sand and gravel (BGS, 2026). These deposits are classified by the EA as a Secondary (A) Aquifer, which indicates it is likely to comprise permeable layers capable of supporting water supply at a local rather than strategic scale.

Figure 5. Superficial Geology (BGS, 2026)



BGS mapping indicates the underlying bedrock geology (Figure 6) consists of the Morridge Formation (MORRI), which comprises mudstone, siltstone and sandstone (BGS, 2026). This bedrock geology is classified by the EA as a Secondary (A) Aquifer, which indicates it is likely to comprise permeable layers capable of supporting water supply at a local rather than strategic scale.

Figure 6. Bedrock Geology (BGS, 2026)



Geological conditions

A review of the BGS borehole database (BGS, 2026) indicates the nearest and most relevant borehole to the Site (ref: SK34SW31) is located within the northwest of the Site at an elevation of 55.72 mAOD (taken from the borehole record). Additional boreholes (ref: SK34SW32 and SK34SW24) are located c. 10 m to the north and 20 m to the west of the Site boundary at elevations of 55.04 mAOD and 56.90 mAOD respectively (taken from the borehole records).

A summary of the geological strata encountered by the boreholes is provided within the table overleaf.

Table 2. Summary of BGS borehole information

BGS borehole SK34SW31		BGS borehole SK34SW32		BGS borehole SK34SW24	
Depth to base of stratum (m bgl)	Strata composition	Depth to base of stratum (m bgl)	Strata composition	Depth to base of stratum (m bgl)	Strata composition
0.08	MADE GROUND Grass over silty sandy topsoil	0.37	MADE GROUND Grass over silty sandy topsoil with occasional assorted gravel and brick fragments	1.00	MADE GROUND soil and gravel
0.51	MADE GROUND slightly clayey silty sand with fragments of brick, concrete, wood and assorted gravel	0.60	Slightly sandy very silty CLAY with occasional assorted gravel	2.50	Silty sandy CLAY
1.50	Sandy silty CLAY with assorted gravel	> 3.00 (base of borehole)	Sandy assorted GRAVEL with occasional cobbles. From 2.0 m bgl sand content lower. At 2.4 m bgl with occasional pockets of sandy clay	3.00	Sandy stoney CLAY
1.80	Slightly sandy very silty CLAY with occasional assorted gravel	-	-	> 8.00 (base of borehole)	Weathered shaley MUSTONE
2.00	Very sandy silty CLAY	-	-	-	-
2.30	CLAY with occasional assorted gravel and cobbles	-	-	-	-
> 3.00 (base of borehole)	Clayey slightly sandy assorted GRAVEL and occasional cobbles	-	-	-	-

Groundwater

Borehole ref: SK34SW31 struck groundwater at 2.30 m below ground level (bgl) within clay strata in July 1994.

Borehole ref: SK34SW32 struck groundwater at 2.00 m bgl within gravel strata in July 1994.

Borehole ref: SK34SW24 reported groundwater seepage at 2.50 m bgl within mudstone strata, and a final standing water level of 2.40 m bgl in July 1976.

All groundwater levels are subject to seasonal variations.

Using the available BGS borehole records, groundwater levels could be between 53.04 and 54.50 mAOD, compared to ground levels within the proposed development area of between 54.96 and 55.44 mAOD.

4. Flood risk to the development

Historical flood events

According to the EA's Historical Flood Map (Figure 8, overleaf) and GEOPDF mapping in Appendix A of the SFRA (JBA Consulting, 2021), several flood events have historically affected the Site.

The Site has been impacted by fluvial flooding in January 1947, January 1957, December 1960, January and December 1965, January 1967, and October 2023. The flood events were attributed to the exceedance in channel capacity of the River Ecclesbourne. It should be noted that flood defence walls were constructed throughout Duffield along the River Ecclesbourne between 1970 to 1975, explaining the frequency of recorded flood events in the 1950s and 60s (Jacobs, 2024).

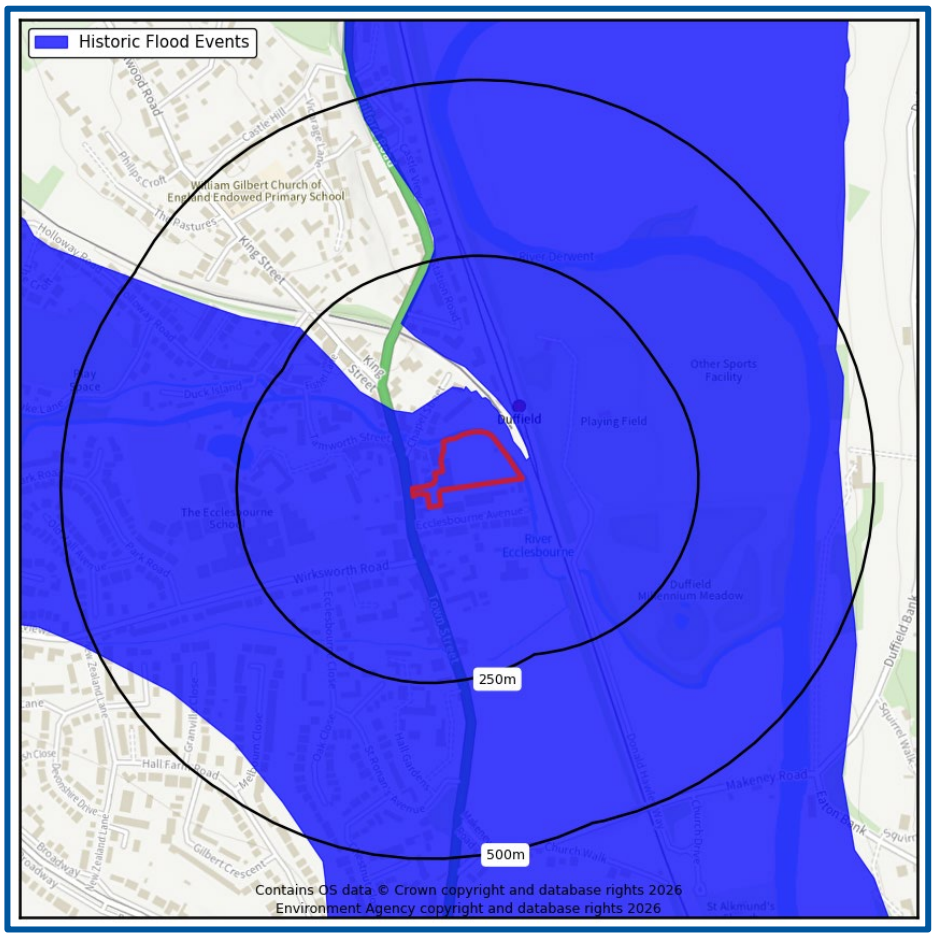
Derbyshire County Council, in their capacity as the Lead Local Flood Authority (LLFA), completed a Section 19 Flooding Investigation due to flooding experienced across the county as a result of Storm Babet in October 2023. The report confirms that the Site was affected during Storm Babet, as shown in Figure 7. The flood defence walls in the vicinity were reported to have overtopped around 2:04pm on 20th of October 2023, resulting in flooding to the tennis courts, clubhouse and several surrounding properties (Jacobs, 2024).

Figure 7. Flooding of Duffield Tennis Courts during Storm Babet in October 2023 (Jacobs, 2024)



The purpose of historical flood data is to provide information on where and why flooding may have occurred in the past. The absence of any recorded events does not mean flooding has never occurred on-Site or that flooding will never occur at the Site.

Figure 8. EA Historic Flood Map (EA, 2026)



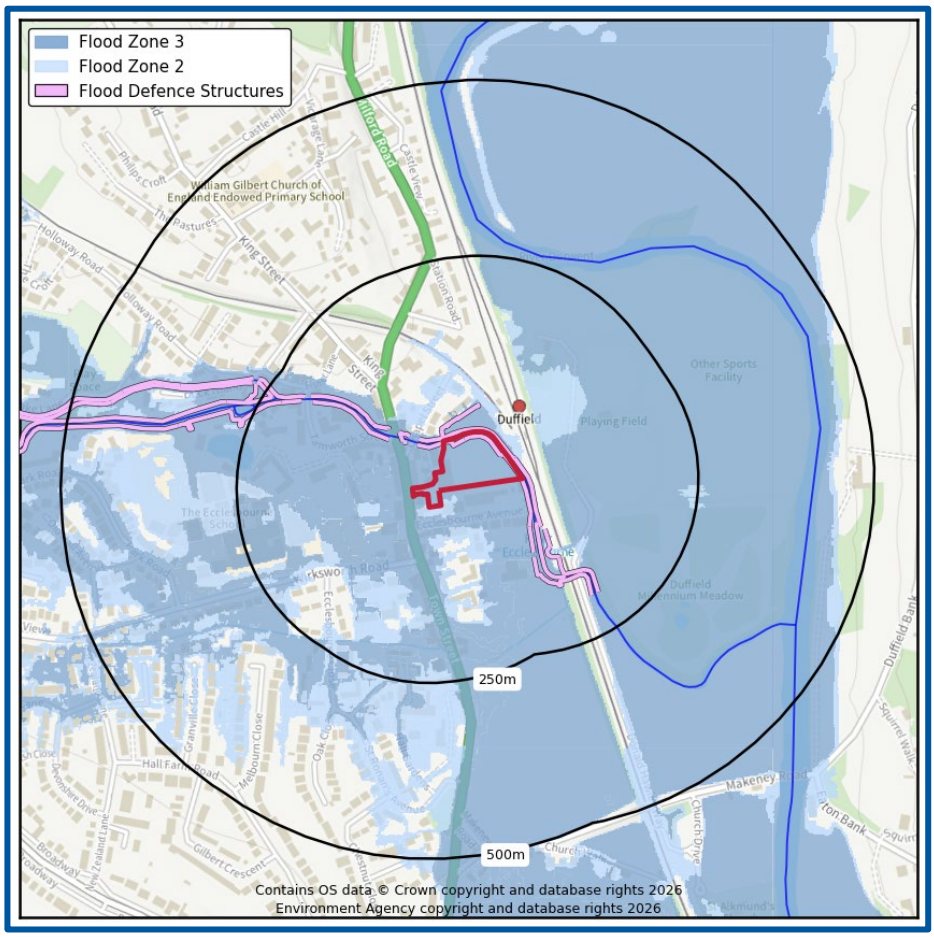
Rivers (fluvial) / Sea (coastal) / Estuarine (tidal) flooding

The predominant risk at the Site is from flooding from rivers, termed as fluvial flooding. The Site is located in an inland location and the risk of flooding from coastal and tidal processes are therefore considered to be Very Low.

River (fluvial) flooding occurs during times of heavy rainfall or snow melt when watercourses' capacity can be exceeded, over topping the banks and flood defences.

According to the EA's Flood Map for Planning Purposes (Figure 9, overleaf), the Site includes areas located within fluvial Flood Zones 2 and 3 and is therefore classified as having Medium to High probability of fluvial flooding from the River Ecclesbourne. Approximately 1% of the Site, located along the southwestern boundary, is located within Flood Zone 2. The remainder of the Site (approximately 99% of the Site area), including the area proposed for development, is located within Flood Zone 3.

Figure 9. EA Flood Map for Planning Purposes (EA, 2026)



Guidance

As defined in the NPPF (2024):

Flood Zone 2:

Ignoring the presence of any defences, land located in a Flood Zone 2 is considered to have a Medium probability of flooding, with between a 1 in 100 and 1 in 1000 annual probability of fluvial flooding or between a 1 in 200 and 1 in 1000 annual probability of coastal flooding in any one year.

Development of "Water-Compatible", "Essential Infrastructure", "Less Vulnerable" and "More Vulnerable" land uses are suitable for this zone with "Highly Vulnerable" land uses requiring an Exception Test to be passed prior to development taking place.

Flood Zone 3:

Ignoring the presence of any defences, land located in a Flood Zone 3 is considered to have High probability of flooding with a 1 in 100 year or greater annual probability of fluvial flooding or a 1 in 200 or greater annual probability of coastal flooding in any one year.

Development of "Water-Compatible" and "Less Vulnerable" land uses are suitable for this zone with "More Vulnerable" and "Essential Infrastructure" requiring an Exception test to be passed prior to development taking place. (see glossary for terminology).

Flood defences

Guidance

Sites that are located close to flood defences are likely to be zones where rapid inundation will occur in the event of the flood defences being overtopped or breached. A Site located close to flood defences (within 250 m) may require a more detailed FRA subject to local topography.

Existing flood defences

The EA's Asset Information Management Systems (AIMS) dataset (2026) identifies the following assets within the vicinity of the Site:

- A wall (asset IDs: 39834, 22432, 22368, 39833, 39832, and 110253) is located along the right bank of the River Ecclesbourne (within the north of the Site boundary). The feature has an effective crest level ranging from 55.61 to 55.88 mAOD and is designed to provide protection for up to a 1 in 100 year event. As per the EA's last inspection (25/02/2026) the condition grade is classified as "Good (Condition Grade: 2)".

Future flood defences

Duffield Parish Council established the Duffield Community Flood Plan in 2025 to create a flooding event emergency action plan which defines a local organisational structure and its responsibilities for communication and assistance to both the local community and the emergency services.

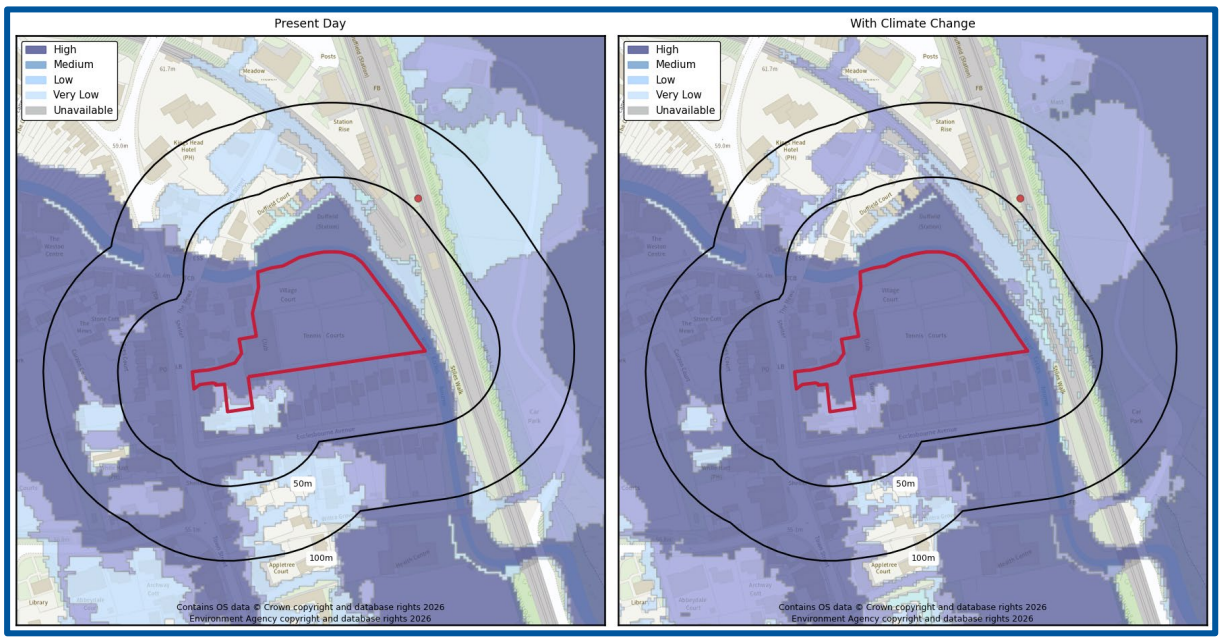
The likelihood of future flood defence schemes for the Duffield area could not be ascertained at the time of writing; it is therefore assumed that the risk presented by the Ecclesbourne Derwent Modelling Study Update (JBA Consulting, 2017) is likely to be sufficiently representative of the future fluvial flood risk at the Site.

Flood risk including the benefit of defences

The type and condition of existing flood defences influence the 'actual' risk of fluvial flooding to the Site, albeit the long-term residual risk of flooding (ignoring the defences) should be considered when proposing new development.

According to the EA's Risk of Flooding from Rivers and Sea (RoFRS) map (Figure 10), which considers the type, condition and crest height of flood defences, the Site has a Low to High risk of flooding from the River Ecclesbourne during the present day scenario, increasing to Medium to High during the climate change (2036 to 2069) scenario. The area proposed for development is at High RoFRS risk in both scenarios.

Figure 10. Risk of Flooding from Rivers and Sea map present day and future (2036 to 2069) (EA, 2026)



Model data

As the Site is located within the EA's fluvial floodplain, modelled flood elevation data was obtained from the EA and has been used to assess flood risk and to provide recommendations for mitigation for the proposed development.

Defended modelled data from the Ecclesbourne Derwent Modelling Study Update (JBA Consulting, 2017) has been extracted from the in-channel flood level data provided as the nearest upstream in-channel node point (ref: EB700, or ref: 6 within the flood risk assessment data provided by the EA) is located at a cross section to the Site[1]. 2D floodplain data was also provided, which identifies floodplain levels which are generally consistent with the in-channel flood levels. The data is provided in the table below and is included within Appendix B.

