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# South Warwickshire Level 2 Strategic Flood Risk Assessment

## Draft Report

S3-P01

Prepared for  
Stratford on Avon District  
Council and Warwick  
District Council

Date  
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# Contract

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This report describes work commissioned by Warwick District Council, on behalf of themselves and Stratford-on-Avon District Council, by an instruction dated 29/09/2025. The Client's representative for the contract was Amit Bratch of Warwick District Council. Stamatia Christianou, George Wiggin, Fiona Barraclough, Elise Coughlin, Harvey Clark and Joanne Chillingworth of JBA Consulting carried out this work.

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### Acknowledgements

We would like to acknowledge the assistance of:

- Warwick District Council
  - Stratford-on-Avon District Council
  - The Environment Agency
  - Warwickshire County Council
  - Severn Trent Water
  - Thames Water
  - Canal and River Trust
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## Abbreviations

AEP	Annual Exceedance Probability
AIMS	Asset Information Management System
BGS	British Geological Survey
CC	Climate Change
CCTV	Closed Circuit Television
EA	Environment Agency
FAA	Flood Alert Area
FMfP	Flood Map For Planning
FRA	Flood Risk Assessment
FWA	Flood Warning Area
GIS	Geographical Information System
JBA	Jeremy Benn Associates
LiDAR	Light Detection And Ranging
LLFA	Lead Local Flood Authority
LPA	Local Planning Authority
mAOD	metres Above Ordnance Datum
NaFRA2	National Flood Risk Assessment 2
NPPF	National Planning Policy Framework
OS	Ordnance Survey
PPG	Planning Practice Guidance
RBD	River Basin District
RMA	Risk Management Authority
RoFSW	Risk of Flooding from Surface Water
SFRA	Strategic Flood Risk Assessment
SuDS	Sustainable Drainage Systems

## Definitions

**1D model:** One-dimensional hydraulic model, typically representing a watercourse and structures within the channel (for example bridges and culverts).

**2D model:** Two-dimensional hydraulic model, typically representing the floodplain flows.

**Annual Exceedance Probability:** The probability (expressed as a percentage) of a flood event occurring in any given year.

**Brownfield:** A previously developed parcel of land.

**Climate change:** Long term variations in global temperature and weather patterns caused by natural and human actions.

**Design flood:** A flood event of a given annual flood probability, which is generally taken as: fluvial (river) flooding likely to occur with a 1% annual probability (a 1 in 100 chance each year), or surface water flooding likely to occur with a 1% annual probability (a 1 in 100 change each year), plus an appropriate allowance for climate change, against which the suitability of a proposed development is assessed and mitigation measures, if any, are designed.

**Dry island:** Land which may not be at risk of flooding itself but is surrounded by flood risk and therefore may become cut off during a flood event.

**Flood defence:** Infrastructure used to protect an area against floods such as floodwalls and embankments; they are designed to a specific standard of protection (design standard).

**Green infrastructure:** A network of natural environmental components and green spaces that intersperse and connect the urban centres, suburbs, and urban fringe.

**Greenfield:** An undeveloped parcel of land.

**Lead Local Flood Authority:** The unitary authority for the area or if there is no unitary authority, the county council for the area.

**Local Planning Authority (LPA):** The local government body which is responsible by law to exercise planning functions for a particular area.

**Main river:** A watercourse shown as such on the statutory main river map held by the Environment Agency. They are usually the larger rivers and streams. The Environment Agency has permissive powers (not duties) to carry out maintenance and improvement works on main rivers.

**Major development:** Defined in the National Planning Policy Framework as a housing development where 10 or more homes will be provided, or the site has an area of 0.5 hectares or more, or as a non-residential development with additional floorspace of 1,000m<sup>2</sup> or more, or a site of 1 hectare or more, or as otherwise provide in the [Town and Country Planning \(Development Management Procedure\) \(England\) Order 2015 \(gov.uk\)](#).

**Natural Flood Management:** Techniques that work with nature to reduce the risk of flooding for communities.

**Ordinary watercourse:** Any river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) and passage through which water flows but which does not form part of a main river. The local authority or internal drainage board has permissive powers (not duties) on ordinary watercourses.

**Permissive powers:** Authorities have the power to undertake flood risk management activities, but not a duty to do so. This will depend on priorities in flood risk management.

**Return period:** An estimate of the interval of time between events of a certain intensity or size, in this instance it refers to flood events. It is a statistical measurement denoting the average recurrence interval over an extended period of time.

**Riparian owner:** A riparian landowner, in a water context, owns land or property, next to a river, stream or ditch.

**Risk:** In flood risk management, risk is defined as a product of the probability or likelihood of a flood occurring, and the consequence of the flood.

**Risk Management Authority:** The Environment Agency, Lead Local Flood Authorities, District and Borough Councils in an area where there is no unitary authority, Coast Protection Authorities in coastal areas, Water and sewerage companies, Internal Drainage Boards, and Highways authorities.

**Standard of Protection (SoP):** Defences are provided to reduce the risk of flooding (typically from a river, sea or surface water). A Standard of Protection is usually described in terms of an AEP flood event. For example, a flood embankment could be described as providing a 1% AEP Standard of Protection

**Stakeholder:** A person or organisation affected by the problem or solution or interested in the problem or solution. They can be individuals or organisations, includes the public and communities.

**Sustainable Drainage Systems:** Sustainable Drainage Systems are methods of management practices and control structures that are designed to drain surface water in a more sustainable manner than some conventional techniques, such as grates, gullies, and channels.

**Windfall site:** A site which becomes available for development unexpectedly and therefore not included as allocated land in a planning authority's Local Plan.

# Executive Summary

## Introduction and context

This Level 2 Strategic Flood Risk Assessment (SFRA) document was prepared with the purpose of providing part of the evidence base for the South Warwickshire Local Plan 2025 - 2050 for which is a joint plan for both Warwick District Council and Stratford-on-Avon District Council. This Level 2 SFRA follows on from the individual authorities' L1 SFRAs produced in 2022, along with a separate Level 1 Addendum for each authority produced as part of this commission in 2026. These documents should be read in conjunction with those documents.

The primary purpose of the Level 2 SFRA is to provide an appropriate understanding of the level of flood risk affecting development brought forward in the updated Local Plan. The assessment takes into account all sources of flooding and considers other factors affecting flood risk such as residual risk. The information provided as part of the Level 2 SFRA enables Stratford-on-Avon District Council and Warwick District Council (which hereafter within this report will be referred to as the 'Local Planning Authorities') to apply the Exception Test to sites in accordance with the National Planning Policy Framework (NPPF).

## SFRA objectives

The Government's Planning Practice Guidance (PPG) on Flood Risk and Coastal Change advocates a tiered approach to risk assessment involving Level 1 and Level 2 SFRAs.

After completing the Level 1 SFRA and the 'Call for Sites' process, the Local Planning Authorities have undertaken the Sequential Test and have shortlisted sites. For sites which cannot be relocated outside of flood risk areas, the Level 2 assessment aims to build on identified risks from the Level 1 SFRA in order to provide a greater understanding of fluvial, surface water, groundwater, sewer, and reservoir related flooding risks to these shortlisted sites. The Level 2 SFRA helps answer part b of the Exception Test. From this, the Local Planning Authorities and developers can make more informed decisions regarding future development. The Level 2 assessment also identifies sites requiring further risk analysis at the site-specific Flood Risk Assessment (FRA) stage.

## Summary of Level 2 SFRA

The Local Planning Authorities initially provided JBA with two separate lists of sites to screen in February 2026; Strategic sites and Non-strategic sites, as they continued their shortlisting process. These sites were screened using an 'overlap analysis' tool in GIS. This analysed various flood risk datasets against the site allocations layer and calculated the percentage cover for each flood risk dataset against each site. This was used to provide a summary of risk to each site.

All sites designated by the Local Planning Authorities as Strategic sites were screened and progressed to Level 2 assessment; the decision was taken due to the sizes of the sites, and their more complex geographical nature. The Strategic sites also contained a number of

'sub-parcels', which were assessed individually within the overall Strategic site assessments, in case any sub-parcels are developed separately in future.

Following screening of the Non-strategic sites, these were given a Red, Amber, or Green categorisation based on the perceived risk to the site.

Red sites are those with significant flooding issues that would need to be addressed if development were to take place. These were generally sites where more than 10% of the site was within Flood Zones 2 or 3, or where more than 20% of the site was at risk in the present day 0.1% AEP surface water event. Some sites where percentages were below this threshold were also categorised as Red due to the nature of the flooding e.g. where there were more significant implications for access or escape, along with sites that on further investigation it was apparent that an ordinary watercourse bisected the site.

Amber sites are those where the sites are generally at low-medium risk but have specific considerations to take the sites forward safely. These were generally sites where a small portion of the site (<10%) was within Flood Zone 2 or 3, between 10-20% of the site was at risk in the 0.1% AEP present day surface water event, or where there was significant risk of groundwater emergence (with groundwater levels between 0.025 and 0.5m below the grounds surface) during a 1% AEP groundwater flooding event.

The remaining sites were classified as Green, indicating minimal concerns relating to flood risk impacting development.

The total number of sites screened as part of this Level 2 SFRA was 99 sites:

- 30 Strategic sites
- 69 Non-Strategic Sites

The Local Planning Authorities agreed to detailed Level 2 assessments being undertaken on 30 Strategic sites and 33 Non-strategic sites.

The detailed assessments can be found in [Appendix B](#) accompanied by the site-specific static mapping in [Appendix C](#).

The following points summarise the Level 2 assessment:

- **Fluvial flooding** – 21 of the Strategic sites were located within Flood Zones; due to the large geographical nature of these sites, the percentage values were not truly representative of risk across the site. In all the sites assessed, development is likely to be appropriate provided development is steered away from those areas at flood risk. 12 of the Non-strategic sites fall within Flood Zone areas, sites 173, 360, 324, 261, 445, 553, 616, 683, 870,812,976,163; all of these sites are considered appropriate for development providing the recommendations and guidance set out in the detailed assessments are considered and development is located away from areas at risk of flooding.
- **Flood Warning Areas (FWAs)** – Strategic site SG23 is located within an existing EA FWA. For proposed development within existing EA FWAs, developers should consult the EA to ensure that adequate flood warning

procedures and evacuation processes are in place, and that Risk Management Authorities (RMAs) are not put under any additional burden.

- **Surface water flooding** - Surface water tends to follow topographic flow routes, for example, along the floodplain of watercourses or isolated pockets of ponding where there are topographic depressions. Due to the pervasive nature of surface water risk, almost all sites assessed within the Level 2 SFRA are subject to some degree of risk. This formed the primary basis for taking those Strategic sites not within Flood Zones 2, 3a or 3b through to Level 2 assessment (sites SG05, SG03, SG07, SG13, SG16). For these sites and the Non-strategic sites where less than 10% of the area is at risk of surface water flooding in the 0.1% AEP event, it is likely development can proceed avoiding the areas of greatest surface water flood risk.
- **Access and escape routes** – Risk is also posed to sites where their access and escape routes are impeded. Consideration should be made as to how safe access and escape routes can be provided during flood events, both for people and emergency vehicles. Consideration should also be given to the nature of the risk, for example whether the flooding forms a flow path which bisects the site, meaning access across the site from one side to another may be compromised.
- **Climate change** - Fluvial and surface water climate change mapping indicates that flood extents are predicted to increase. As a result, the depths, velocities, and hazard of flooding may also increase. The significance of the increase will depend on the topography of the site and the climate change percentage allowance used. Site-specific FRAs should confirm the impact of climate change using latest guidance. It is recommended that the Local Planning Authorities work with other RMAs to review the long-term sustainability of existing and new development in these areas when developing climate change plans and strategies for the districts.
- **Historic flooding** – A number of sites (Strategic sites – SG23, SG02, SG20, SG15, SG12 and Non-strategic sites 261, 360, 870) taken forward within the Level 2 SFRA fall within areas that have historically flooded, as indicated by the EA historical flood map, where they have previously experienced fluvial flooding. Further historical flooding records were provided by Warwickshire County Council as the Lead Local Flood Authority (LLFA) who provided their historical flooding records, where details of flooding within and surrounding sites (within 200m) has been described within the detailed site assessments.
- **Sewer flooding** – Sewer flooding was assessed within the detailed site assessments using information made available by Severn Trent Water, including their Drainage and Wastewater Management Plan (DWMP23) along with their historic sewer flooding database. Developers should consult with Severn Trent Water or the appropriate Water Company (Thames Water or Anglian Water) in all cases to ensure development will be safe from flooding

and integrate developments into plans for managing sewer capacity risks across the area.

- **Groundwater flooding** – Groundwater flood risk is variable throughout South Warwickshire. The JBA Groundwater emergence map was used to screen the sites and attribute risk to a site of groundwater emergence. Screening identified 26 Non-strategic sites and 12 Strategic sites, that have areas within them where groundwater is within 0.5m of the ground surface, during a 1% AEP flood event (at high risk). The areas of risk are detailed within the detailed site assessments. An appropriate assessment of the groundwater regime for a site should be carried out at the site-specific FRA stage.
- **Reservoir flooding** - There are 11 sites assessed within the detailed site assessments that are shown to be at risk of reservoir flooding (two Non-strategic – 559,870 and nine Strategic – SG23, SG02, SG12, BW, SG15, E1, SG20, SG18-N and SG18-S). The level and standard of inspection and maintenance required under the Reservoirs Act means that the risk of flooding from reservoirs is very low. However, there is a residual risk of a reservoir breach, and this risk should be considered in any site-specific FRA.
- **Canal flooding** - Across the study area there have been 38 instances of Canal overtopping as well as 9 instances of canal breaches occurring. Throughout the study area the canal has the potential to interact with other watercourses, where these watercourses can become flow paths if the canal overtops or breaches, or that flooding from fluvial watercourses or significant surface water flows could prove detrimental to wider canal infrastructure causing scenarios where breaches are more likely to occur. Non-strategic sites 53 and 978 are in proximity to a canal; for these sites and any further sites, the Canal and River Trust should be consulted on guidance for developing near canals.
- **SuDS** - A strategic assessment was conducted of SuDS options using regional datasets. A detailed site-specific assessment of suitable SuDS techniques would need to be undertaken at site-specific level to understand which SuDS option would be best.

## Recommendations

Section 8 sets out the recommendations based on the findings of this Level 2 SFRA. This includes recommendations for applying the Exception Test, where required, requirements for developers in developing the Local Plan allocations, and guidance for windfall sites and development of sites not included within the Local Plan.

# 1 Introduction

## 1.1 Purpose of the Strategic Flood Risk Assessment

Paragraph 171 of the [National Planning Policy Framework \(NPPF\) \(2024\) \(gov.uk\)](#) states that '*Strategic policies should be informed by a strategic flood risk assessment and should manage flood risk from all sources. They should consider cumulative impacts in, or affecting, local areas susceptible to flooding, and take account of advice from the Environment Agency and other relevant flood risk management authorities, such as lead local flood authorities and internal drainage boards.*'

## 1.2 Levels of SFRA

The [Planning Practice Guidance \(PPG\) Flood risk and coastal change \(gov.uk\)](#) advocates a staged approach to risk assessment and identifies two levels of a Strategic Flood Risk Assessment (SFRA):

- A Level 1 assessment, which all Local Planning Authorities (LPAs) are required to undertake. Where potential site allocations are at low flood risk and where development pressures are low a Level 1 assessment is likely to be sufficient, without the LPA progressing to a more detailed Level 2 assessment. The Level 1 assessment should be of sufficient detail to enable application of the Sequential Test, to inform the allocation of development to areas of lower flood risk.
  - The full Level 1 SFRA was produced in 2022, along with an Addendum in 2026 providing key updates to policy, guidance and NaFRA2 data since 2022.
- A Level 2 assessment is required where land outside flood risk areas cannot appropriately accommodate all necessary development, creating the need to apply the NPPF's Exception Test, or if an LPA believe they may receive high numbers of applications in flood risk areas on sites not identified in the Local Plan. In these circumstances the assessment should consider the detailed nature of the flood characteristics within a Flood Zone and assessment of all sources of flooding.
  - This SFRA report fulfils the requirements for a Level 2 assessment of development sites identified for potential allocation within Warwick and Stratford-on-Avon Districts and has been prepared in accordance with the NPPF (2024) and PPG (2025).