Table 3. Defended EA present day modelled flood data (JBA Consulting, 2017)

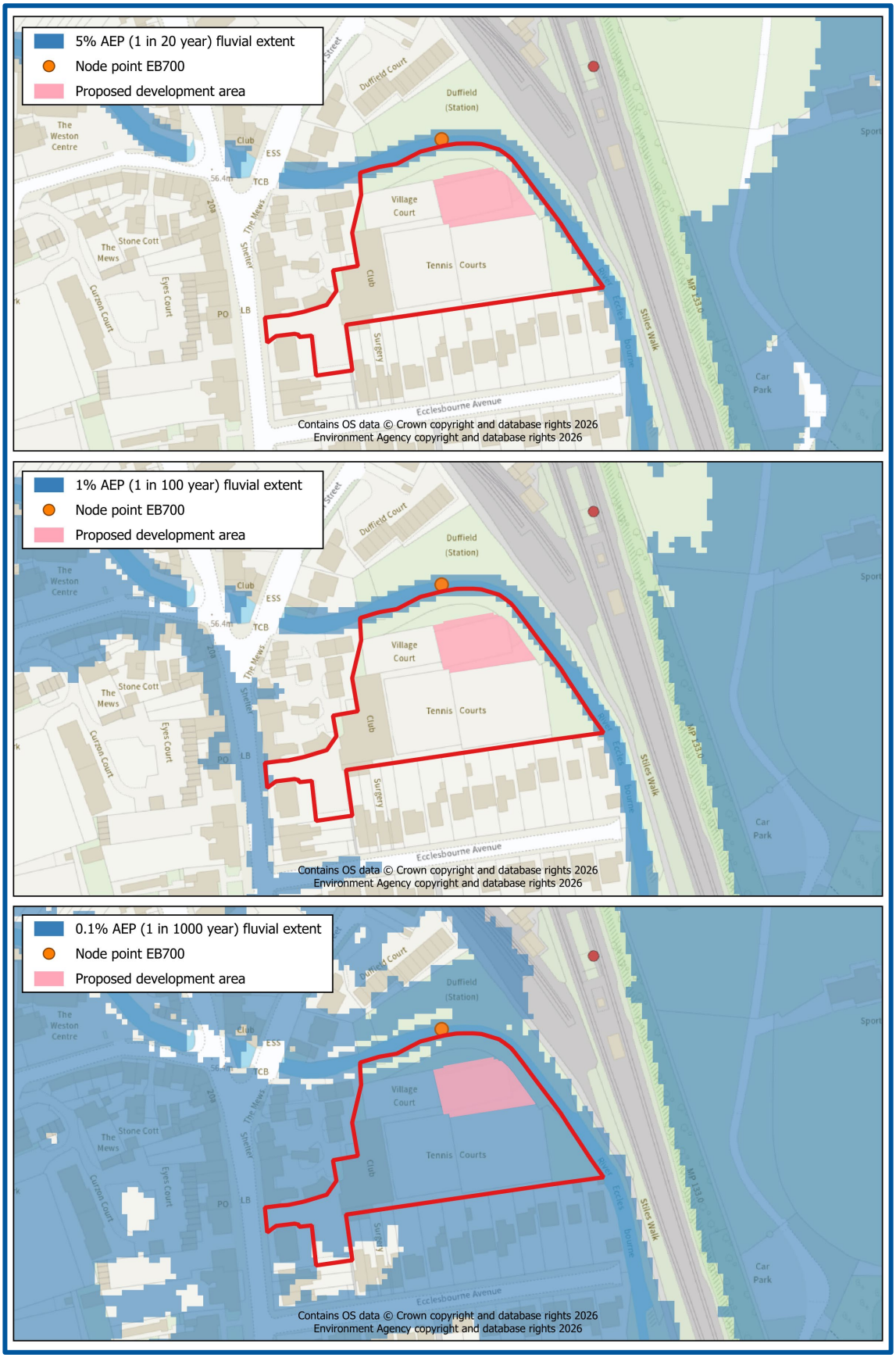
Flood data	Flooding scenario		
	1 in 20 year	1 in 100 year	1 in 1000 year
Flood level (mAOD)	55.41	55.79	56.23
Flood defence wall (Asset ID: 39833) effective crest level (mAOD)	55.84		
Flood depths (m)*	No flooding anticipated		Up to 1.27

*Compared to LiDAR levels in the area proposed for development of between 54.96 and 55.44 mAOD.

Due to the presence of flood defences, the proposed development area is not anticipated to experience flooding during the 5% Annual Exceedance Probability (AEP) (1 in 20 year) or 1% AEP (1 in 100 year) events. Figure 11 (overleaf) confirms the flood extent associated with overtopping of the flood defences in the present day flooding scenarios.

[1] The accuracy of the modelled flood levels is not known. These are dependent on the accuracy of input datasets such as LiDAR data, used to model the impacts of flooding within the 2D domain. Confirmation of the accuracy of the modelled flood data can be obtained separately from the Environment Agency.

Figure 11. Defended modelled present day flooding scenarios (JBA Consulting, 2017)



Climate change factors

The EA's *Flood risk assessments: climate change allowances* guidance (published 19 February 2016 and updated May, 2022) has been used to inform a suitable increase in peak river flows for the proposed development. The updated guidance confirms 'Water Compatible' developments are required to undertake a Basic assessment approach.

As the Site is located within the Derwent Derbyshire Management Catchment, within the Humber region, and the proposed development is classed as Water Compatible, where the proposed lifespan is approximately 75 years, the Central (29%) allowance has been used to determine a suitable climate change factor to apply to river data.

The Ecclesbourne Derwent Modelling Study Update (JBA Consulting, 2017) includes a modelled scenario for the 1 in 100 year event including a 20% allowance for climate change. Therefore, a stage (level) graph has been produced (Appendix C) has been produced using the EA's modelled in-channel flood level data to account for the 9% difference between the modelled 20% allowance and the required 29% allowance. The derived level climate change allowance has been used to identify a suitable increase in river flows from the River Ecclesbourne.

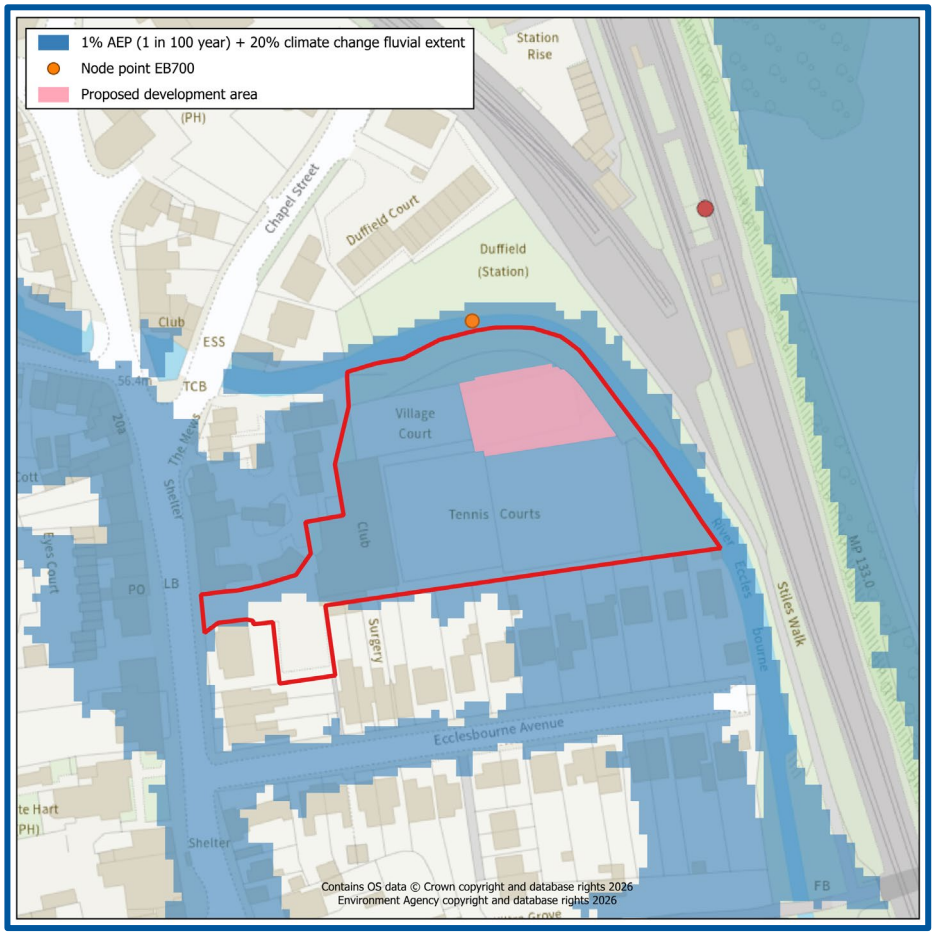
Table 4. Flood levels plus climate change allowances

Flood data	Flooding scenario	
	1 in 100 year plus 20% allowance for climate change	1 in 100 year plus 29% allowance for climate change
Modelled flood level (mAOD)	55.91	55.96
Flood depths (m)*	Up to 0.95	Up to 1.00

*Compared to LiDAR levels in the area proposed for development of between 54.96 and 55.44 mAOD.

Figure 12 (overleaf) shows the flood extent associated with overtopping of the flood defences in the 1 in 100 year + 20% climate change flooding scenario.

Figure 12. Defended Modelled 20% climate change flooding scenarios (JBA Consulting, 2017)



Whilst baseline RoFRS mapping indicates there is a High risk of flooding in the climate change (2036 to 2069) scenario, further analysis of Site ground levels and modelled flood data across the lifetime of the development indicates that the Site would not be impacted in the 1 in 30 and 1 in 100 year scenarios. The after analysis fluvial risk has been reduced from High to Medium.

Surface water (pluvial) flooding

Surface water flooding occurs when intense rainfall exceeds the infiltration capacity of the ground and overwhelms the drainage systems. It can occur in most locations even at higher elevations and at significant distances from river and coastal floodplains.

According to the EA's Risk of Flooding from Surface Water (pluvial) flood mapping, the Site is at a variable risk of pluvial flooding ranging from Very Low to High.

Figure 13 (overleaf) confirms the extent and depth of flooding in multiple modelled flood scenarios in the present day. Analysis of the mapping suggests that the majority of surface water flooding will be confined to the southeast of the Site where the level of the existing tennis court is slightly lower than the surrounding Site:

- During the High risk present day event (>3.3% AEP), flooding is mapped within the southwest of the Site and is not anticipated to affect the proposed development area. The depth of flooding is modeled to be minor (< 0.20 m) and the estimated pluvial flood level is 54.95 mAOD during this event.
- During the Medium risk present day event (3.3 - 1% AEP), flooding may affect the southeast of the development area, however the footprint of the padel courts themselves is not anticipated to be affected. The depth of flooding is modeled to be minor (< 0.20 m) and the estimated pluvial flood level is 55.00 mAOD during this event.
- During the Low risk event (1 - 0.1% AEP), flooding may affect the south of the area proposed for development. The depth of flooding is modelled to be less than 0.30 m and the estimated pluvial flood level is 55.10 mAOD during this event.

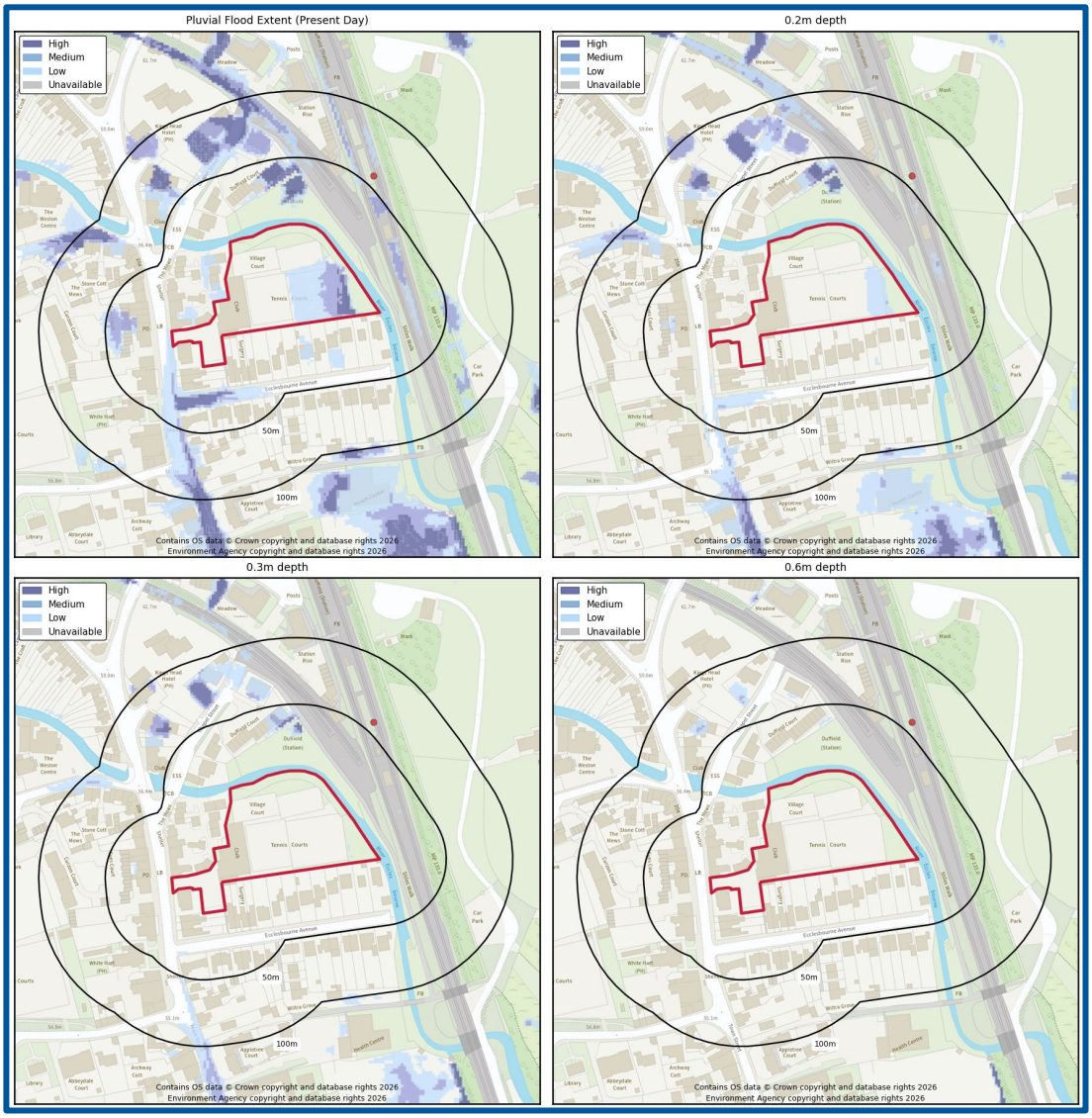
Critical Drainage Areas (CDAs) were not delineated as part of the SFRA (JBA Consulting, 2021).

Guidance

According to EA's surface water flood risk map, areas of the Site are at:

- Very Low risk - chance of flooding of less than 1 in 1000 (0.1%).
- Low risk - chance of flooding of between 1 in 1000 & 1 in 100 (0.1% and 1%).
- Medium risk - chance of flooding of between 1 in 100 and 1 in 30 (1% and 3.3%).
- High risk - chance of flooding of greater than 1 in 30 (3.3%).

Figure 13. EA present day surface water flood extent and depth mapping (EA, 2026)



Guidance

According to EA's surface water flood risk map the following advisory guidance applies to the Site:

Flood Depth

- 0.15 to 0.30 m - Flooding would: typically exceed kerb height, likely exceed the level of a damp-proof course, cause property flooding in some areas

Surface water flooding flow routes

Analysis of OS mapping, ground elevation data and the EA's pluvial flow route mapping in the 1 in 1000 year (Low probability) event and Overland Flow Pathways mapping confirms the Site is not located on a potential overland flow route.

Based on the available data, the mapped pluvial flood risk during this event is considered representative of isolated ponding rather than significant overland flow.