This report should be read alongside the [Stratford-on-Avon District](#) and [Warwick District Council](#) Level 1 SFRAs and builds upon information presented within the Level 1 SFRAs.

### 1.3 SFRA objectives

The objectives of this Level 2 SFRA are to:

1. Provide individual flood risk analysis for site options using the latest available flood risk data, thereby assisting the Councils in applying the Exception Test, where required, to their proposed site options in preparation of their Local Plan.
2. Using the available data, provide information and comprehensive mapping presenting flood risk from all sources for the site.
3. Provide recommendations for making sites safe throughout their lifetime.
4. Take into account most recent policy and legislation in the NPPF, PPG, EA SFRA Guidance, and LLFA SuDS guidance.

### 1.4 Consultation

SFRAs should be prepared in consultation with other RMAs. The following parties (external to Warwick District Council and Stratford-on-Avon District Council) have been consulted during the preparation of this version of the SFRA:

- Environment Agency
- Warwickshire County Council (LLFA)
- Canal and River Trust
- Severn Trent Water and Thames Water

### 1.5 How to use this report

Table 1-1 below outlines the contents of this report and details how different users can apply this information.

Table 1-1 Outline of the contents of each section of this report.

Section	Contents	How to use
1. Introduction	Outlines the purpose and objectives of the Level 2 SFRA.	For general information and context.
2. Policy and strategy for flood risk management	Includes information on the implications of recent changes to planning and flood risk policies and legislation and signposts to relevant sections of the Level 1 SFRA.	Users should refer to this section and the relevant sections of the Level 1 SFRA for any relevant policy which may underpin strategic or site-specific assessments.
3. Sequential and Exception Tests	Signposts to relevant sections of the Level 1 SFRA for information on the Sequential and Exception Tests.	Users should refer to this section and the relevant sections of the Level 1 SFRA to understand and follow the steps required for applying the Sequential and Exception Tests.

3. Information used in the Level 2 SFRA	Summarises the data used in the Level 2 detailed site assessments and mapping.	Users should refer to this section in conjunction with the detailed site assessments (Appendix B) and mapping (Appendix C) to understand the data presented.
4. Level 2 Assessment Methodology	Summarises the sites taken forward to a Level 2 assessment and the outputs produced for each of these sites.	Users should refer to this section in conjunction with the detailed site assessments (Appendix B) and mapping (Appendix C) to understand the data presented.
6. Flood risk management requirements for developers	Identifies the scope of the assessments that must be submitted in Flood Risk Assessments (FRAs) supporting applications for new development. Refers to relevant sections in the Level 1 SFRA for mitigation guidance.	Developers should use this section alongside the relevant sections of the Level 1 SFRA to understand requirements for FRAs, which conditions/guidance documents should be followed, and information on flood mitigation options.
7. Surface water management and SuDS	Signposts to relevant sections of the Level 1 SFRA for information on the management of surface water including types of SuDS, SuDS policy and guidance, and SuDS constraints.	Developers should use this section alongside the relevant sections of the Level 1 SFRA to understand what national, regional, and local SuDS standards are applicable.
8. Summary of Level 2 assessment and recommendations	Summarises the results and conclusions of the Level 2 assessment, and signposts to the Level 1 SFRA for planning policy recommendations.	Developers and planners should use this section to see a summary of the Level 2 assessment and understand the key messages from the detailed site assessments. Developers should refer to the Level 1 SFRA recommendations when considering requirements for site-specific assessments.
Appendix A: Data sources used in this SFRA	Summarises the data used in the Level 2 detailed site assessments and mapping.	Users should refer to this section to understand the data used and where this data can be obtained.
Appendix B: Detailed site assessments	Provides a detailed summary of flood risk for sites requiring a more detailed assessment, which considers flood risk, emergency planning, climate change, broadscale assessment of possible SuDS, Exception Test requirements,	Planners should use this appendix to inform the application of the Exception Tests, as relevant. Developers should use these assessments to understand flood risk, access and escape route requirements, climate change,

Section	Contents	How to use
	and requirements for site-specific FRAs.	SuDS, and FRA requirements for site-specific assessments.
Appendix C: Static Mapping	Provides mapping of the flood risk at each of the sites afforded a detailed site assessment. Includes depth, velocity and hazard information for fluvial and surface water flood risk where available, alongside climate change risk.	Planners should use this appendix to inform the application of the Exception Tests, as relevant. Developers should use these assessments to understand flood risk, access and escape route requirements, climate change, SuDS, and FRA requirements for site-specific assessments.
Appendix D: Amber site assessments	Provides a table of sites assessed as amber not requiring Level 2 assessment but with moderate surface water and/or groundwater risk to be considered.	Planners and developers should consult this appendix for information on flood risk to the sites. Information may aid in master planning, site drainage strategy and SuDS implementation.
Appendix E: Red/Amber/Green – Non-strategic site Assessment / Screening	Provides the Red/Amber/Green (RAG) assessment of the non-strategic sites along with the screening results against flood risk datasets	Planners and developers should consult this appendix for an overview of high-level flood risk to the sites.
Appendix F: Strategic site Screening	Provides the site screening results for the Strategic sites against flood risk datasets, along with the notation of updated naming conventions (for applicable sites)	Planners and developers should consult this appendix for an overview of high-level flood risk to the sites.

## 1.6 SFRA study area

The study area covers the administrative boundaries of Stratford-on-Avon District Council and Warwick District Council.

Stratford-on-Avon District lies within the county of Warwickshire and covers an area of approximately 978km<sup>2</sup> with a population of approximately 134,725 ([2021 Census](#)). The main urban centre within the district is Stratford-on-Avon which has a population of around 30,000. Other main urban areas in the district include Alcester, Henley in Arden, Bidford on Avon, Southam, Shipston on Stour and Wellesbourne.

The District is bounded by 11 other authorities:

- Bromsgrove District Council
- Redditch Borough Council
- Wychavon District Council
- West Oxfordshire District Council
- Warwick District Council
- Rugby Borough Council
- South Northants District Council
- Solihull Metropolitan Borough Council
- Daventry District Council
- Cotswold District Council
- Cherwell District Council.

Warwick District lies within the county of Warwickshire and covers an area of approximately 283km<sup>2</sup> with a population of approximately 142,452 ([2021 ONS](#)). The main urban centre within the District is Royal Leamington Spa which has a population of around 52,200. Other main urban areas in the District include Warwick, Whitnash, Kenilworth, and Royal Leamington Spa. Coventry airport is located to the north-east of the district.

The district is bounded by four other authorities;

- Coventry City Council
- Rugby Borough Council
- Stratford-on-Avon District Council
- Solihull Metropolitan Borough Council

A number of main rivers flow through the study area, including: the River Avon, River Leam, River Sowe, River Itchen, Finham Brook, Inchford Brook, River Arrow, River Alne, River Stour, River Dene and the Tach Brook.

## 2 Policy and strategy for flood risk management

The flood risk management roles and responsibilities for different organisations and relevant legislation, policy and strategy are detailed within Section 2 of the Stratford-on-Avon District Level 1 SFRA and Warwick District Level 1 SFRA.

This contains details on:

- Key legislation for flood and water management.
- Key national, regional, and local policy documents and strategies.
- Roles and responsibilities for flood risk management in South Warwickshire Area.

The following section(s) summarise any changes to flood risk legislation, policy, and strategy since publication of the Level 1 SFRAs.

### 2.1 National Planning Policy Framework

The [NPPF \(December 2024\) \(gov.uk\)](#) sets out Government's planning policies for England and how these are expected to be applied. The NPPF is based on core principles of sustainability and forms the national policy framework in England, also accompanied by a number of PPG. It must be taken into account in the preparation of Local Plans and is a material consideration in planning decisions.

At the time of the Level 1 SFRAs, the latest version of the NPPF was the December 2023 update. The NPPF has since been updated in December 2024, reflected in the 2026 Addendums. Overall, the changes in relation to flood risk (Paragraphs 170 to 182) are considered to be relatively minor and strengthen ambiguity within the previous framework rather than materially changing anything and therefore a full update to the 2022 Level 1 SFRAs are not considered necessary. Instead, Level 1 Addendums were completed in January 2026 to outline changes in policy and flood risk data outlined in Section 3 of this report below.

The following points summarise the changes in the December 2024 NPPF:

- **Paragraph 173:** A new paragraph has been added with the purpose of specifying that the Sequential Test should apply to individual applications as well as plans. This was already included within the PPG and as such has been included in the NPPF for completeness.
- **Paragraph 174 (previously Paragraph 168):** Reference to the sequential approach ('the sequential approach should be used in areas known to be at risk now or in the future from any form of flooding') has been deleted from this paragraph.
- **Paragraph 175:** A new paragraph has been added which brings across changes which were made in the EA standing advice in August. This addition

clarifies under what circumstances the Sequential Test would not need to be applied; where a site-specific FRA demonstrates that no built development within the site boundary, including access or escape routes, land raising or other potentially vulnerable elements, would be located on an area that would be at risk of flooding from any source, now and in the future (having regard to potential changes in flood risk).

- **Paragraph 176:** This paragraph is largely the same as paragraph 174 in the previous version of the NPPF, but it has been moved further up the document to a more appropriate location.
- **Paragraph 177 (previously Paragraph 169):** The start of this paragraph has been updated to include 'Having applied the sequential test' – providing more clarification that the Sequential Test needs to be applied before the Exception Test.
- **Paragraph 182 (previously Paragraph 175):** The reference to 'Major developments' has been removed, thus applying the need for SuDS to all development. A statement on proportionality has also been included in place of 'unless there is clear evidence that this would be inappropriate'. Greater emphasis has also been placed on the multifunctional benefits.

It should be noted that the NPPF is in the process of being revised, this has been in consultation since December 2025.

### 3 Sequential and Exception Tests

Information on planning policy for flood risk management is detailed in Section 3 of the Warwick District Council and Stratford-on-Avon District Council 2022 Level 1 SFRA. Users should consider this section within the Level 1 SFRA to understand national planning policy guidance and how to evidence that a proposed development will pass the Sequential Test, and if necessary, the Exception Test. Users should also consult the 2026 Level 1 SFRA Addendums for Warwick District and Stratford-on-Avon District for further clarifications on updates undertaken, particularly in relation to the National Flood Risk Assessment 2 (NaFRA2) flood mapping updates and how this impacts the study area.

Section 3 of the Level 1 SFRA supplemented by the 2026 Level 1 Addendums contains details on:

- the NPPF and PPG;
- the risk-based approach; and
- the Sequential and Exception Tests.

## 4 Information used in the Level 2 SFRA

This section outlines the datasets used in assessing the Local Plan proposed development sites in the Level 2 SFRA detailed site assessments (Appendix B).

It should be noted that datasets used to inform this SFRA may be updated following the publication of this SFRA and new information on flood risk may be produced by Risk Management Authorities (RMAs). This new information (such as updated mapping and modelling) may supersede the information included in this SFRA. Guidance should be sought from the LPA, LLFA, and the EA as appropriate to check the most up to date source of information is used for future flood risk assessment.

Appendix A provides an overview of the supplied data used to inform the appraisal of flood risk for South Warwickshire, including when the data was provided, the source of the data, and how the data can be obtained by a developer if applicable.

### 4.1 Historic flooding

Historic flooding was assessed using a record of flood incidents across the study area since 2008, provided by Warwickshire County Council. Warwickshire County Council also provided Section 19 post-flood investigation reports in the study area. The EA's Historic Flood Map and Recorded Flood Outlines datasets have been used to understand whether historic flooding has been recorded at sites within the study area.

It is important to note that the absence of historic flood records does not mean that an area has never flooded, only that records are not held. For previously undeveloped sites, it is likely that historic flooding incidents may have gone unreported due to a lack of site use or interest. In addition, it is also possible that flooding mechanisms have changed since the date of a recorded flooding incident, making it more or less likely for flooding to occur on site.

### 4.2 River networks

Main Rivers are represented by the EA's Statutory Main River layer. Ordinary Watercourses are represented by the OS Open Rivers dataset. Caution should be taken when using these layers to identify culverted watercourses which may appear as straight lines of open watercourse but, in reality, are routed through a pipe below ground. Not all Ordinary Watercourses are apparent within the above datasets. For site specific developments, further site surveys should be undertaken to identify all Ordinary Watercourses within a site.

### 4.3 NaFRA2 mapping

The EA initially updated the [Risk of Flooding from Surface Water \(RoFSW\) dataset \(gov.uk\)](#) on 28 January 2025, with the Flood Map for Planning being published at the end of March 2026. Later updates to the dataset included the flood extents, depths, velocities and hazard (based on probability bands), with the latest update published on 7 November 2025. A further update was scheduled for January 2026. However, the release of this updated mapping has been pushed back to an unconfirmed date and therefore this SFRA continues to rely on the published data.

The EA initially updated the [Flood Map for Planning \(FMfP\) \(gov.uk\)](#) in January 2025 with the release of NaFRA2. The latest round of updates for the FMfP occurred on 24 October 2025. The FMfP now shows updated extents for Flood Zone 2 (0.1% AEP) and Flood Zone 3 (1% AEP) which incorporate new national modelling, as well as appropriate local models where available. In addition to the Flood Zones, the following information is now also provided in the FMfP:

- Rivers and sea with defences
  - Mapping for the 3.3% AEP, 1% AEP, and 0.1% AEP events for present day and climate change (using the Central allowance for the 2080s epoch) taking account the presence of flood defences (extents only).
- Rivers and sea without defences
  - Mapping for the 3.3% AEP, 1% AEP, and 0.1% AEP events for present day and climate change (using the Central allowance for the 2080s epoch) which ignores the presence and condition of flood defences (extents only).
- Surface water
  - Mapping for the 3.3% AEP, 1% AEP, and 0.1% AEP events for the present day only

### 4.4 Representation of fluvial Flood Zones in the Level 2 SFRA

In the process of preparing the Level 2 SFRA, along with the Level 1 SFRA Addendums and associated mapping, updated modelled data was requested from the Environment Agency (EA). As of September 2025, no new fluvial modelling had been published by the EA that was not previously included within the 2022 Level 1 SFRA for the study area.

The static mapping (Appendix C) uses the fluvial models provided by the EA to define Flood Zone 3b (functional floodplain); this uses the 3.3% AEP modelled flood extents and where this is not available, the 2% AEP events have been applied. Where there is no detailed modelling available, the NaFRA2 New National Modelling 3.3% Annual Exceedance Probability (AEP) extent has been used as a proxy for Flood Zone 3b.

Flood Zone 2 has been defined using detailed modelling provided by the EA as preference where this is available; using the 0.1% AEP (present day) fluvial event. Where this is not available the NaFRA2 New National Modelling Flood Map for Planning (FMfP) Flood Zone 2 has been used. Flood Zone 3a similarly uses detailed modelling as preference where it is

available; using the 1% AEP (present day) fluvial event. Where this is not available the NaFRA2 FMfP Flood Zone 3 has been used.

In areas of Warwick and its surroundings covered by the EA's Warwick Tributaries model, modelled flood extents have not been used to define fluvial flood risk, as agreed in consultation with the EA. Instead, NaFRA2 flood extents are considered to more accurately represent fluvial flood risk in this location.