Climate change factors

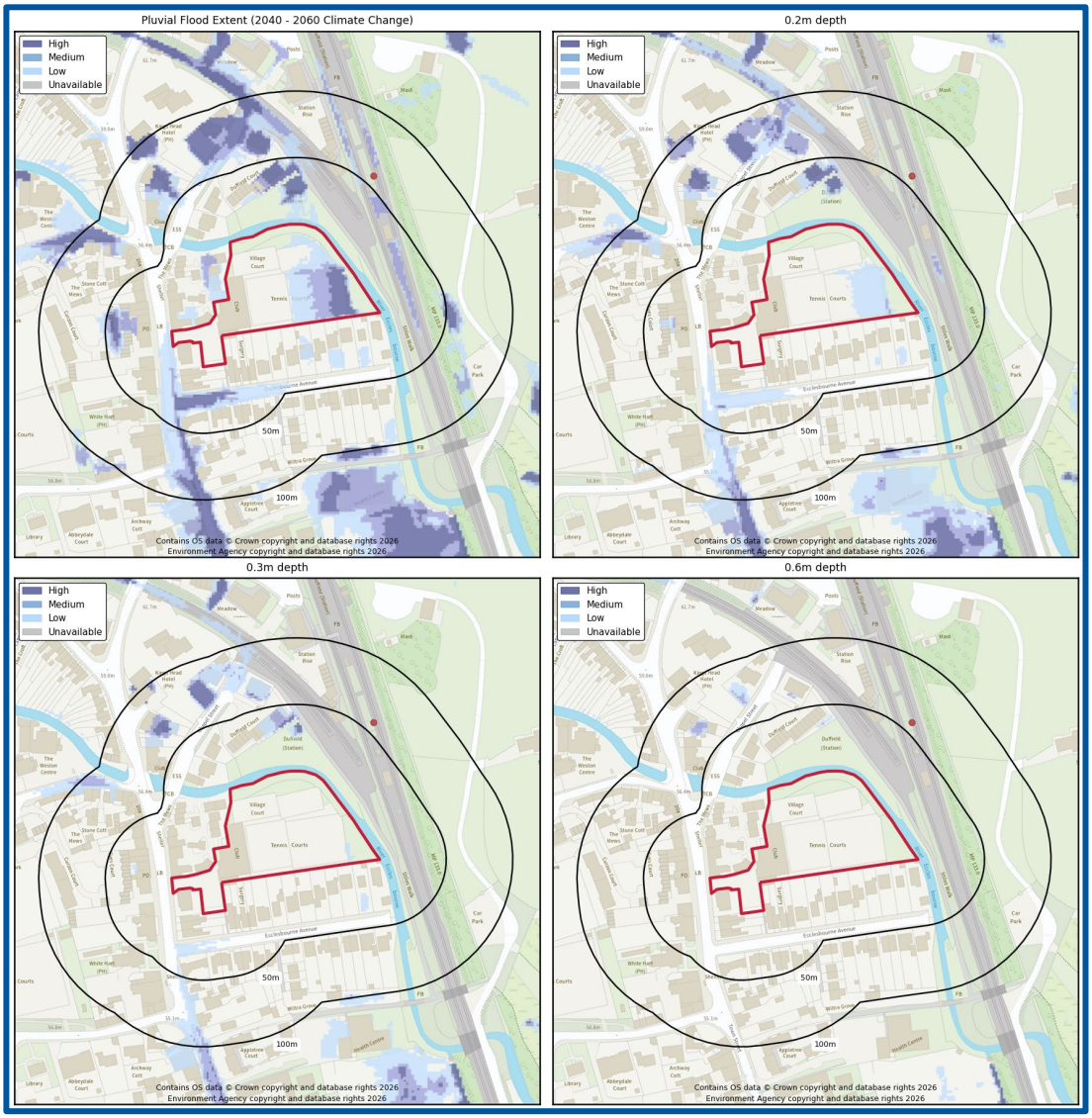
Paragraph 002 of the National Planning Practice Guidance (2025) requires consideration of the 1% AP (1 in 100 year) event, including an appropriate allowance for climate change.

As the Site is located within the Derwent Derbyshire Management Catchment and the proposed development is classed as Water Compatible, where the proposed lifespan is approximately 75 years, the Upper End (40%) allowance is required to determine a suitable climate change factor to apply to rainfall data.

As part of RoFSW mapping, climate change modelling has been applied exclusively for the central allowance up to the 2050s epoch. Whilst it should be noted that the risk of pluvial flooding is likely to be greater than this dataset indicates for the lifetime of the development, in the absence of more extensive modelling scenarios this data is considered the best resource at the time of writing.

According to the RoFSW climate change modelling (Figure 14, overleaf), the extent and depth of pluvial flooding is anticipated to remain relatively similar to the present day events, although a greater proportion of the area proposed for development is modelled to be affected during the Low risk event. Given that the area proposed for development is not affected by the High risk event, the after analysis pluvial risk has been reduced from Very Low – High, to Very Low – Medium.

Figure 14. EA future (2040 to 2060) surface water flood extent and depth mapping (EA, 2026)

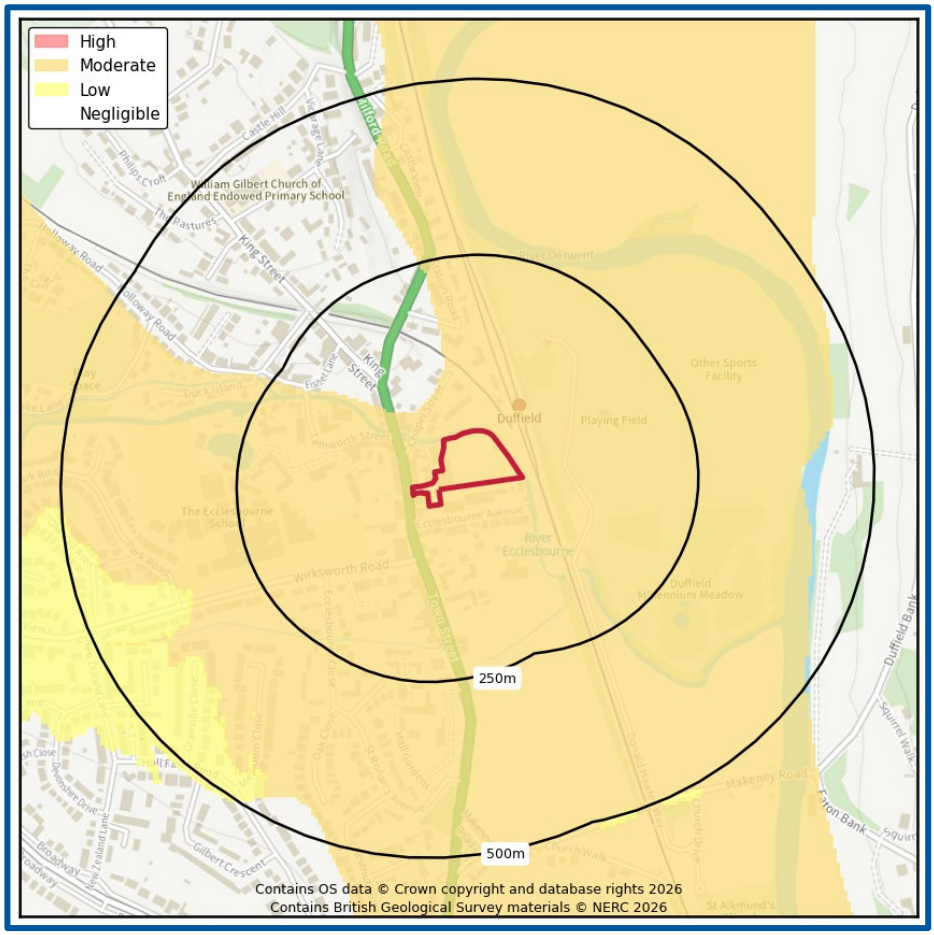


Groundwater flooding

Groundwater flooding occurs when sub-surface water emerges from the ground at the surface or into Made Ground and structures. This may be as a result of persistent rainfall that recharges aquifers until they are full; or may be as a result of high river levels, or tides, driving water through near-surface deposits. Flooding may last a long time compared to surface water flooding, from weeks to months. Hence the amount of damage that is caused to property may be substantially higher.

Groundwater Flood Risk screening data (Figure 15, overleaf) indicates there is a Moderate risk of groundwater flooding at the surface in the vicinity from permeable bedrock and superficial aquifers during a 1 in 100 year event.

Figure 15. GeoSmart GW5 Groundwater Flood Risk Map (GeoSmart, 2026)



Mapped classes within the screening map combine likelihood, possible severity and the uncertainty associated with predicting the subsurface system. The map is a national scale screening tool to prompt site-specific assessment where the impact of groundwater flooding would have significant adverse consequences. Mapping limitations and a number of local factors may reduce groundwater flood risk to land and property even where it lies within mapped groundwater flood risk zones, which do not mean that groundwater floods will occur across the whole of the risk area.

A site-specific assessment has been undertaken to refine the groundwater risk screening information on the basis of site-specific datasets (see Section 3) including BGS borehole data and the EA's fluvial floodplain data to develop a conceptual groundwater model. The risk rating is refined further using the vulnerability of receptors including occupants and the existing and proposed Site layout, including the presence of basements and buried infrastructure. The presence of any nearby or on-Site surface water features such as drainage ditches, which could intercept groundwater, have also been considered.

- It is understood that significant sub-surface excavation will not be required as part of the development and the development will not contain any buried infrastructure. *Note: The risks are higher for basements, buried infrastructure and soakaway systems which may be affected by high groundwater levels.*

- According to a review of the hydrogeology (Section 3), the Site is underlain by permeable superficial deposits above permeable bedrock. Groundwater levels may rise in the bedrock and superficial aquifers in a seasonal response to prolonged rainfall recharge which may cause an unusually high peak in groundwater levels during some years.
- Groundwater levels may also rise in the superficial aquifer in response to high river events due to the potential hydraulic continuity with the River Ecclesbourne and River Derwent. It is noted groundwater flooding may occur in response to prolonged high water levels, by-passing flood defences even if overtopping does not occur. The design of the development should consider the groundwater pathway through permeable formations.
- According to a review of the BGS borehole database (BGS, 2026), the nearby relevant boreholes reported groundwater levels of between 53.04 and 54.50 mAOD, compared to ground levels within the proposed development area of between 54.96 and 55.44 mAOD. Groundwater levels are subject to seasonal variations.
- GEOPDF mapping in Appendix A of the SFRA (JBA Consulting, 2021) includes the EA's Areas Susceptible to Groundwater Flooding mapping, which was developed as a screening tool for Local Authorities at a strategic scale. This mapping indicates that the Site is located in a 1 km square where greater than 75% of the land is susceptible to groundwater emergence.
- The hydrogeological characteristics suggest there is potential for a groundwater table beneath the Site.

The baseline groundwater flood risk rating is Moderate, and further analysis confirms that this would be appropriate for the Site.

Guidance
Moderate Risk - There will be a significant possibility that incidence of groundwater flooding could lead to damage to property or harm to other sensitive receptors at, or near, this location.

Climate change predictions suggest an increase in the frequency and intensity of extremes in groundwater levels.

- Rainfall recharge patterns will vary regionally resulting in changes to average groundwater levels.
- A rise in peak river levels will lead to a response of increased groundwater levels in adjacent aquifers subject to the predicted climate change increases in peak river level for the local catchment.

The impact of climate change on groundwater levels beneath the Site is linked to the predicted rise in peak river levels as well as the variation in rainfall recharge, which is uncertain.

Flooding from artificial sources

Artificial sources of flood risk include waterbodies or watercourses that have been amended by means of human intervention rather than natural processes. Examples include reservoirs (and associated water supply infrastructure), docks, sewers and canals. The flooding mechanism associated with flood risk from artificial sources is primarily related to breach or failure of structures (reservoir, lake, sewer, canal, flood storage areas, etc.)

Sewer flooding

Flooding from the sewer network can occur when flow entering the system exceeds its available discharge capacity, the system becomes blocked or it cannot discharge due to a high water level in the receiving watercourse. Water then begins to back up through the sewers and surcharge through manholes, potentially flooding highways, and properties.

Table 5-2 of the SFRA has identified 3 incidences of flooding as a result of surcharging sewers within the DE56 4 postcode. However, it is recognised that this five-digit postcode covers a large area and instances of flooding are not specific to the Site (JBA Consulting, 2021).

Guidance

Properties classified as "at risk" are those that have suffered, or are likely to suffer, internal flooding from public foul, combined or surface water sewers due to overloading of the sewerage system either once or twice in the ten year reference period. Records held by the sewage utility company provide information relating to reported incidents, the absence of any records does not mean that the Site is not at risk of flooding.

Canal failure

Canals typically present a residual risk to Site rather than a direct flood risk due to the water levels being highly managed within an operating zone. Flooding can still occur from canals as a result of overtopping due to prolonged rainfall or embankment failure.

According to Ordnance Survey (OS) mapping, there are no canals within 500 m of the Site and therefore the risk is considered to be Negligible.

Water supply infrastructure

Water supply infrastructure is comprised of a piped network to distribute water to private houses or industrial, commercial or institution establishments and other usage points. In urban areas, this represents a particular risk of flooding due to the large amount of water supply infrastructure, its condition and the density of buildings.

The risks of flooding to properties from burst water mains cannot be readily assessed. If more information regarding the condition and history of the water supply infrastructure within the vicinity of the Site is required, then it is advisable to contact the local water supplier, Severn Trent.

Culverts and bridges

The blockage of watercourses or structures by debris (that is, any material moved by a flowing stream including vegetation, sediment and man-made materials or refuse) reduces flow capacity and raises water levels, potentially increasing the risk of flooding. High water levels can cause saturation, seepage and percolation leading to failure of earth embankments or other structures. Debris accumulations can change flow patterns, leading to scour, sedimentation or structural failure.

The pre-2017 EA update Product 5 River Ecclesbourne Flood Modelling report (JBA Consulting, 2014) included blockage modelling runs at eight locations on the River Ecclesbourne, based on their likely flood risk to surrounding properties/infrastructure and any known local issues. The Site is modelled to be affected in the majority of blockage scenarios and is therefore considered to be at risk. The modelled outputs of the blockage scenarios were not provided as part of the EA data, and therefore the risk depth of flooding cannot be assessed.

Given that the culverts are located on a designated main river, any operation and maintenance falls under the statutory responsibility of the EA. Discussions should be held with the EA to ascertain the responsibility of maintenance for the infrastructure. Where no such schedule is already in effect it is recommended that an appropriate maintenance regime is put in place to maintain their effective operation.

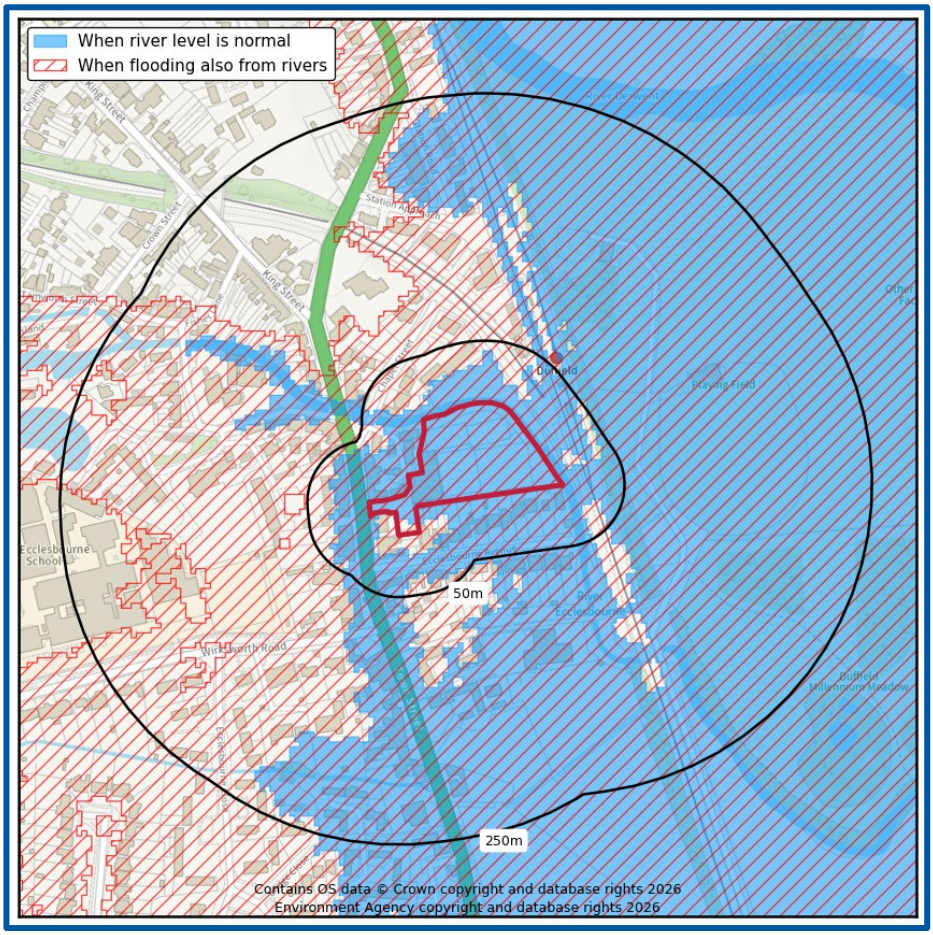
Reservoir flooding

According to the EA's Risk of Flooding from Reservoir mapping the Site is at risk of flooding from reservoirs during a "dry day" and "wet day" scenario (Figure 16) (EA, 2026).

A "dry day" scenario predicts the flooding that would occur if the dam/reservoir failed when rivers are at normal levels.

The "wet day" scenario predicts how much worse the flooding might be if a river is already experiencing an extreme natural flood. The combination of both reservoir and fluvial defence breaches are considered extremely unlikely.

Figure 16. EA Risk of Reservoir Flooding (EA, 2026)



Guidance

The risk of reservoir flooding is related to the failure of a large reservoir (holding over 25,000 m^3 of water) and is based on the worst-case scenario. Reservoir flooding is extremely unlikely to occur (EA, 2026).

5. Flood risk from the development

Floodplain storage

Where flood storage from any source of flooding is to be lost as a result of development, on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development, should be provided. Where it is not possible to provide compensatory storage on site, it may be acceptable to provide it off-site if it is hydraulically and hydrologically linked.

The loss of floodplain storage is less likely to be a concern in areas benefitting from appropriate flood risk management infrastructure or where the source of flood risk is solely tidal.

While the development is located within a fluvial Flood Zone 3 and would be affected by the 1 in 100 year plus 29% climate change event, the proposals will be specifically designed to minimise losses in floodplain storage and alterations of flow routes during a flood event. The canopy over the padel courts will be open in its design, and mesh panels will be incorporated into the design of the padel courts. This will allow for flood water to flow through the courts during any future flood events, resulting in minimal losses of floodplain storage and minor alterations in flow routes. In addition, the padel courts will be positioned perpendicular to the flow direction of the River Ecclesbourne, meaning that the mesh fencing will face the anticipated flow direction of flooding resulting in further minimisation of the impact of the development on flow routes. Therefore, the provision of compensatory flood storage is not considered to be required.

Drainage and run-off

Based on the topography and surface water flood risk in the vicinity, interference or interaction with overland flow paths and inflows from off-Site is considered unlikely.

The potential surface water run-off generated from the Site during a 1 in 100 year return period should be calculated, using FEH 2022 rainfall data from the online Flood Estimation Handbook (FEH), developed by NERC (2009) and CEH (2016).

The NPPF (2024) recommends the effects of climate change are incorporated into FRA's. As per the most recent update to the NPPG (September 2025) the applicable climate change factor for the 1 in 30 (≥ 3.3% AEP) and 1 in 100 (< 3.3 to 1% AEP) year event to apply to surface water flooding is dependent upon the management catchment.

Given the proposed lifespan of the development, the requirements for climate change should allow up to the 1% AEP upper end allowance. As the Site is located within the Derwent Derbyshire Management Catchment the following peak rainfall allowances are to be applied.

Table 5. Climate change rainfall allowances

Derwent Derbyshire Management Catchment	3.3% Annual exceedance rainfall event		1% Annual exceedance rainfall event	
	2050s	2070s	2050s	2070s
Upper end	35%	35%	40%	40%
Central	20%	25%	20%	30%

6. Suitability of the proposed development

The information below outlines the suitability of proposed development in relation to national and local planning policy.

National policy and guidance

The aims of the national planning policies are achieved through application of the Sequential Test and in some cases the Exception Test.

Guidance

Sequential test: The aim of this test is to steer new development towards areas with the lowest risk of flooding (NPPF, 2024). Reasonably available sites located in Flood Zone 1 should be considered before those in Flood Zone 2 and only when there are no reasonably available sites in Flood Zones 1 and 2 should development in Flood Zone 3 be considered.

Exception test: In some cases, this may need to be applied once the Sequential Test has been considered. For the exception test to be passed it must be demonstrated that the development would provide wider sustainability benefits to the community that outweigh flood risk and a site-specific FRA must demonstrate that the 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.

Suitability of the proposed development, and whether the Sequential and Exception Tests are required, is based on the risk of flooding from all sources aiming to steer development towards low-risk areas. The flood risk vulnerability classification of the existing and proposed development must also be compatible with the respective Flood Zone. Some developments may contain different elements of vulnerability and the highest vulnerability category should be used, unless the development is considered in its component parts.

This report has been produced to assess all development types, prior to any development. The vulnerability classification and Flood Zones are compared within the table overleaf (Table 2 of the NPPG (2025)).

As the Site is located within Flood Zone 3a and the proposed development is defined as Water Compatible, the proposals would be acceptable, but may be subject to the Sequential Test.

Where the Sequential Test is required it must be demonstrated that there are no alternative reasonably available Sites at lower risk of flooding within an area agreed with Amber Valley Borough Council (NPPF, 2024).

Table 6. Flood risk vulnerability and flood zone 'incompatibility (taken from NPPG, 2025)

Flood risk vulnerability classification		Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Flood Zone	Zone 1 – low probability	✓	✓	✓	✓	✓
	Zone 2 – medium probability	✓	✓	Exception test required	✓	✓
	Zone 3a - high probability	Exception test required	✓	X	Exception test required	✓
	Zone 3b – functional flood plain	Exception test required	✓	X	X	X

EA Flood Risk Standing Advice for vulnerable developments located in Flood Zones 2 or 3 (February, 2022)

For all relevant vulnerable developments (i.e. more vulnerable, less vulnerable and water compatible), advice on the points should be followed:

- Surface water management;
- Access and evacuation; and,
- Floor levels.

Surface water management

Plans for the management of surface water need to meet the requirements set out in either the local authority's:

- Surface water management plan where available; OR,
- Strategic flood risk assessment.

They also need to meet the requirements of the approved building regulations Part H: drainage and water disposal. Read section H3 rainwater drainage.

Planning permission is required to use a material that can't absorb water (e.g. impermeable concrete) in a front garden larger than 5m^2.

Access and evacuation

Details of emergency escape plans should be provided for any parts of a building that are below the estimated flood level.

Plans should show:

- Single storey buildings or ground floors that don't have access to higher floors can access a space above the estimated flood level, e.g. higher ground nearby;
- Basement rooms have clear internal access to an upper level, e.g. a staircase;
- Occupants can leave the building if there's a flood and there's enough time for them to leave after flood warnings.

Floor levels

The following should be provided:

- Average ground level of your site;
- Ground level of the access road(s) next to your building; and,
- Finished floor level of the lowest room in your building.

Finished floor levels should be a minimum of whichever is higher of 300 mm above the:

- Average ground level of the site;
- Adjacent road level to the building; OR
- Estimated river or sea flood level.

You should also use construction materials that have low permeability up to at least the same height as finished floor levels.

If you cannot raise floor levels to meet the minimum requirement, you will need to:

- Raise them as much as possible;
- Consider moving vulnerable uses to upper floors; and,
- Include extra flood resistance and resilience measures.

When considering the height of floor levels, you should also consider any additional requirements set out in the SFRA. Flood water can put pressure on buildings causing structural issues. If your design aims to keep out a depth of more than 600 mm of water, you should get advice from a structural engineer. They will need to check the design is safe.

Extra flood resistance and resilience measures

Follow the guidance in this section for developments in flood risk areas where you cannot raise the finished floor levels to the required height. You should design buildings to exclude flood water where possible and to speed recovery in case water gets in.

Make sure your flood resilience plans for the development follow the guidance in the CIRIA Property Flood Resilience Code of Practice. Please note that the code of practice uses the term 'recovery measures'. In this guide we use 'resilience measures'.

Flooding can affect the structural stability of buildings. If your building design would exclude more than 600 mm of flood water, you should get advice from a structural engineer. They will need to check the design is safe. Only use resistance measures that will not cause structural stability issues during flooding. If it is not possible to safely exclude the estimated flood level, exclude it to the structural limit then allow additional water to flow through the property.

The design should be appropriately flood resistant and resilient by:

- Using flood resistant materials that have low permeability to at least 600 mm above the estimated flood level;
- Making sure any doors, windows or other openings are flood resistant to at least 600 mm above the estimated flood level;
- Using flood resilient materials (for example lime plaster) to at least 600 mm above the estimated flood level;
- By raising all sensitive electrical equipment, wiring and sockets to at least 600 mm above the estimated flood level;
- Making it easy for water to drain away after flooding such as installing a sump and a pump;
- Making sure there is access to all spaces to enable drying and cleaning; and,
- Ensuring that soil pipes are protected from back-flow such as by using non-return valves.

Temporary or demountable flood barriers are not appropriate for new buildings. Only consider them for existing buildings when:

- There is clear evidence that it would be inappropriate to raise floor levels and include passive resistance measures; and,
- An appropriate flood warning or other appropriate trigger is available.

If proposals involve the development of buildings constructed before 1919, refer to Flooding and Historic Buildings guidance produced by Historic England.

7. Resilience and mitigation

Based on the flood risk identified at the Site, the national and local policies and guidance and proposed development, the mitigation measures outlined within this section of the report are likely to help protect the development from flooding.

Sea (coastal/tidal) flood mitigation measures

As the Site is not identified as being at risk of flooding from the sea, mitigation measures are not required.

Rivers (fluvial) flood mitigation measures

The Site is located within an area which is affected by flooding from rivers. The following table confirms the flood depths associated with the area proposed for development.

Table 7. Defended EA modelled flood data (JBA Consulting, 2017)

Flood data	Flooding scenario		
	1 in 100 year	1 in 100 year plus 29% CC	1 in 1000 year
Flood level (mAOD)	55.79	55.96	56.23
Flood defence wall (Asset ID: 39833) effective crest level (mAOD)	55.84		
Flood depths (m)*	No flooding anticipated	Up to 1.00	Up to 1.27

*Compared to LiDAR levels in the area proposed for development of between 54.96 and 55.44 mAOD.

Given that the proposed development is classed as Water Compatible, specific fluvial mitigation measures are not considered to be necessary. However, consideration should be given to the design of the padel court playing surface to ensure that future flood events do not result in significant costs of repair. In addition, any vulnerable assets such as power supplies and other related infrastructure should be raised above the expected 1 in 100 year plus 29% climate change flood level.

The mesh side panels of the padel courts should be maintained to ensure that flow routes remain unobstructed and that no displacement of floodwater occurs. Following any flood event, appropriate maintenance should be undertaken to remove any debris from the mesh.

Works within 8 m of a flood defence may require a flood risk activity permit (FRAP) from the EA. Given the proximity of the proposed development to a flood defence wall, it is recommended that the EA are contacted to confirm whether a FRAP is required.

If these mitigation measures are implemented this could reduce the flood risk to the development from Medium to Low.

Surface water (pluvial) flood mitigation measures

The mitigation measures detailed above for river flood risk are likely to be suitable for the relatively shallow flood depths which could be experienced in a 1 in 100 year plus climate change pluvial flood event.

In addition, the regular maintenance of any drains and culverts surrounding/on the Site should be undertaken to reduce the flood risk.

A Sustainable Drainage Strategy (SuDS) should be developed for the Site, for effective management of surface water runoff from the proposed development.

If these mitigation measures are implemented this would reduce the flood risk to the development from Very Low - Medium, to Very Low - Low.

Groundwater flood mitigation measures

A Moderate risk of groundwater flooding has been identified at the Site. It is likely the flood mitigation measures recommended for the fluvial risk will reduce the groundwater flood risk at the development.

In addition, in order to ensure the development includes sufficient flood mitigation measures to reduce the risk of groundwater flooding over its lifetime, the installation of interceptor drains directing any groundwater seepage towards a surface water drainage network is recommended at the Site.

If this mitigation measure is implemented, the groundwater flood risk to the development could be reduced from Moderate to Low.

Reservoir flood mitigation measures

According to the EA data, the Site is at risk of flooding from reservoirs.

There would be a relatively high rate and onset of flooding associated with a reservoir breach; therefore, it is unlikely that safe access could be achieved unless a long warning period was provided. Occupants should get to the highest level of the wider Site as possible and contact the emergency services.

Other flood risk mitigation measures

Multiple highway bridges have been identified crossing the River Ecclesbourne within the vicinity of the Site, with the closest located c. 40 m, 70 m and 200 m upstream (to the northwest).

These structures may pose a flood risk to the Site should they become blocked or damaged. The pre-2017 EA update Product 5 River Ecclesbourne Flood Modelling report (JBA Consulting, 2014) included blockage modelling runs at eight locations on the River Ecclesbourne, based on their likely flood risk to surrounding properties/infrastructure and any known local issues. The modelled outputs of the blockage scenarios were not provided as part of the EA data, and therefore the risk to the Site in the event of a blockage cannot be fully assessed.

Given that the culverts are located on a designated main river, any operation and maintenance falls under the statutory responsibility of the EA. Discussions should be held with the EA to ascertain the responsibility of maintenance for the infrastructure. Where no such schedule is already in effect it is recommended that an appropriate maintenance regime is put in place to maintain their effective operation.

Residual flood risk mitigation measures

The risk to the Site has been assessed from all sources of flooding and appropriate mitigation and management measures proposed to keep the users of the development safe over its lifetime. There is, however, a residual risk of flooding associated with the potential for failure of mitigation measures if regular maintenance and upkeep are not undertaken. If mitigation measures are not implemented or maintained, the risk to the development will remain as the baseline risk.

Further flood mitigation information

More information on flood resistance, resilience and water entry can be found here: http://www.planningportal.gov.uk/uploads/br/flood_performance.pdf

Emergency evacuation - safe access / egress and safe refuge

An area of safe refuge should be sufficient in size for all potential users and be reasonably accessible to the emergency services.

Emergency evacuation from the development and the Site should only be undertaken in strict accordance with any evacuation plans produced for the Site, with an understanding of the flood risks at the Site including available mitigation, the vulnerability of occupants and preferred evacuation routes.

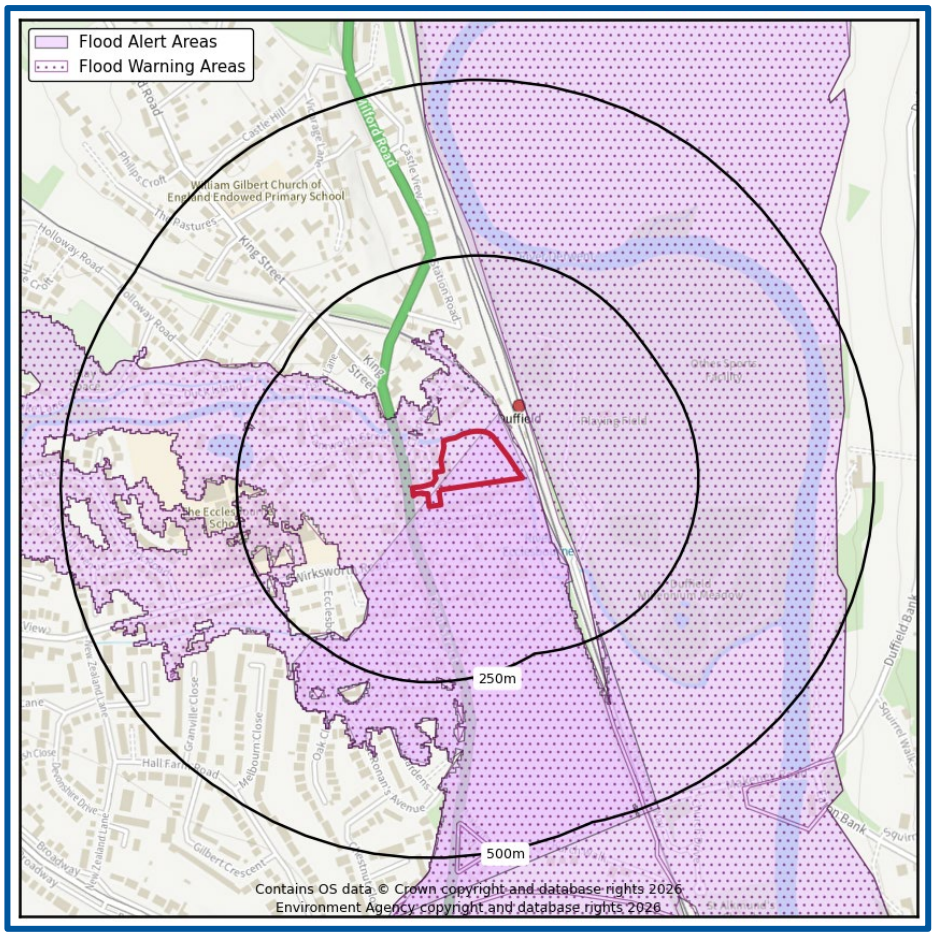
Flood warnings

The EA operates a flood warning service in all areas at risk of flooding; this is available on their website: https://www.gov.uk/check-flood-risk. The Site is located within two EA Flood Alert coverage areas and an EA Flood Warning coverage area so is able to receive alerts and warnings (Figure 17). All warnings are also available through the EA's 24 hour Floodline Service (0345 988 1188).

- Flood Alert: River Ecclesbourne in Derbyshire (034WAF431); Quick Dial code: 206022.
- Flood Alert: River Derwent in Derbyshire (034WAF409); Quick Dial code: 206009.
- Flood Warning: Rivers Ecclesbourne and Derwent at Duffield (034FWFECDUFFIELD); Quick Dial code: 306074.

The EA aims to issue Flood Warnings 2 hours in advance of a flood event. Flood Warnings can provide adequate time to enable protection of property and evacuation from a Site, reducing risk to life and property.

Figure 17. EA Flood Warning Coverage for the local area (EA, 2026)



Emergency evacuation

Where possible, a safe access and egress route with a 'very low' hazard rating from areas within the floodplain to an area wholly outside the 1 in 100 year flood event including an allowance for climate change should be demonstrated.

Based on the EA's Flood Zone Map the closest dry evacuation area within Flood Zone 1 is along Town Street (c. 80 m northwest – direct measurement). It is assumed that the existing Site operates an appropriate evacuation procedure in the event of flooding.

Other relevant information

A Business Continuity and Flood Warning and Evacuation Plan (BCFWEP) is recommended where not in place already to reduce risks to people, property and profit.

Owners and users of the Site should be signed up to receive EA Flood Alerts and Warnings.