Where areas are not covered by detailed fluvial modelling and Flood Zones have been informed by the NaFRA2 New National Modelling, there is currently no flood depth, velocity or hazard information available. Further assessment should be undertaken as required within a site-specific Flood Risk Assessment, using the latest available flood risk data, to determine flood depth, velocity and hazard at these sites.

For small watercourses where the fluvial flood risk is not represented within the Flood Map for Planning, the Risk of Flooding from Surface Water dataset has been used to provide an indication of fluvial flood risk. However, detailed hydraulic modelling of these watercourses, based on channel survey information, may need to be undertaken as part of a site-specific Flood Risk Assessment, to confirm fluvial flood risk.

Table 4-1 Models used for this assessment

Model Name	Runs AEP	CC-uplift %	Model year	AEP (%) used in FZ3b
River Arrow and Alne SFRM	20% / 10% / 5% / 1.33% / 1% / 0.5% / 0.1%	1% AEP +20%	2009	2
Bell Brook	50% / 20% / 10% / 5% / 2% / 1.33% / 1% / 0.5% / 0.1%	1% AEP +25%	2019	2
River Avon	50% / 20% / 10% / 5% / 2% / 1.33% / 1% / 0.5% / 0.1%	1% AEP +20%	2010	2
River Stour	20% / 10% / 5% / 2% / 1.33% / 1% / 0.5% / 0.1%	1% AEP +20%	2010	2
Racecourse Brook / Shottery Brook	50% / 20% / 10% / 5% / 3.3% / 2% / 1.3% / 1% / 0.5% / 0.1%	1% AEP +25%	2019	3.3
Kenilworth	50% / 20% / 10% / 5% / 2% / 1.33% / 1% / 1%+20% / 0.5% / 0.1%	1% AEP +20%	2010	2
Canley Brook	20% / 10% / 5% / 2% / 1.33% / 1% / 0.5% / 0.1%	1% AEP +20%	2010	2

Model Name	Runs AEP	CC-uplift %	Model year	AEP (%) used in FZ3b
River Itchen & Stowe	50% / 20% / 10% / 5% / 2% / 1.33% / 1% / 1%+20% / 0.5% / 0.1%	1% AEP +20%	2010	2
River Leam	50% / 20% / 10% / 5% / 2% / 1.33% / 1% / 1%+20% / 0.5% / 0.1%	1% AEP +20%	2010	2
Wellesbourne FAS Hydraulic Model	1% / 0.1% / 1.33%	N/A	2010	N/A
River Sowe	20% / 10% / 5% / 2% / 1.33% / 1% / 0.5% / 0.1%	1% AEP +21%	2010	2

#### 4.5 Flood defence Assets

Current flood defence information has been taken from the EA's Asset Information Management System (AIMS) Spatial Defences dataset. These datasets include all flood defences currently owned, managed or inspected by the EA and include information pertaining to their current condition and standard of protection.

Section 6 of the respective Local Planning Authorities' [Level 1 SFRAs](#) provides information on flood defences and schemes.

#### 4.6 Surface water flooding

The [EA's Risk of Flooding from Surface Water mapping \(RoFSW\) \(gov.uk\)](#) has been used to assess surface water risk within this SFRA. The mapping is intended to provide a consistent standard of assessment for surface water flood risk across England and Wales in order to help LLFAs, the EA, and any potential developers to focus their management of surface water flood risk. The RoFSW should not be used to understand flood risk for individual properties but is suitable for high level assessments such as SFRAs for local Authorities.

Surface water flood risk within the published NaFRA2 data is subdivided into the following four categories:

- **High:** An area has a chance of flooding greater than 3.3% AEP (1 in 30) each year.
- **Medium:** An area has a chance of flooding between 1% AEP (1 in 100) and 3.3% AEP (1 in 30) each year.
- **Low:** An area has a chance of flooding between 0.1% AEP (1 in 1,000) and 1% AEP (1 in 100) each year.

- **Very Low:** An area has a chance of flooding of less than 0.1% AEP (1 in 1,000) each year.

The RoFSW datasets include information about flood depths, velocity, and hazards. The flood risk information represents the low, medium or high likelihood of a flood depth occurring with water at a given depth/velocity/hazard or higher (e.g. the chance of flooding reaching a depth of 60cm or greater). The available banded layers have been used to give a broad indication of depth, velocity, and hazard across assessed sites in the absence of available gridded data. However, this data is not sufficiently detailed to evidence for site-specific planning decisions.

## 4.7 Climate change

### 4.7.1 Climate change allowances for peak flows

Climate change is expected to increase the peak flows of rivers, meaning that flows which were previously thought to be extreme will now be considered far more possible. Areas benefiting from flood defences will find the standard of protection changes over time with overtopping of defences more likely unless they are upgraded.

Peak river flow climate change allowances developed by the EA are divided into a series of Management Catchments. South Warwickshire is covered primarily by the Avon Warwickshire Management Catchment, with areas also located within the Cherwell and Ray and Cotswolds Management Catchments, with the relevant allowances for each Management Catchment detailed in the tables below.

Since the publication of the original 2022 Level 1 SFRA reports, updates to the [EA climate change guidance](#) indicate that the 'Central' climate change allowance should be assessed for all flood risk vulnerabilities except 'Essential Infrastructure', whereas the 'Higher' allowance was previously required.

Table 4-2: Peak river flow allowances for the Avon Warwickshire Management Catchment.

Allowance category	Total potential change (%) anticipated for '2020s' (2015 to 2039)	Total potential change (%) anticipated for '2050s' (2040 to 2069)	Total potential change (%) anticipated for '2080s' (2070 to 2125)
Upper end	22%	31%	59%
Higher Central	12%	14%	32%
Central	7%	8%	21%

Table 4-2: Peak river flow allowances for the Cherwell and Ray Management Catchment

Allowance category	Total potential change (%) anticipated for '2020s' (2015 to 2039)	Total potential change (%) anticipated for '2050s' (2040 to 2069)	Total potential change (%) anticipated for '2080s' (2070 to 2125)
Upper end	24%	27%	49%
Higher Central	11%	10%	25%
Central	6%	4%	15%

Table 4-3: Peak river flow allowances for the Cotswolds Management Catchment

Allowance category	Total potential change (%) anticipated for '2020s' (2015 to 2039)	Total potential change (%) anticipated for '2050s' (2040 to 2069)	Total potential change (%) anticipated for '2080s' (2070 to 2125)
Upper end	31%	43%	82%
Higher Central	17%	21%	43%
Central	11%	17%	31%

#### 4.7.2 Representation of fluvial climate change in the Level 2 SFRA

Climate change mapping is shown in the mapping in Appendix C for fluvial flooding.

Where detailed modelling is available at the assessed sites, these outputs have been used. The climate change extents from all models received from the EA fall within the required 2080s epoch Central allowance for the Avon Management Catchment and the Cherwell and Ray Management Catchment. The adjustment in the climate change guidance means that existing models with a 1% AEP plus 20% or 25% climate change uplift in these Management Catchments are now appropriate to use in the SFRA to represent the new Central 2080s epoch allowances. The only catchment where the current modelled climate change outputs fall below the required Central allowance, is the Cotswolds Management Catchment (central allowance 31%). However, no sites assessed fell within this Management Catchment. Developers may need to undertake updated site-specific climate change modelling at sites within this Management Catchment in the future.

The NaFRA2 'Flood Zones plus climate change' layer has been used to assess the impact of climate change on fluvial flood risk where detailed fluvial modelling is unavailable. No flood depth, velocity or hazard information is available in for this dataset, and therefore it is recommended that further assessment of climate change, including modelling of the relevant allowances, is undertaken within a site-specific Flood Risk Assessment.

### 4.7.3 Climate change allowances for peak rainfall

Climate change is predicted to result in wetter winters and increased summer storm intensity in the future. This increased rainfall intensity will affect land and urban drainage systems, resulting in surface water flooding, due to the increased volume of water entering the systems.