Registration to the Environment Agency's flood warning scheme can be done by following this link: https://www.gov.uk/sign-up-for-flood-warnings.

8. Conclusions and recommendations

Table 8. Risk ratings following Site analysis

Source of Flood Risk	Baseline[1]	After analysis[2]	After Mitigation[3]
River (fluvial) flooding	High	Medium	Low
Sea (coastal/tidal) flooding	Very Low		N/A
Surface water (pluvial) flooding	Very Low to High	Very Low to Medium	Very Low to Low
Groundwater flooding	Moderate		Low
Other flood risk factors present	Yes (Reservoir breach and bridge failure/blockage)		N/A
Is any other further work recommended?	Yes (see below)		

1 BASELINE risks assigned for the whole Site, using national risk maps, including the benefit of EA flood defences and the impacts of climate change.

2 AFTER ANALYSIS modification of risk assessment based on detailed site specific analysis including some or all of the following: flood model data, high resolution mapping, building location, access routes, topographic and CCTV surveys. Reasons for the change in classification are provided in the text.

3 AFTER MITIGATION risks include risks to proposed development / asset and occupants if mitigation measures recommended in this report are implemented, including the impacts of climate change.

*N/A indicates where mitigation is not required.

The table overleaf provides a summary of where the responses to key questions are discussed in this report.

Water-compatible developments in a Flood Zone 3 are acceptable according to the NPPF and providing the recommended mitigation measures are put in place (see previous sections) it is likely that flood risk to this Site will be reduced to an acceptable level.

Table 9. Summary of responses to key questions in the report

Key sources of flood risks identified	Fluvial, surface water, groundwater, reservoirs and bridge blockages (see Section 4).
Are standard mitigation measures likely to provide protection from flooding to/from the Site?	Yes (see Section 7).
Is any further work recommended?	Yes (See exec summary and Section 7).

9. Further information

The following table includes a list of additional products by GeoSmart:

Additional GeoSmart Products			
✓	Additional assessment: SuDSmart Report		The SuDSmart Report range assesses which drainage options are available for a Site. They build on technical detail starting from simple infiltration screening and work up to more complex SuDS Assessments detailing alternative options and designs. Please contact info@geosmartinfo.co.uk for further information.
	Additional assessment: EnviroSmart Report		Provides a robust desk-based assessment of potential contaminated land issues, taking into account the regulatory perspective. Our EnviroSmart reports are designed to be the most cost effective solution for planning conditions. Each report is individually prepared by a highly experienced consultant conversant with Local Authority requirements. Ideal for pre-planning or for addressing planning conditions for small developments. Can also be used for land transactions. Please contact info@geosmartinfo.co.uk for further information.

10. References and glossary

References

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Defra/Environment Agency (2005). Flood Risk Assessment Guidance for New Development. *Phase 2 Framework and Guidance for Assessing and Managing Flood Risk for New Development – Fill Documentation and Tools*. R & D Technical Report FD232-/TR2.

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Glossary

General terms

BGS	British Geological Survey
EA	Environment Agency
GeoSmart groundwater flood risk model	GeoSmart's national groundwater flood risk model takes advantage of all the available data and provides a preliminary indication of groundwater flood risk on a 50m grid covering England and Wales. The model indicates the risk of the water table coming within 1 m of the ground surface for an indicative 1 in 100 year return period scenario.
Dry-Island	An area considered at low risk of flooding (e.g. In a Flood Zone 1) that is entirely surrounded by areas at higher risk of flooding (e.g. Flood Zone 2 and 3)
Flood resilience	Flood resilience or wet-proofing accepts that water will enter the building, but through careful design will minimise damage and allow the re-occupancy of the building quickly. Mitigation measures that reduce the damage to a property caused by flooding can include water entry strategies, raising electrical sockets off the floor, hard flooring.
Flood resistance	Flood resistance, or dry-proofing, stops water entering a building. Mitigation measures that prevent or reduce the likelihood of water entering a property can include raising flood levels or installation of sandbags.
Flood Zone 1	This zone has less than a 0.1% annual probability of river flooding
Flood Zone 2	This zone has between 0.1 and 1% annual probability of river flooding and between 0.1% and 0.5 % annual probability sea flooding
Flood Zone 3	This zone has more than a 1% annual probability of river flooding and 0.5% annual probability of sea flooding
Functional Flood Plain	An area of land where water has to flow or be stored in times of flood.
Hydrologic model	A computer model that simulates surface run-off or fluvial flow. The typical accuracy of hydrologic models such as this is ±0.25m for estimating flood levels at particular locations.
OS	Ordnance Survey
Residual Flood Risk	The flood risk remaining after taking mitigating actions.

SFRA	Strategic Flood Risk Assessment. This is a brief flood risk assessment provided by the local council
SuDS	A Sustainable drainage system (SuDS) is designed to replicate, as closely as possible, the natural drainage from the Site (before development) to ensure that the flood risk downstream of the Site does not increase as a result of the land being developed. SuDS also significantly improve the quality of water leaving the Site and can also improve the amenity and biodiversity that a Site has to offer. There are a range of SuDS options available to provide effective surface water management that intercept and store excess run-off. Sites over 1 Ha will usually require a sustainable drainage assessment if planning permission is required. The current proposal is that from April 2014 for more than a single dwelling the drainage system will require approval from the SuDS Approval Board (SABs).

Aquifer Types

Principal aquifer	These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.
Secondary A aquifer	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.
Secondary B aquifer	Predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.
Secondary undifferentiated	Has been assigned in cases where it has not been possible to attribute either category A or B to a rock type due to the variable characteristics of the rock type.
Unproductive Strata	These are rock layers or drift deposits with low permeability that has negligible significance for water supply or river base flow.

NPPF (2024) terms

Exception test	Applied once the sequential test has been passed. For the exception test to be passed it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk and a site-specific FRA must demonstrate that the 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.
Sequential test	Aims to steer new development to areas with the lowest probability of flooding.

Essential infrastructure	Essential infrastructure includes essential transport infrastructure, essential utility infrastructure and wind turbines.
Water compatible	Water compatible land uses include flood control infrastructure, water-based recreation and lifeguard/coastal stations.
Less vulnerable	Less vulnerable land uses include police/ambulance/fire stations which are not required to be operational during flooding and buildings used for shops/financial/professional/other services.
More vulnerable	More vulnerable land uses include hospitals, residential institutions, buildings used for dwelling houses/student halls/drinking establishments/hotels and sites used for holiday or short-let caravans and camping.
Highly vulnerable	Highly vulnerable land uses include police/ambulance/fire stations which are required to be operational during flooding, basement dwellings and caravans/mobile homes/park homes intended for permanent residential use.

Data sources

Aerial Photography	Contains Ordnance Survey data © Crown copyright and database right 2026 BlueSky copyright and database rights 2026
Bedrock & Superficial Geology	Contains British Geological Survey materials © NERC 2026 Ordnance Survey data © Crown copyright and database right 2026
Flood Risk (Flood Zone/RoFRS/Historic Flooding/Pluvial/Surface Water Features/Reservoir/ Flood Alert & Warning)	Environment Agency copyright and database rights 2026 Ordnance Survey data © Crown copyright and database right 2026
Flood Risk (Groundwater)	GeoSmart, BGS & OS GW5 (v2.4) Map (GeoSmart, 2026) Contains British Geological Survey materials © NERC 2026 Ordnance Survey data © Crown copyright and database right 2026
Location Plan	Contains Ordnance Survey data © Crown copyright and database right 2026
Topographic Data	OS LiDAR/EA Contains Ordnance Survey data © Crown copyright and database right 2026 Environment Agency copyright and database rights 2026

11. Appendices

GeoSmart Information

Appendix A

Site plans



Scale
0 5 25m 1:500

rev	date	issued	description

Newark Studio
t: 01635 605100

Derby Studio
t: 01332 557557

Manchester Studio
t: 0161 8261042

GUY TAYLOR ASSOCIATES
NEWARK / MANCHESTER / DERBY

A1
Original Sheet Size

STATUS
Preliminary

- All rights described in chapter IV of the copyright, designs and patents act 1988 have been generally asserted
- Where any drawing is to be read in conjunction with another, including specialists, the two drawings shall be cross-checked and any descrepancies reported to the architect before the work is put in hand
- All dimensions are in millimeters, all levels are in metres, unless shown otherwise
- Any discrepancies in dimensions or details on or between these drawings/specifications should be drawn to the attention of the Guy Taylor Associates and or the engineer in writing for clarification
- Drawing prepared solely for the use of client, as detailed in text box, and is not to be copied, lent or used by any third party without written permission

PROJECT
Duffield Squash and Tennis Club

CLIENT
DSTC

DRAWING TITLE
Existing Site Plan

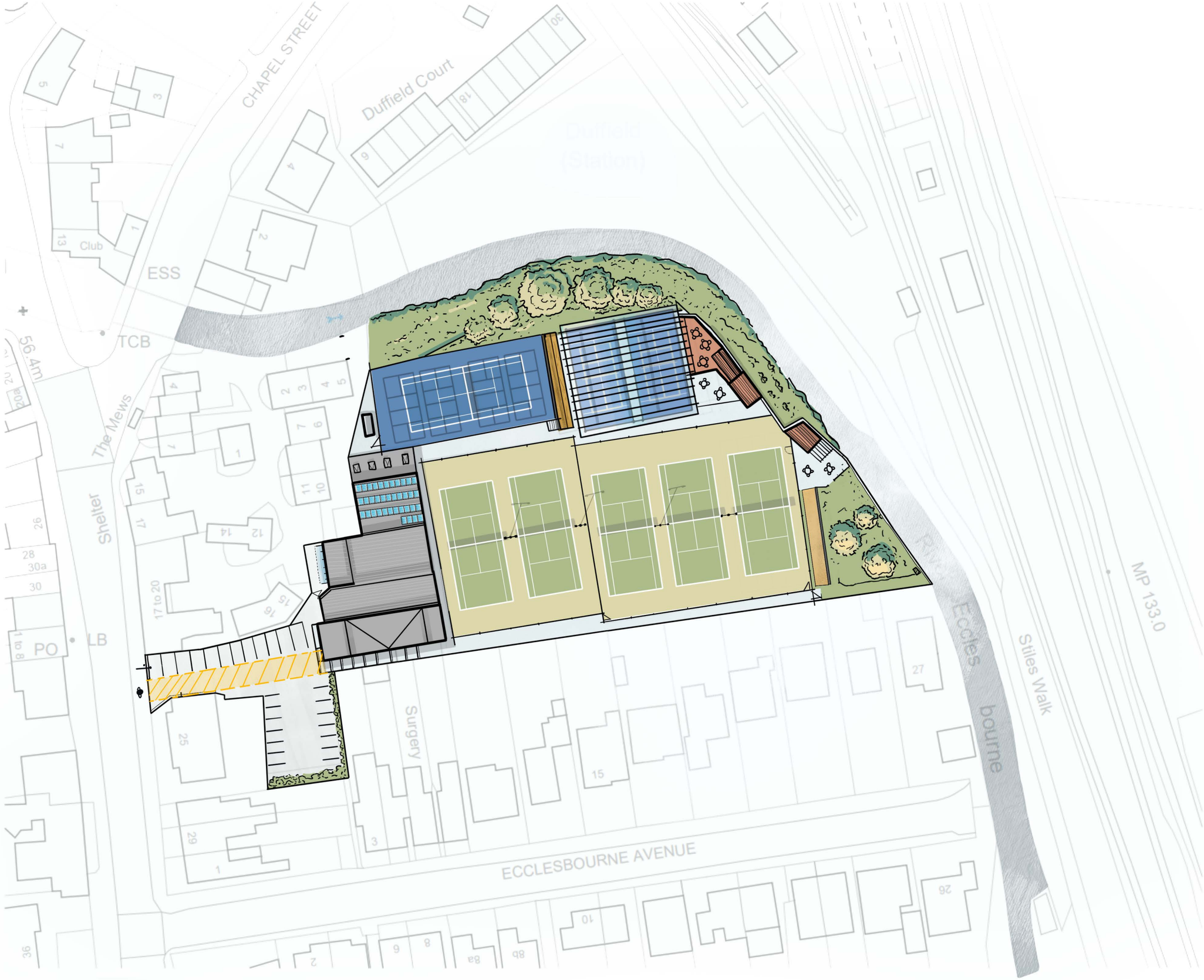
SCALE	DATE	DRAWN	CHK
1:500 at A1	15/04/2025	OL	--

DRAWING NUMBER
562.1463.1 --

REVISION
--

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© COPYRIGHT


CHAPEL STREET
Duffield Court
Duffield (Station)
Club
ESS
TCB
56.4m
The Mews
Shelter
PO
LB
Surgery
ECCLESBOURNE AVENUE
Eccles bourne
Stiles Walk
MP 133.0
0
5
25m

GeoSmart Information

Appendix B

Environment Agency data

Product 4: Flood Risk Data Package for
Duffield Rackets and Fitness Club, 13 Town Street, Duffield, Belper, DE56 4EH

EIR/2026/08344 **Date: 23/02/2026**

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

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

This location is within Flood Zone 3.

The flood zones on this map:

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

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

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

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

The climate change allowances for this location are:

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

Modelled Information: This product 4 shows the updated flood zones 1, 2 and 3 from December 2025, however the flood levels or depth data is not currently available from our New National Flood Risk Assessment system. Therefore, we have provided you flood risk levels from our local detailed model as it represents the best available flood risk information at this time. We might be able to provide flood depth information associated with our New National Flood Risk Assessment system in the future, so please contact us again if you still require this information at a later date.

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

Historic Information: We have records of historic fluvial flooding at this location in 1957, 1965 1967 and 2023. Please note that we may or may not hold the original records in question. We do not make any claim as to the reliability of recorded flood extents or that all flood events in the area have been recorded. Please also be aware that flood defences may have been built after these historic flood events. Note - This information relates to the area the above-named property is in and is not specific to the property itself - it ***does not*** provide an indicator of flood risk ***at individual property level***.

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

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

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

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

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

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

Strategic flood risk assessments: We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site-specific flood risk assessment. This should give you information about the potential impacts of climate change in this catchment areas defined as functional floodplain flooding from other sources, such as surface water, ground water and reservoirs. This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

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

Flood risk assessment data

Location of site: 434569 / 343400 (shown as easting and northing coordinates)
Document created on: 23 February 2026
This information was previously known as a product 4.
Customer reference number: R4V77F6VKAGJ

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)
- past floods
- flood defences and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- climate change modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Surface water and other sources of flooding

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

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

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

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

Your Lead Local Flood Authority is Derbyshire County.

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

About the models used

Model name: 2017_EcclesbourneDerwentUpdate
Scenario(s): Defended fluvial, defended climate change fluvial
Date: 1 January 2017

This model contains the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

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

Metres above ordnance datum (mAOD)

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

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 3.

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

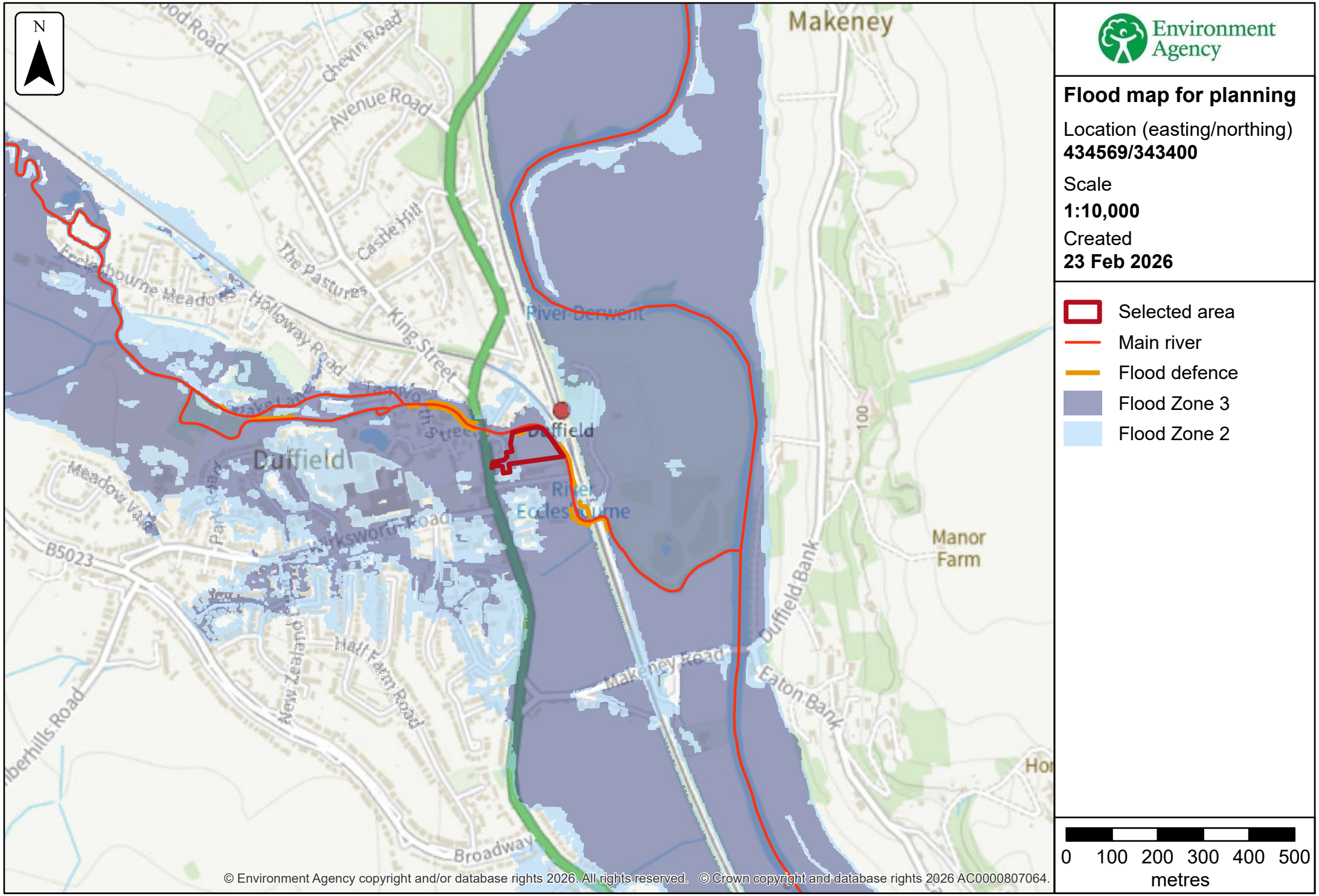
- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

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

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

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

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



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Past floods

Past flood events included in this document

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

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

Data limitations

The outlines do not include flooding from:

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

Changes to flood defences

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

What the recorded flood outlines dataset is

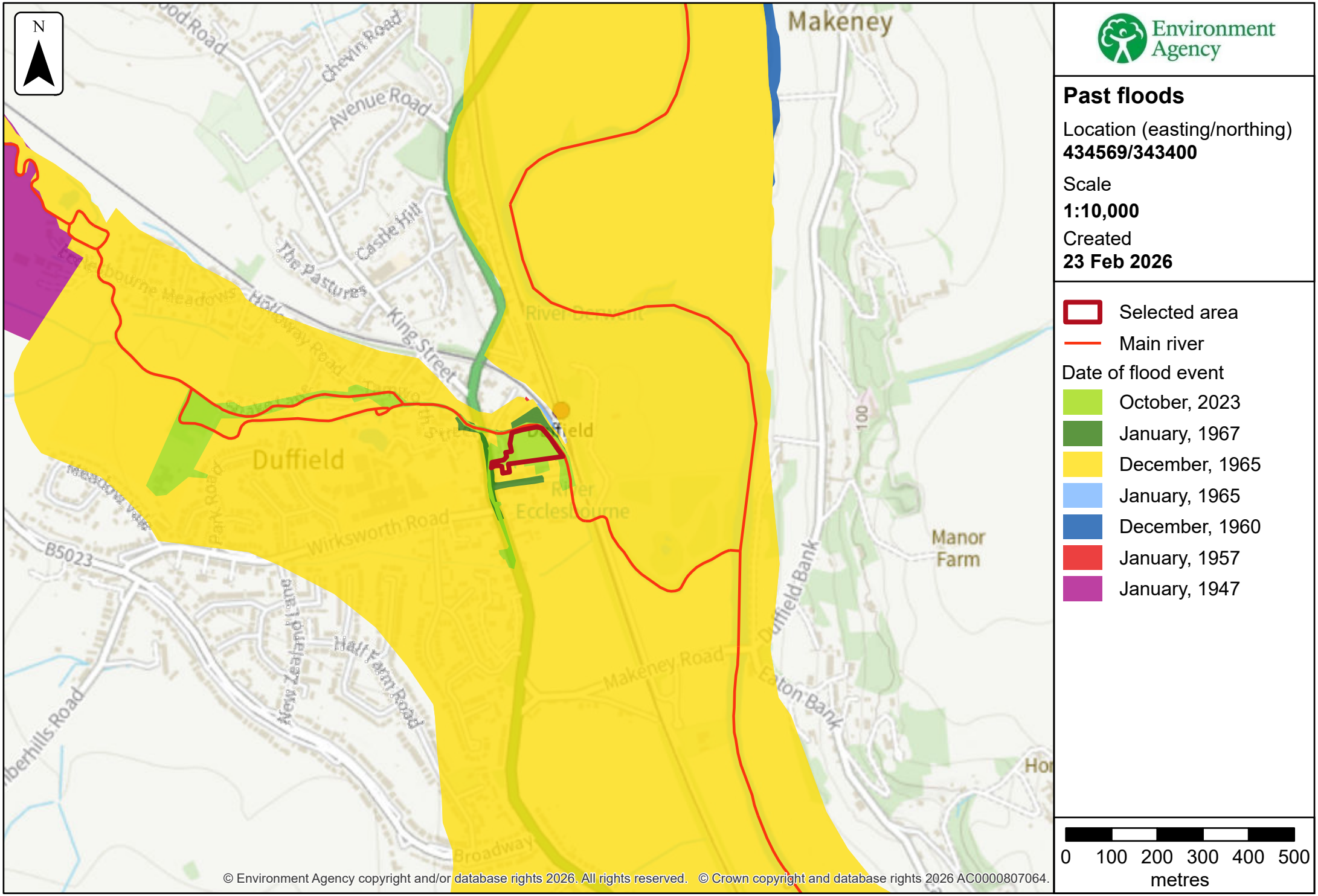
The recorded flood outlines are a geographical information system (GIS) data layer that show our verified records of areas that have flooded in the past from:

- rivers
- the sea
- groundwater
- surface water

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

Get flood information from other organisations

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


N
Makeney
Avenue Road
Castle Hill
The Pastures
King Street
River Derwent
Duffield
Wirksworth Road
River Ecclesbourne
Park Road
B5023
Manor Farm
Duffield Bank
Eaton Bank
Makeney Road
Broadway
Half Farm Road
Environment Agency
Past floods
Location (easting/northing)
434569/343400
Scale
1:10,000
Created
23 Feb 2026
Selected area
Main river
Date of flood event
October, 2023
January, 1967
December, 1965
January, 1965
December, 1960
January, 1957
January, 1947
0 100 200 300 400 500
metres
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Data on past flood events

Start date	End date	Source of flood	Cause of flood	Affects location
16 October 2023	24 October 2023	main river	channel capacity exceeded (no raised defences)	Yes
1 January 1967	1 January 1967	main river	channel capacity exceeded (no raised defences)	Yes
1 December 1965	1 December 1965	main river	channel capacity exceeded (no raised defences)	Yes
1 January 1965	1 January 1965	main river	channel capacity exceeded (no raised defences)	Yes
1 December 1960	1 December 1960	main river	channel capacity exceeded (no raised defences)	No
1 January 1957	1 January 1957	main river	channel capacity exceeded (no raised defences)	Yes
1 January 1947	1 January 1947	main river	channel capacity exceeded (no raised defences)	No

Flood defences and attributes

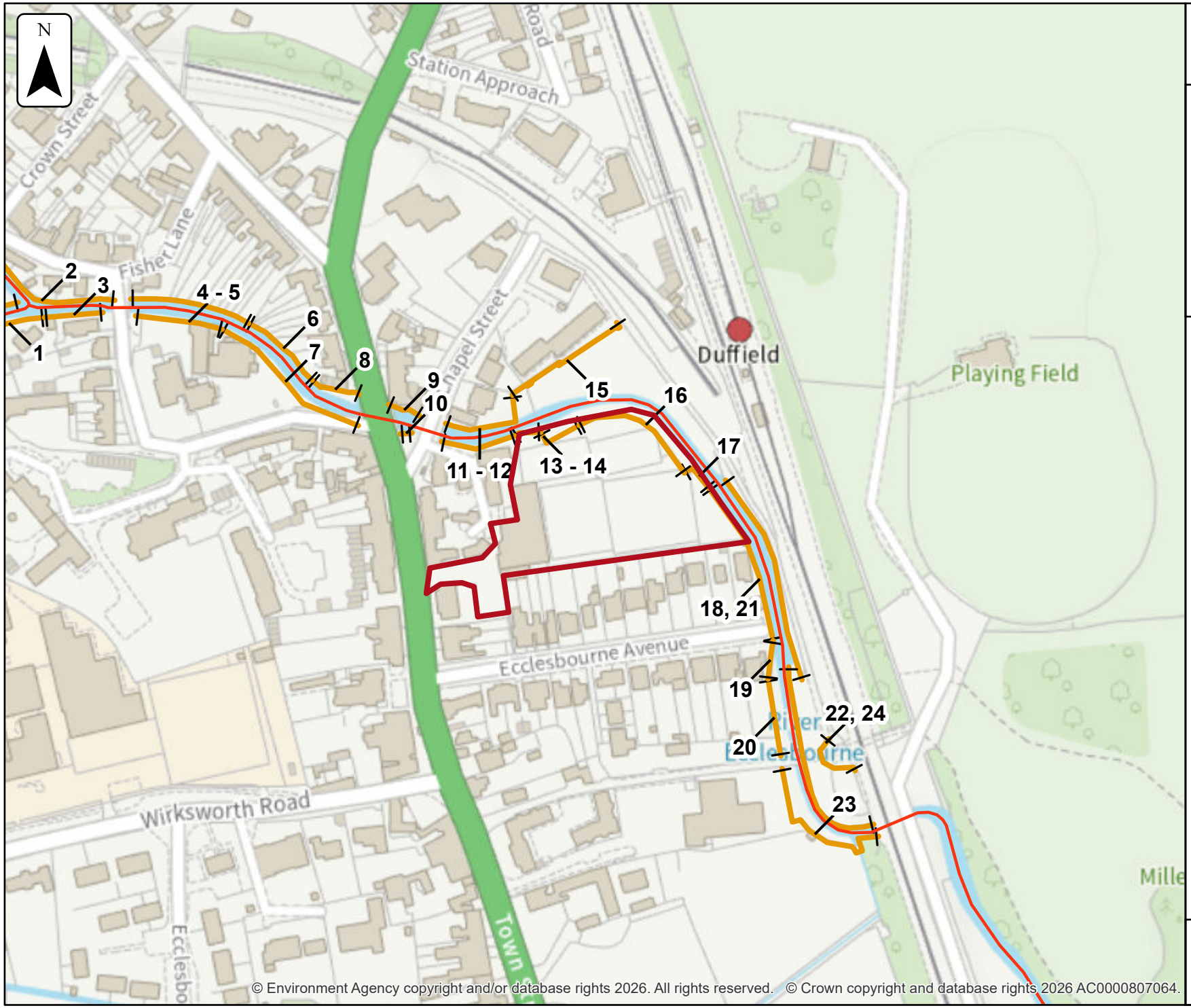
The flood defences map shows the location of the flood defences present.

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

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

Use this information:

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



Environment Agency

Flood defences

Location (easting/northing)
434569/343400

Scale
1:2,500

Created
23 Feb 2026

- Selected area
- Main river
- Flood defence

0 25 50 75 100
metres

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Flood defences data

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
1	37244	Wall	200	Good	57.43	57.71	57.41
2	37196	Wall	200	Fair	57.46	57.63	57.32
3	51348	Wall	200	Good	57.86	57.39	57.34
4	39214	Wall	200	Fair	57.29	57.38	57.26
5	51347	Wall	200	Fair	57.38	57.38	57.15
6	45385	Wall	200	Fair	57.51	57.51	57.15
7	39213	Wall	200	Fair	57.47	58.33	57.40
8	22470	Wall	200	Fair	58.17	58.17	57.42
9	39211	Wall	1000	Fair	57.84	57.77	
10	39212	Wall	1000	Good	57.07	57.07	57.06

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

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
11	39834	Wall	20	Good	55.88	55.99	55.88
12	154564	Wall	200	Fair	57.16	54.49	53.91
13	22432	Wall	100	Good	55.87	55.87	55.87
14	22368	Wall	100	Good	55.86	56.03	
15	54400	Wall	100	Fair	56.81	56.86	56.47
16	39833	Wall	100	Fair	55.85	55.84	55.84
17	39832	Wall	100	Good	55.87	55.87	55.85
18	110253	Wall	100	Fair	55.61	55.87	55.61
19	39831	Wall	100	Fair	55.52	55.51	55.51
20	22431	Wall	100	Fair	55.51	55.51	55.45

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

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
21	105981	Wall	100	Fair	55.56	55.86	55.56
22	436075	Engineered High Ground					
23	39799	Wall	100	Fair	55.44	55.47	55.43
24	55634	Engineered High Ground	100		56.0	54.21	

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

Modelled data

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

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

Climate change

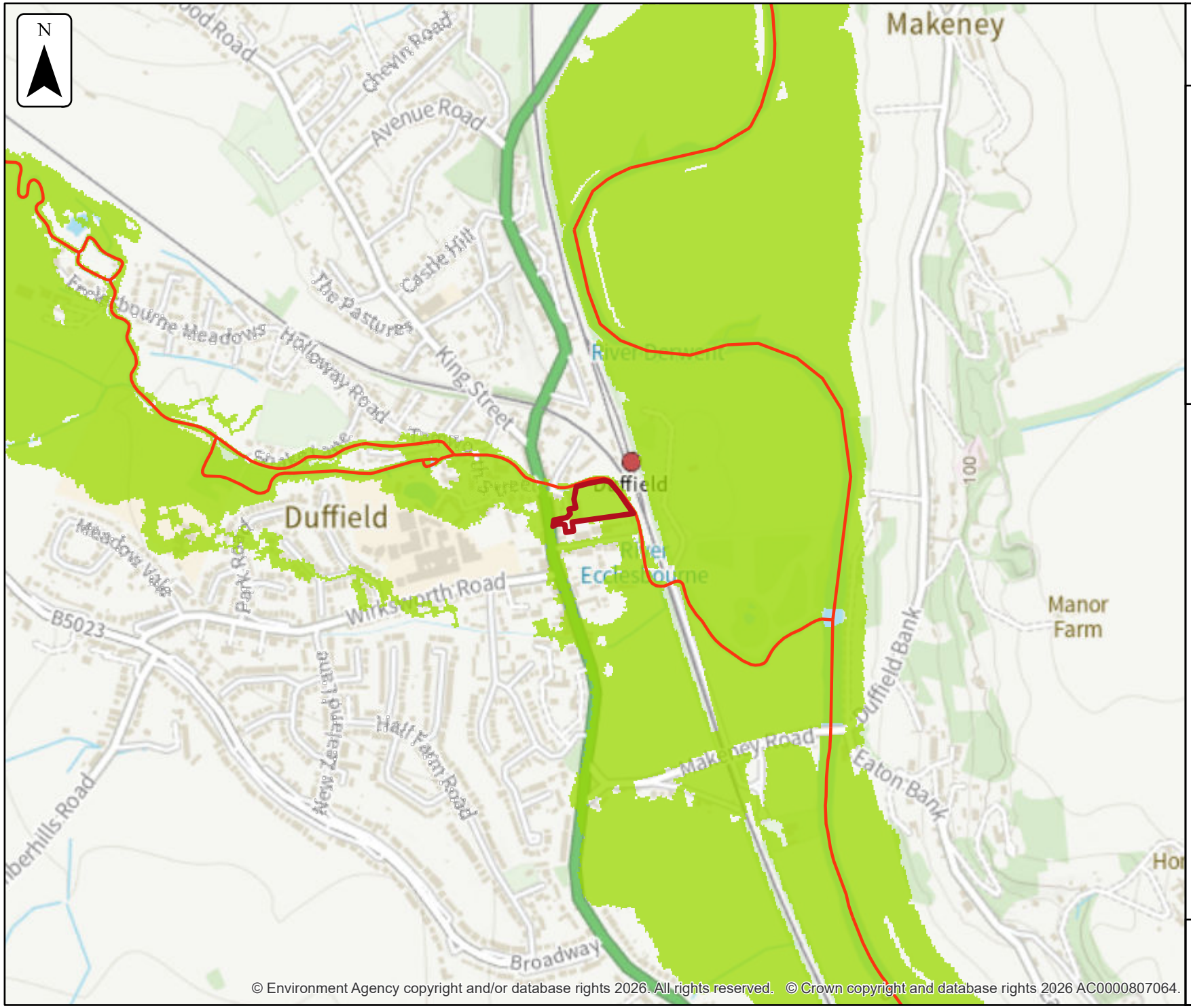
The climate change data included in the models may not include the latest flood risk assessment climate change allowances. Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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

Modelled scenarios

The following scenarios are included:

- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- Defended climate change modelled fluvial: risk of flooding from rivers where there are flood defences, including estimated impact of climate change



Environment Agency

Defended climate change modelled fluvial extent

Location (easting/northing)
434569/343400

Scale
1:10,000

Created
23 Feb 2026

Model name
2017 EcclesbourneDerwentU...