Peak rainfall climate change allowances developed by the EA are divided into the same Management Catchments as peak river flows and are detailed in the tables below.

Table 4-4: Peak rainfall intensity allowances for small and urban catchments for the Avon Warwickshire Management Catchment.

Allowance category	Total potential change (%) anticipated for '2050s' (2022 to 2060) for 3.3% AEP	Total potential change (%) anticipated for '2050s' (2022 to 2060) for 1% AEP	Total potential change (%) anticipated for '2070s' (2061 to 2125) for 3.3% AEP	Total potential change (%) anticipated for '2070s' (2061 to 2125) for 1% AEP
Upper end	35%	40%	35%	40%
Central	20%	20%	25%	25%

Table 4-5: Peak rainfall intensity allowances for small and urban catchments for the Cherwell and Ray Management Catchment.

Allowance category	Total potential change (%) anticipated for '2050s' (2022 to 2060) for 3.3% AEP	Total potential change (%) anticipated for '2050s' (2022 to 2060) for 1% AEP	Total potential change (%) anticipated for '2070s' (2061 to 2125) for 3.3% AEP	Total potential change (%) anticipated for '2070s' (2061 to 2125) for 1% AEP
Upper end	35%	40%	35%	40%
Central	20%	20%	25%	20%

Table 4-6: Peak rainfall intensity allowances for small and urban catchments for the Cotswolds Management Catchment.

Allowance category	Total potential change (%) anticipated for '2050s' (2022 to 2060) for 3.3% AEP	Total potential change (%) anticipated for '2050s' (2022 to 2060) for 1% AEP	Total potential change (%) anticipated for '2070s' (2061 to 2125) for 3.3% AEP	Total potential change (%) anticipated for '2070s' (2061 to 2125) for 1% AEP
Upper end	35%	40%	35%	40%
Central	20%	20%	25%	25%

#### 4.7.4 Representation of surface water climate change in the Level 2 SFRA

Currently, only the 2050s central surface water climate change has been made available to assess future surface water risk, which is unsuitable for most planning purposes. Therefore, the 0.1% AEP extent from the NaFRA2 surface water data has been used as a proxy to indicate areas likely to be at risk during the 1% AEP plus climate change event. The 0.1% AEP surface water extent can also be used as an indication of the impact of climate change on surface water flood risk from smaller watercourses, which are too small to be covered by the EA's Flood Zones. It should be noted that the EA intend to release further surface water climate change data later in 2026, which is expected to include the 2070s allowances, which are suitable for planning purposes. Therefore, developers should contact the EA before undertaking any site-specific work to ensure they are using the best available data.

In addition, the 0.1% AEP surface water extent can be used as an indication of the impact of climate change on surface water flood risk from smaller watercourses, which are too small to be covered by the EA's Flood Zones.

### 4.8 Groundwater flooding

The JBA Groundwater Emergence map has been used to assess potential areas that are likely to be at higher risk of groundwater flooding. The JBA Groundwater Emergence map, shows the likelihood of groundwater emergence posing a risk to both surface and subsurface assets, based on predicted groundwater levels during a 1% AEP event. Surface water mapping and topographic data is used to gain an understanding of the overland flow routes which may be impacted by this emergence.

The JBA Groundwater Emergence mapping is categorised into five different classes; a detailed description of the classes is in Table 4-7 below.

Table 4-7 JBA Groundwater Emergence Mapping categories

Category	Potential risk
Groundwater levels are either at or very near (within 0.025m of) the ground surface.	Within this zone there is a risk of groundwater flooding to both surface and subsurface assets. Groundwater may emerge at significant rates and has the capacity to flow overland and/or pond within any topographic low spots.
Groundwater levels are between 0.025m and 0.5m below the ground surface.	Within this zone there is a risk of groundwater flooding to both surface and subsurface assets. There is the possibility of groundwater emerging at the surface locally.
Groundwater levels are between 0.5m and 5m below the ground surface.	There is a risk of flooding to subsurface assets, but surface manifestation of groundwater is unlikely.
Groundwater levels are at least 5m below the ground surface.	Flooding from groundwater is not likely.
No risk.	This zone is deemed as having a negligible risk from groundwater flooding due to the nature of the local geological deposits.

#### 4.8.1 Groundwater flooding and climate change

The impact of climate change is more uncertain for groundwater flooding associated with rivers and land catchments and those watercourses where groundwater has a large influence on winter flood flows. Changes in frequency and intensity of groundwater flooding due to climate change would depend on the flooding mechanism and geological characteristics.

Milder wetter winters may increase the frequency of groundwater flooding incidents in areas that are already susceptible, but warmer drier summers may counteract this effect by drawing down groundwater levels to a greater extent during the summer months.

## 4.9 Reservoir flooding

The risk of inundation as a result of a breach or failure of a number of reservoirs within the area has been identified from the EA's [Reservoir Flood Extents dataset \(gov.uk\)](https://www.gov.uk/government/datasets/reservoir-flood-extents). Although it is predicted that there is a risk to life if these reservoirs were to fail, the risk of such an event occurring is very low.

This dataset consists of flood extents for two scenarios including 'Wet Day' and 'Dry Day', for all large, raised reservoirs. The 'Dry Day' scenario shows flood extents in the event that reservoirs were to fail and release the water they hold when local rivers are at normal levels. The 'Wet Day' scenario shows flood extents in the event that reservoirs were to fail and release the water they hold when local rivers are in flood.

Flood extents are not included for smaller reservoirs or for reservoirs commissioned after the reservoir modelling programme began in October 2016. Furthermore, only those reservoirs with an impounded volume greater than 25,000 cubic metres are governed by the Reservoir Act 1975.

## 4.10 Sewer flooding

Severn Trent Water, Anglian Water and Thames Water are the water companies responsible for the management of the sewerage networks across South Warwickshire.

The majority of the study area is managed by Severn Trent Water. Historical incidents of flooding are detailed by Historic Sewer Flooding Records. The Historic Sewer Flooding database records properties with historic incidents of sewer flooding.

Thames Water have provided records of Sewer flooding that they hold for the Stratford-on-Avon area for the L2 SFRA this data has been used in conjunction with data provided for the L1 SFRA.

Severn Trent Water provided a list of recorded internal and external sewer flooding incidents from their Hydraulic Sewer Flooding Risk Register, last updated on the 22nd October 2025.

No data was provided Anglian Water for this SFRA. This is due to both the limited rural area they are responsible for and lack of Water Treatment works within the study area.

Due to licencing and confidentiality restrictions, sewer data has not been represented on the mapping, but incidents within 200 meters of the site provided to us with anonymised locations are referred to within the detailed site assessments.

## 4.11 Residual risk

There is evidence that a number of both the Strategic and Non-strategic sites have within them or are near culverted watercourses, which flow beneath roads, railway lines and through embankments, presenting a residual flood risk should they become blocked or fail. Potential culvert blockages that may affect a site were identified using Section 21 culvert records provided to us from the LLFA (Warwickshire County Council) which have been

compared with LiDAR, OS Mapping and the OS Watercourse Link layer to determine where watercourses flow into culverts or through structures (i.e. bridges) in the vicinity of the sites. Assets included within the Section 21 culvert records denotes the approximate locations of culverts but ownership and responsibility for maintenance falls to the landowner of each asset, defined as the riparian owner.

Any potential locations were flagged in the detailed site assessment, alongside recommendations for further blockage modelling and assessment of culvert capacities as part of a site-specific Flood Risk Assessment.

#### 4.12 Canal flooding

The Canal & River Trust were consulted to identify any instances of breaches and overtopping of the canals that fall within the study area:

- Grand Union Canal – The Canal flows through both Warwick District area and Stratford District area from northeast to west, passing through Lapworth, Hatton and Warwick, Leamington Spa and Stockton joining the Oxford Canal near Napton on the Hill.
  - Saltisford Arm (Grand Union Canal) – A small arm of the Grand Union canal between Hatton and Warwick
- Oxford Canal – The canal flows within the eastern area of the Stratford District passing near Napton on the Hill Marston Doles and Fenny Compton.
  - Engine Arm (Oxford Canal) – A small arm of the Oxford canal north of Marston Doles.
- North Stratford Canal – The canal flows within the Warwick District through Hockley Heath and Lapworth, where it Joins the Kingswood Arm and South Stratford canals.
  - Kingswood Arm (North Stratford Canal) – This is an arm of the North Stratford Canal which joins the former with the Grand Union Canal east of Lapworth.
- South Stratford Canal – The Canal flows within the Warwick and Stratford-on-Avon Districts from Lapworth in the north through to Stratford-Upon-Avon. Passing through Preston Green, Wootton Wawen and Newnham.

Across the study area there have been 38 instances of canal overtopping as well as 9 Instances of canal breaches occurring. Throughout the study area the canal has the potential to interact with other watercourses, where these watercourses can become flow paths if the canal overtops or breaches, or that flooding from fluvial watercourses or significant surface water flows could prove detrimental to wider canal infrastructure causing scenarios where breaches are more likely to occur.

Any development proposed adjacent to a canal should include a detailed assessment of how a canal breach would impact the site, as part of a site-specific FRA. [The Canal and River Trust \(canalrivertrust.org.uk\)](http://canalrivertrust.org.uk) provide guidance on development near canals.

### 4.13 Depth, velocity, and hazard to people

The Level 2 assessment seeks to map the probable depth and velocity of flooding as well as the hazard to people and use this within the detailed site assessments.

#### 4.13.1 Fluvial

Where detailed modelling is available the depth velocity and hazard grids will be used to ascertain a more accurate picture of risk at the sites. Where only national modelling covers a site depth velocity and hazard data is not yet available and cannot be used.

#### 4.13.2 Surface Water

Depth, velocity and hazard information using NaFRA2 is displayed in bands showing the probability of a given depth, velocity or hazard being exceeded, rather than based on discrete events of a given return period (e.g. the chance of flooding reaching a depth of 60cm or greater).

Hazard to people has been calculated using the below formula as suggested in [Defra's Supplementary note on flood hazard ratings and thresholds for development planning and control purpose \(gov.uk\)](#). The different hazard categories are shown in Table 4-.

The RoFSW dataset includes a band where the hazard rating is greater than or equal to 0.5, but less than 0.75. Within the Level 2 site assessments this category has been given a conservative description of "Very low hazard/caution".

Developers should also test the impact of climate change depths, velocities, and hazard on the site, as part of the site-specific FRA.

Table 4-8: Defra's 'Flood Risks to People' classifications

Description of Flood Hazard Rating	Flood Hazard Rating	Classification Explanation
Very Low Hazard/ Caution	<0.75	'Flood zone with shallow flowing water or deep standing water'
Danger For Some (i.e. children)	0.75 - 1.25	'Danger: flood zone with deep or fast flowing water'
Danger For Most	1.25 - 2.00	'Danger: flood zone with deep fast flowing water'
Danger For All	>2.00	'Extreme danger: flood zone with deep fast flowing water'

### 4.14 SuDS suitability

The hydraulic and geological characteristics of each site have been assessed to determine the factors that potentially constrain schemes for surface water management. This assessment is designed to inform the early-stage site planning process and is not intended to replace site-specific detailed drainage assessments. A high-level assessment of suitability of SuDS is included in the site assessments in Appendix A.

The assessment is based on catchment characteristics using the following data:

- EA 1m LiDAR
- [The British Geological Survey website \(bgs.ac.uk\)](http://bgs.ac.uk) geology and soils mapping
- JBA Groundwater Emergence Mapping (see Section 4.8 for further details)
- Historic landfill sites
- Groundwater Source Protection Zones
- Nitrate Vulnerable Zones
- Open Rivers Network
- RoFSW mapping
- Flood Zones derived as part of this Level 2 SFRA (see Section 4.3 for further details)

This data was then collated to provide an indication of particular groups of SuDS systems which might be suitable at a site. SuDS techniques were categorised into five main groups, as shown in Table 4-.

Table 4-9: Summary of SuDS categories

SuDS Type	Technique
Source Controls	Green Roof, Rainwater Harvesting, Rain Gardens
Infiltration	Infiltration Trench, Infiltration Basin, Soakaway, Pervious Pavements
Detention	Pond, Wetland, Subsurface Storage, Shallow Wetland, Extended Detention Wetland, Pocket Wetland, Submerged Gravel Wetland, Wetland Channel, Detention Basin
Filtration	Surface Sand Filter, Sub-Surface Sand Filter, Perimeter Sand Filter, Bioretention, Filter Strip, Filter Trench
Conveyance	Dry Swale, Under-drained Swale, Wet Swale

The suitability of each SuDS type for the development sites has been described in the detailed site assessments, where applicable. The assessment of suitability is broadscale and indicative only; more detailed assessments should be carried out during the site planning stage to confirm the feasibility of different types of SuDS.

#### 4.15 Emergency Planning

Flood Warning Areas (FWAs) and Flood Alert Areas (FAAs) are detailed in the EA's GIS datasets and can be used to inform emergency planning. FAAs inform the EA when there is flooding first in the catchment, irrespective of properties, hence this coverage tends to apply to whole watercourses. FWAs are derived from the extreme flood outline (0.1% AEP event), focussed on communities, properties, and/or infrastructure. Modelled depth, velocity and hazard data can be used to understand safe access and escape routes for each site.

## 5 Level 2 Assessment Methodology

This section outlines how sites were screened against flood risk datasets to determine which sites required a Level 2 detailed site assessment. It also identifies other sites, referred to in this SFRA as 'Amber sites', at lower risk with general recommendations for developers.

### 5.1 Site screening

The Local Planning Authorities provided the below sites to be screened as part of the assessment process.

These sites were screened using an 'overlap analysis' tool in GIS. This analysed various flood risk datasets against the site allocations layer and calculated the percentage cover for each flood risk dataset against each site. Site screening has been undertaken on a batch basis with two separate site lists when site boundaries were confirmed by the Local Planning Authorities.

- “NSandSGL” sites - are those sites which the Local Planning Authorities class as Strategic sites, of which 30 sites were screened.
- “Non Strat Resi” sites – are the sites that fall outside of the Strategic site areas that are planned to be developed; these Non-strategic sites are primarily for residential purposes. The Local Planning Authorities sent a list of 69 sites to be screened.

These were used to provide a summary of risk to each site presented as a spreadsheet, including:

- the proportion of the site in each Flood Zone derived from detailed hydraulic model outputs where available, and where detailed modelling was unavailable the information is taken from the EA's NaFRA2 FMfP (see Section 4.2 for a summary of how the Flood Zones were derived for this SFRA).
- the proportion of the site affected by climate change within the detailed modelling extents where available alternatively the Flood Zones plus climate change dataset (in areas where neither this or detailed modelling was available Flood Zone 2 has been used as a proxy of fluvial climate change).
- whether the site is shown to be at risk from surface water flooding in the RoFSW mapping for the 3.3%, 1%, and 0.1% AEP events, and the 0.1% AEP event has been used as climate change proxy.
- whether the site is within 5m of watercourses shown within the OS Open watercourses dataset.
- whether the site is at heightened (Band 3 or 4) risk from groundwater emergence using the JBA Groundwater Emergence Map.

The results of the screening provide a quick and efficient way of identifying sites that are likely to require a Level 2 assessment, assisting the Local Planning Authorities with Sequential Test decision-making so that flood risk is taken into account when considering allocation options.

The screening also provides an opportunity to identify sites which may show to be 100% in Flood Zone 1, but upon visual inspection in GIS, have an ordinary watercourse flowing through or adjacent to them. Although there are no Flood Zone maps available for all of these watercourses, it does not mean the watercourse does not pose a risk, it just means no modelling has yet been undertaken to identify the risk.