- Selected area
- Main river

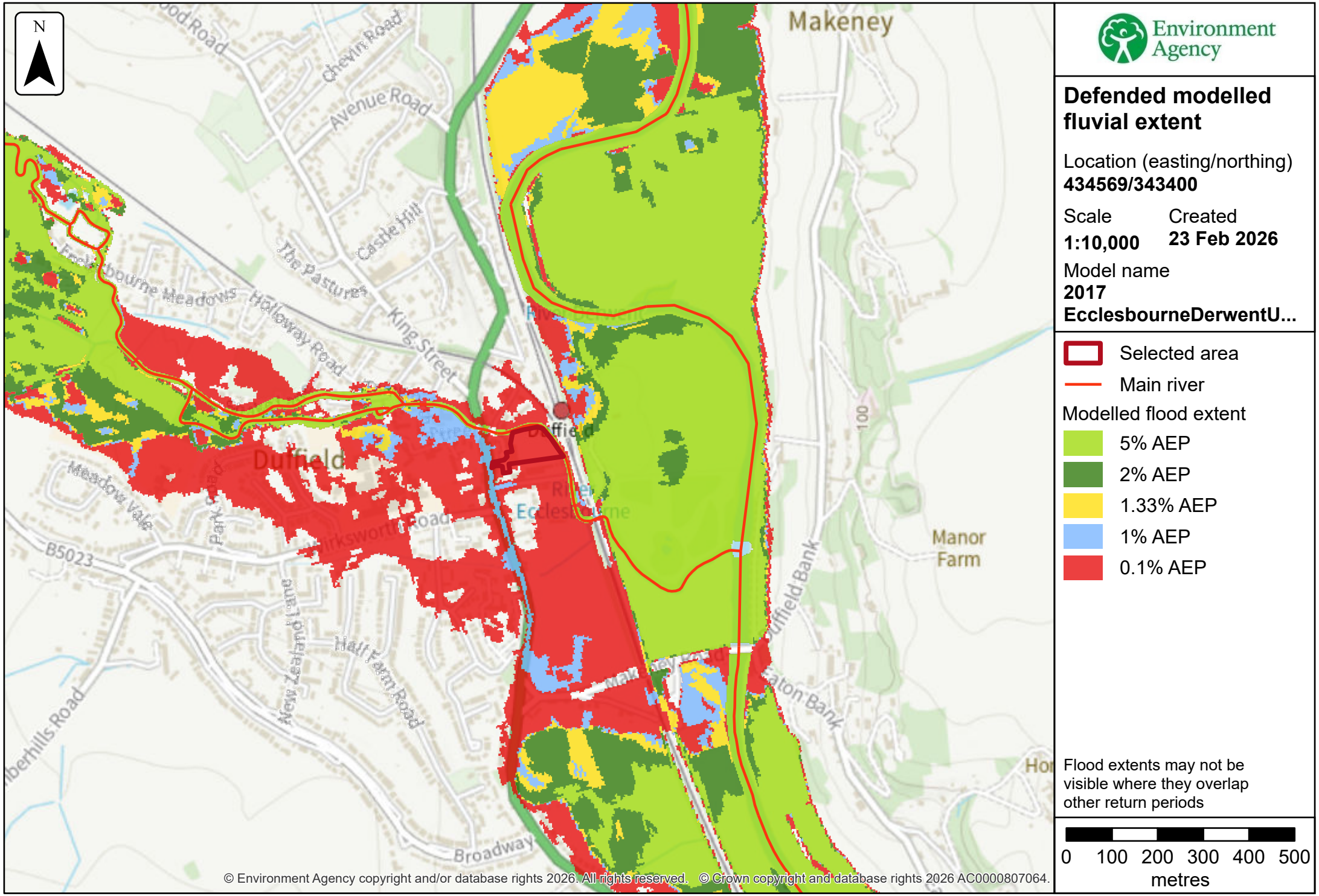
Modelled flood extent

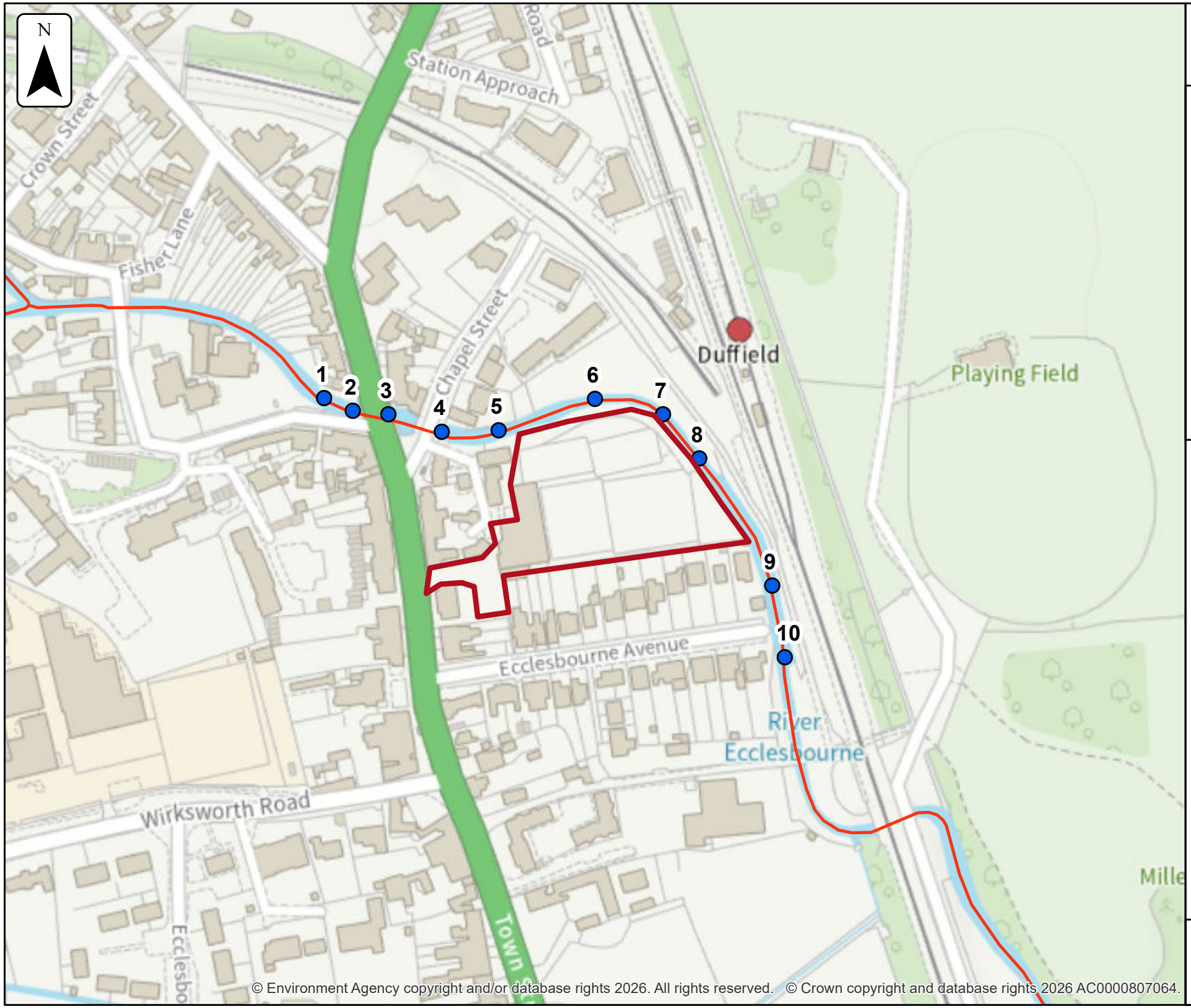
- 1% AEP (+20%)

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

0 100 200 300 400 500
metres

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N
Makeney
Avenue Road
Castle Hill
The Pasture
King Street
Holloway Road
Dufffield
Meadow Vale
Fay Road
Wirksworth Road
B5023
Hall Farm Road
Broadway
Manor Farm
Duffield Bank
100
Environment Agency
Defended modelled fluvial extent
Location (easting/northing)
434569/343400
Scale
1:10,000
Created
23 Feb 2026
Model name
2017 EcclesbourneDerwentU...
Selected area
Main river
Modelled flood extent
5% AEP
2% AEP
1.33% 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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Environment Agency

Defended modelled fluvial node locations

Location (easting/northing)
434569/343400

Scale
1:2,500

Created
23 Feb 2026

Model name
2017 EcclesbourneDerwentU...

Selected area
Modelled location
Main river

0 25 50 75 100
metres

Modelled node locations data

Defended

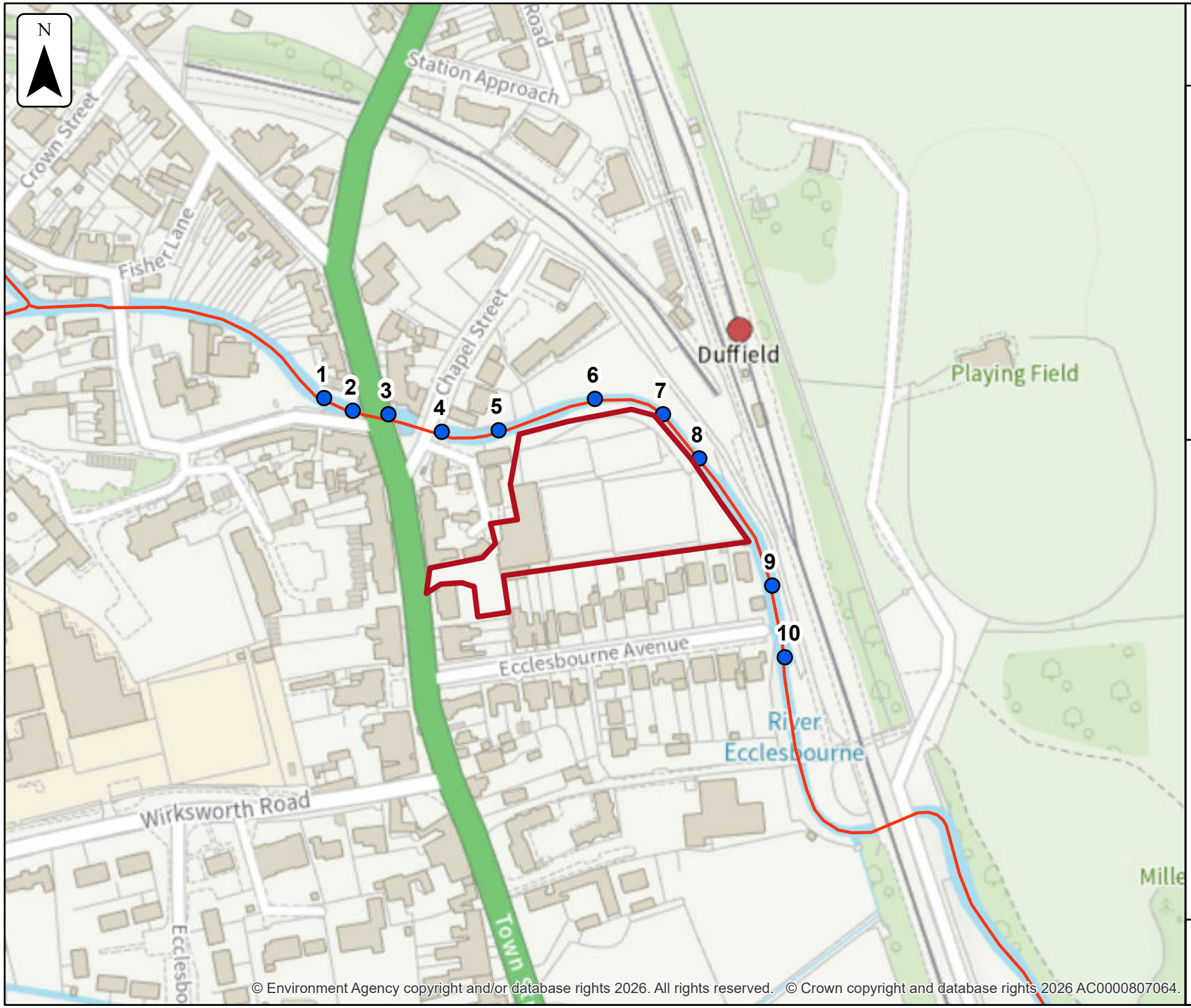
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level
1	980495	434438	343452	55.12	55.49	55.73	56.02	56.38	56.62	56.77	57.44
2	980455	434451	343446	55.10	55.48	55.72	56.01	56.37	56.61	56.76	57.44
3	980452	434469	343444	55.07	55.42	55.62	55.84	56.06	56.19	56.27	56.64
4	980403	434495	343435	55.0	55.34	55.52	55.71	55.88	55.94	55.98	56.24
5	980307	434522	343436	54.90	55.23	55.41	55.60	55.80	55.84	55.89	56.24
6	980366	434569	343451	54.72	55.03	55.21	55.41	55.62	55.71	55.79	56.23
7	980517	434603	343444	54.30	54.61	54.79	54.99	55.40	55.54	55.70	56.21
8	980494	434620	343422	54.36	54.69	54.86	55.05	55.29	55.42	55.50	56.08
9	980498	434656	343361	54.25	54.53	54.67	54.82	55.01	55.10	55.16	56.22
10	980475	434662	343326	54.09	54.38	54.53	54.71	54.92	55.02	55.08	56.24

Data in this table comes from the 2017 EcclesbourneDerwentUpdate 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.

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	980495	434438	343452	16.37	23.29	27.74	32.81	40.38	44.91	47.79	54.31
2	980455	434451	343446	16.37	23.29	27.72	32.81	40.38	44.91	47.79	54.28
3	980452	434469	343444	16.37	23.29	27.72	32.81	40.38	44.91	47.79	54.28
4	980403	434495	343435	16.37	23.29	27.72	32.81	40.38	44.91	47.79	54.26
5	980307	434522	343436	16.37	23.29	27.72	32.81	40.38	44.91	47.79	54.22
6	980366	434569	343451	16.37	23.29	27.72	32.81	40.38	44.91	47.79	54.14
7	980517	434603	343444	16.37	23.28	27.72	32.81	40.38	44.91	47.78	54.87
8	980494	434620	343422	16.37	23.29	27.72	32.81	40.38	44.91	47.78	53.94
9	980498	434656	343361	16.37	23.29	27.72	32.81	40.38	44.91	47.78	56.85
10	980475	434662	343326	16.37	23.28	27.72	32.81	40.38	44.91	47.79	63.78

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



Environment Agency

Defended climate change modelled fluvial node locations

Location (easting/northing)
434569/343400

Scale
1:2,500

Created
23 Feb 2026

Model name
2017 EcclesbourneDerwentU...

- Selected area
- Modelled location
- Main river

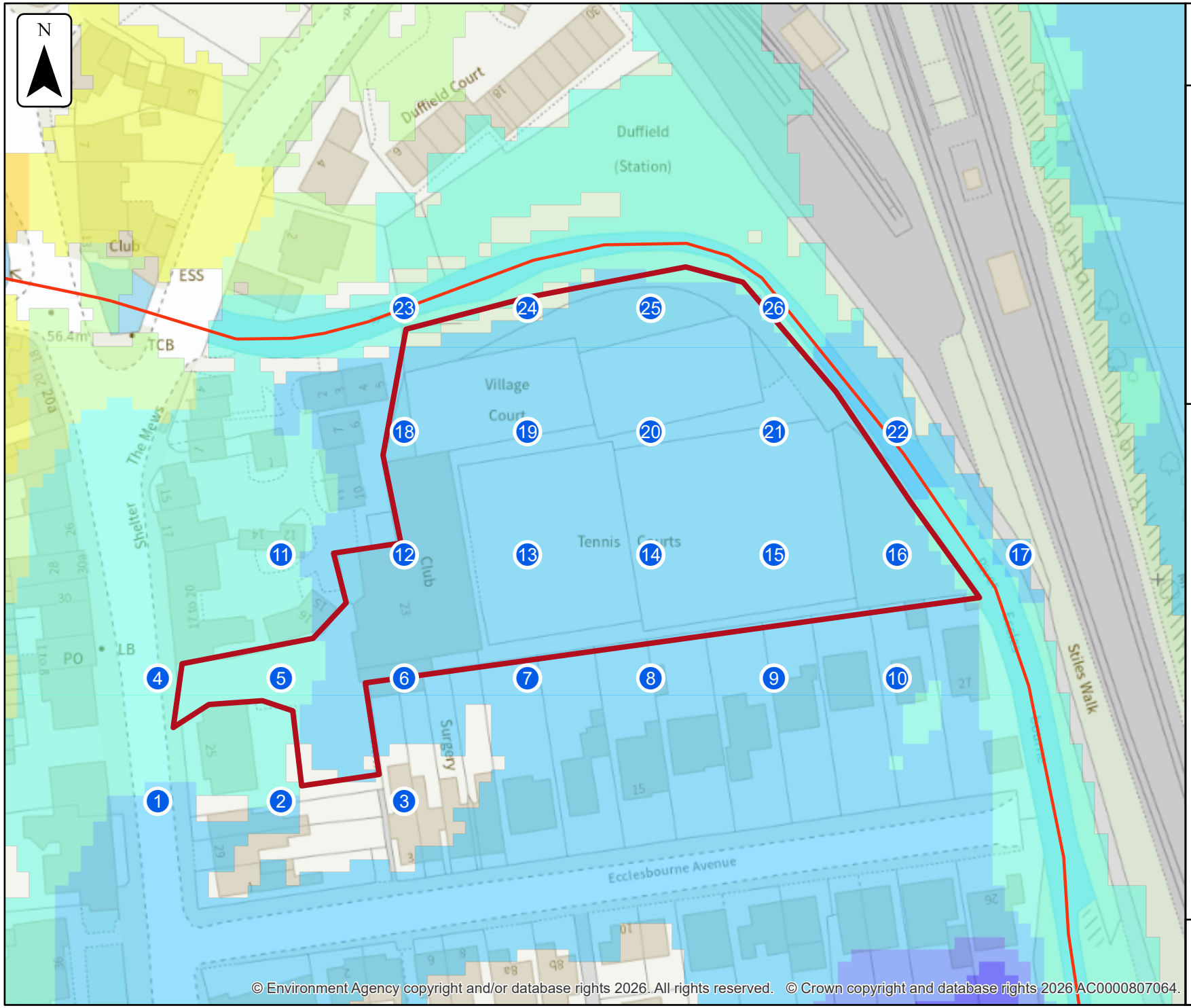
0 25 50 75 100
metres

Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+20%)
				Level	Flow
1	980495	434438	343452	57.06	51.84
2	980455	434451	343446	57.06	51.84
3	980452	434469	343444	56.40	51.84
4	980403	434495	343435	56.05	51.84
5	980307	434522	343436	55.98	51.84
6	980366	434569	343451	55.91	51.84
7	980517	434603	343444	55.85	51.84
8	980494	434620	343422	55.62	51.84
9	980498	434656	343361	55.42	51.84
10	980475	434662	343326	55.42	51.98

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



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Environment Agency

Defended modelled fluvial extent and height

Location (easting/northing)
434569/343400

Scale
1:1,000

Created
23 Feb 2026

Model name
2017 EcclesbourneDerwentU...

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 55 - 55.375
- 55.375 - 55.75
- 55.75 - 56.125
- 56.125 - 56.5
- 56.5 - 56.875
- 56.875 - 57.25
- 57.25 - 57.625
- 57.625 - 58.0
- 58.0 - 58.375

This map shows the 0.1% AEP height data

0 10 20 30 40
metres

Sample point data

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height
1	434484	343342	NoData	NoData	NoData	NoData	NoData	NoData	55.42	56.11
2	434508	343342	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.13
3	434532	343342	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	434484	343366	NoData	NoData	NoData	NoData	NoData	NoData	55.50	56.17
5	434508	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.13
6	434532	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.07
7	434556	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.04
8	434580	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.03
9	434604	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.03
10	434628	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.08
11	434508	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.13
12	434532	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.08

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height
13	434556	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.04
14	434580	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.04
15	434604	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.03
16	434628	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.02
17	434652	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.10
18	434532	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.05
19	434556	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.04
20	434580	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.04
21	434604	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.03
22	434628	343414	54.35	54.67	54.83	55.02	55.25	55.38	55.45	56.10
23	434532	343438	54.86	55.19	55.37	55.56	55.77	55.81	55.87	56.24
24	434556	343438	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height
25	434580	343438	NoData	NoData	NoData	NoData	NoData	NoData	NoData	56.04
26	434604	343438	54.31	54.62	54.80	55.00	55.39	55.52	55.66	56.18
Max value in selected area:			54.85	55.18	55.36	55.55	55.76	55.81	55.86	56.24

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

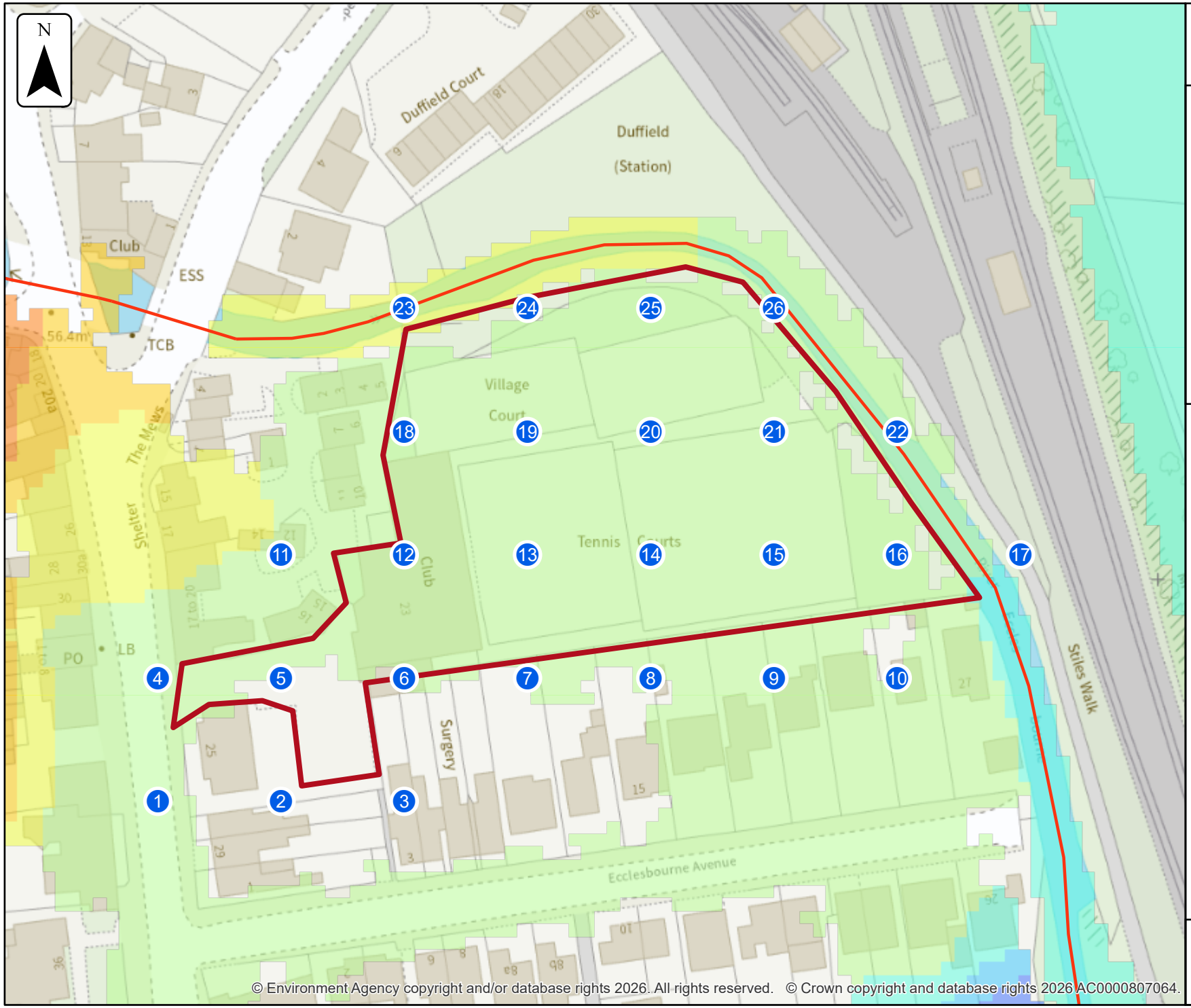
Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
1	434484	343342	NoData	NoData	NoData	NoData	NoData	NoData	0.04	0.73
2	434508	343342	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.01
3	434532	343342	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	434484	343366	NoData	NoData	NoData	NoData	NoData	NoData	0.10	0.77
5	434508	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.28
6	434532	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.33
7	434556	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.40
8	434580	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.49
9	434604	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.66
10	434628	343366	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.43
11	434508	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.35
12	434532	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.52

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
13	434556	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.76
14	434580	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.99
15	434604	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.12
16	434628	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.64
17	434652	343390	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.53
18	434532	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.55
19	434556	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.62
20	434580	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.99
21	434604	343414	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.09
22	434628	343414	1.72	1.90	1.99	2.10	2.23	2.30	2.35	2.69
23	434532	343438	1.93	2.15	2.28	2.46	2.67	2.71	2.77	3.14
24	434556	343438	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
25	434580	343438	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.95
26	434604	343438	0.16	0.18	0.20	0.24	0.60	0.74	0.88	1.40
Max value in selected area:			0.88	0.98	1.12	1.30	1.57	1.70	1.78	2.35

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



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Environment Agency

Defended climate change modelled fluvial extent and height

Location (easting/northing)
434569/343400

Scale
1:1,000

Created
23 Feb 2026

Model name
2017 EcclesbourneDerwentU...

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 54 - 54.375
- 54.375 - 54.75
- 54.75 - 55.125
- 55.125 - 55.5
- 55.5 - 55.875
- 55.875 - 56.25
- 56.25 - 56.625
- 56.625 - 57.0
- 57.0 - 57.375

This map shows the 1% AEP +20% height data

0 10 20 30 40
metres

Sample point data

Defended climate change

Label	Easting	Northing	1% AEP (+20%)	1% AEP (+20%)
			Height	Depth
1	434484	343342	55.76	0.37
2	434508	343342	NoData	NoData
3	434532	343342	NoData	NoData
4	434484	343366	55.83	0.42
5	434508	343366	NoData	NoData
6	434532	343366	55.71	0.02
7	434556	343366	NoData	NoData
8	434580	343366	55.69	0.14
9	434604	343366	55.69	0.31
10	434628	343366	NoData	NoData
11	434508	343390	55.85	0.07
12	434532	343390	55.72	0.16

Label	Easting	Northing	1% AEP (+20%)	1% AEP (+20%)
			Height	Depth
13	434556	343390	55.69	0.40
14	434580	343390	55.69	0.64
15	434604	343390	55.69	0.77
16	434628	343390	55.69	0.30
17	434652	343390	NoData	NoData
18	434532	343414	55.69	0.19
19	434556	343414	55.69	0.26
20	434580	343414	55.69	0.64
21	434604	343414	55.69	0.74
22	434628	343414	55.59	2.42
23	434532	343438	55.96	2.87
24	434556	343438	NoData	NoData

Label	Easting	Northing	1% AEP (+20%)	1% AEP (+20%)
			Height	Depth
25	434580	343438	55.69	0.60
26	434604	343438	55.81	1.03
Max value in selected area:			55.96	1.90

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

Strategic flood risk assessments

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

This should give you information about:

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

Your Lead Local Flood Authority is Derbyshire County.

About this data

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

Flood risk activity permits

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

Find out more about flood risk activity permits

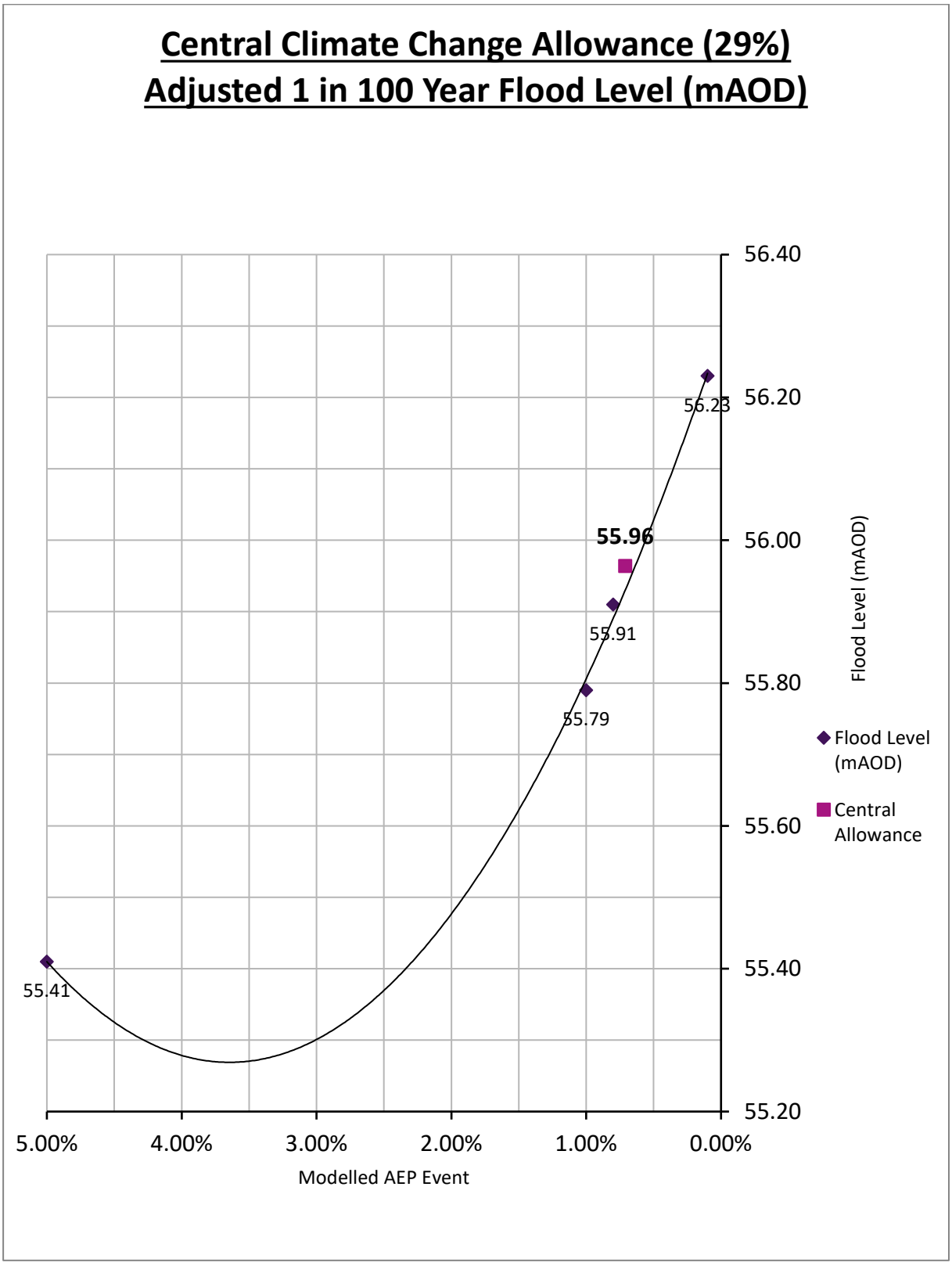
Help and advice

Contact the East Midlands Environment Agency team at emdenquiries@environment-agency.gov.uk for:

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

Appendix C

Stage (level) relationship graph



Disclaimer

This report has been prepared by GeoSmart in its professional capacity as soil, groundwater, flood risk and drainage specialists, with reasonable skill, care and diligence within the agreed scope and terms of contract and taking account of the manpower and resources devoted to it by agreement with its client and is provided by GeoSmart solely for the internal use of its client.

The advice and opinions in this report should be read and relied on only in the context of the report as a whole, taking account of the terms of reference agreed with the client. The findings are based on the information made available to GeoSmart at the date of the report (and will have been assumed to be correct) and on current UK standards, codes, technology and practices as at that time. They do not purport to include any manner of legal advice or opinion. New information or changes in conditions and regulatory requirements may occur in future, which will change the conclusions presented here.

This report is confidential to the client. The client may submit the report to regulatory bodies, where appropriate. Should the client wish to release this report to any other third party for that party's reliance, GeoSmart may, by prior written agreement, agree to such release, provided that it is acknowledged that GeoSmart accepts no responsibility of any nature to any third party to whom this report or any part thereof is made known. GeoSmart accepts no responsibility for any loss or damage incurred as a result, and the third party does not acquire any rights whatsoever, contractual or otherwise, against GeoSmart except as expressly agreed with GeoSmart in writing.

For full T&Cs see http://geosmartinfo.co.uk/terms-conditions

Important consumer protection information

This search has been produced by GeoSmart Information Limited, Suite 9-11, 1st Floor, Old Bank Buildings, Bellstone, Shrewsbury, SY1 1HU.

Tel: 01743 298 100

Email: info@geosmartinfo.co.uk

GeoSmart Information Limited is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom.
- sets out minimum standards which firms compiling and selling search reports have to meet.
- promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals.
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.
- By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports.
- act with integrity and carry out work with due skill, care and diligence.
- at all times maintain adequate and appropriate insurance to protect consumers.
- conduct business in an honest, fair and professional manner.
- handle complaints speedily and fairly.
- ensure that products and services comply with industry registration rules and standards and relevant laws.
- monitor their compliance with the Code.

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs contact details:

The Property Ombudsman scheme

Milford House

43-55 Milford Street

Salisbury

Wiltshire SP1 2BP

Tel: 01722 333306

Fax: 01722 332296

Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk. Please ask your search provider if you would like a copy of the search code

Complaints procedure

GeoSmart Information Limited is registered with the Property Codes Compliance Board as a subscriber to the Search Code. A key commitment under the Code is that firms will handle any complaints both speedily and fairly. If you want to make a complaint, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk.

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision. Complaints should be sent to:

Liz Lloyd

Finance Manager

GeoSmart Information Limited

Suite 9-11, 1st Floor,

Old Bank Buildings,

Bellstone, Shrewsbury, SY1 1HU

Tel: 01743 298 100

support@geosmartinfo.co.uk

12. Terms and conditions, CDM regulations and data limitations

Terms and conditions can be found on our website:

http://geosmartinfo.co.uk/terms-conditions/

CDM regulations can be found on our website:

http://geosmartinfo.co.uk/knowledge-hub/cdm-2015/

Data use and limitations can be found on our website:

http://geosmartinfo.co.uk/data-limitations/