Flood Zones are not provided for specific sites or land where the catchment of the watercourse falls below 3km<sup>2</sup>. For this reason, the Flood Zones are not of a resolution to be used as application evidence to provide the details of possible flooding for individual properties or sites and for any sites with watercourses on, or adjacent to the site.

The Risk of Flooding from Surface Water (RoFSW) mapping has been used to assess flood risk in these cases because it is comparable to fluvial flooding from smaller watercourses and is therefore a reasonable representation of the floodplain of such watercourses to use for a strategic assessment.

## 5.2 Sites taken forward to a Level 2 assessment

A Red-Amber-Green (RAG) assessment was carried out following the site screening on both site lists:

- Red sites were identified as those located within the EA Flood Zones (generally where more than 10% of the site was within Flood Zones 2 or 3), at risk of flooding from ordinary watercourses (within 5m of a watercourse using the OS Open Rivers dataset / EA Main Rivers), or at significant surface water risk (more than 20% of the site was at risk in the present day 0.1% AEP surface water event.).
- Amber sites were identified to have some isolated surface water risk (between 10-20% of the site was at risk in the 0.1% AEP present day surface water event), potentially impacting access and escape in vicinity of the site, high risk of groundwater emergence.
- Green sites were identified as sites where flood risk is unlikely to have an impact on future development of the site.

All sites designated by the Local Planning Authorities as Strategic sites were screened and progressed to Level 2 assessment; the decision was taken due to the sizes of the sites, and their more complex geographical nature. The Strategic sites also contained a number of 'sub-parcels', which were assessed individually within the overall Strategic site assessments, in case any sub-parcels are developed separately in future. The 30 screened sites are listed in [Appendix F](#), with updated site naming conventions provided by the Local Planning Authorities.

The remaining Non-strategic residential sites were RAG classified and those that were classified as 'Red' have been assessed within the Level 2 SFRA. All sites and are detailed in [Appendix E Red/Amber/Green – Non-Strategic site assessment/Screening](#):

### 5.3 Detailed site assessments

As part of the Level 2 SFRA, detailed site assessments have been produced for the 63 sites in total:

- 30 Strategic Sites
- 33 Non-Strategic Sites

Sites are split between Non-strategic sites and Strategic growth sites identified in Section 5.2. The site assessments can be found in Appendix B with the mapping shown in Appendix C. Table 5-1 sets out the information contained within each section of the site assessment.

Table 5-1: Summary of the information within each section of the detailed site assessments.

Section	Information
1. Background	<ul style="list-style-type: none"> <li>• Location of the site</li> <li>• Area, current land use (greenfield/brownfield), proposed site use</li> <li>• Topography of the site</li> <li>• Geology and soil characteristics</li> </ul>
2. Sources of flood risk	<ul style="list-style-type: none"> <li>• Location of the site within the catchment</li> <li>• Existing drainage features</li> <li>• Fluvial – proportion of site at risk including description from mapping/modelling, utilising depth, hazard, and velocity information from detailed hydraulic models where available (Within Strategic Sites where it is applicable this description is undertaken per sub-parcel)</li> <li>• Surface Water – proportion of site at risk including description from RoFSW mapping using available depth, hazard, and velocity information (Within Strategic Sites where it is applicable this description is undertaken per sub-parcel)</li> <li>• Reservoir flood risk in both the 'Dry Day' and 'Wet Day' scenarios</li> <li>• Groundwater emergence risk</li> <li>• Sewer flood risk - reported incidences within the site and any additional known risks identified by Severn Trent Water or Thames Water</li> <li>• Flood history - historic incidents on or surrounding the site from the EA Recorded Flood Outline and Historic Flood Map datasets, along with Warwickshire County Council Flood Incident database.</li> </ul>

Section	Information
3. Climate Change	<ul style="list-style-type: none"> <li>Fluvial climate change - summary of available climate change allowances and increase in flood extent compared to the 1% AEP event (where detailed modelling is available) or Flood Zone 3a</li> <li>Surface water climate change - summary of available climate change allowances and increase in flood extent compared to the 1% AEP event, using the 0.1% AEP present day event as proxy for the 1% AEP plus climate change event.</li> </ul>
4. Flood risk management infrastructure	<ul style="list-style-type: none"> <li>Flood risk management infrastructure</li> <li>Description of residual risks to the site – including risk of defence breach and/or culvert blockage within or surrounding the site.</li> </ul>
5. Emergency planning	<ul style="list-style-type: none"> <li>Flood warnings and alerts</li> <li>Access and escape routes</li> </ul>
6. Requirements for drainage control and impact mitigation	<ul style="list-style-type: none"> <li>Broadscale assessment of possible SuDS to provide indicative surface water drainage advice for each site assessed for the Level 2 SFRA.</li> <li>Identification of potential SuDS constraints including Groundwater Source Protection Zones, Nitrate Vulnerable Zones and historic landfill sites</li> </ul>
7. NPPF and planning implications	<ul style="list-style-type: none"> <li>Exception Test requirements</li> <li>Requirements and guidance for site-specific Flood Risk Assessment</li> <li>Guidance for site design and making development safe</li> </ul>
8. Conclusions	<ul style="list-style-type: none"> <li>Summary of key risks to the site</li> <li>Summarising considerations if development proceeds</li> </ul>

#### 5.4 Amber sites assessment

As set out in Section 5.2 and laid out in Appendix E, 22 sites that are being taken forward by the Local Planning Authorities were identified as 'Amber sites' based on the surface water risk on or surrounding the site, and/or groundwater emergence potential at the site. Appendix D provides a more detailed overview of the flood risk at the identified 'Amber sites' and general recommendations that should be applied to any future development at these sites.

## 6 Flood risk management requirements for developers

The flood risk management requirements for developers are detailed within the Warwick District Council L1 SFRA and Stratford-on-Avon District Council L1 SFRA. (Section 8). Users should refer to this section for guidance on site-specific FRAs and other principles for managing flood risk in new development.

This contains details on:

- early consultation with statutory and non-statutory consultees;
- requirements for site-specific FRAs, including signposting to specific guidance; and
- emergency planning.

The sections below contain further information on emergency planning and the requirements for developer contributions.

### 6.1 Emergency planning

Safe access and escape routes from the site should be provided. The developer should seek to incorporate an emergency plan and a safe refuge point if the development site has been identified to be at risk of flooding. The Local Planning Authorities and Emergency Services should be consulted when designing an Emergency Plan.

This Level 2 assessment has identified 26 sites across the strategic and non-strategic sites, which are located within existing EA FWAs and/or FAAs:

Strategic Site References:

E1, SG15, SG01, B1, SG20, SG12, SG09, SG02, SG06, SG10, SG23, SG04, SG08, SG18-N.

Non-Strategic Site References:

169, 173, 261, 293, 360, 445, 559, 870

For proposed development within existing EA FWAs, developers should consult the EA to ensure that adequate flood warning procedures and evacuation processes are in place and that RMAs are not put under any additional burden.

Section 8.5 of the Level 1 SFRA report discusses NPPF requirements and what an emergency plan will need to consider and other relevant information on emergency planning. Further information is provided on the [Warwickshire Resilience Forum | Better Prepared](#).

The duration and onset of flooding affecting a site depends on several factors:

- Location of the site within the catchment: flooding is likely to be rapid and flashy in the upper catchment (e.g. small tributaries) and slower responding and longer in duration in the lower catchment.
- Upstream storage: floodplains, reservoirs, and other storage areas upstream of a site may provide some online flood storage that reduces the flood risk downstream and delays the onset of flooding.
- Timing of peak flow: at the confluence of the larger watercourses and smaller tributaries, there may be different timings of peak flows, for example smaller tributaries would peak much earlier than the larger catchments.
- The principal source of flooding: where this is surface water, depending on the intensity and location of the rainfall, flooding could be experienced within 30 minutes of the heavy rainfall event e.g., a thunderstorm. Typically, the duration of flooding for areas at risk of surface water flooding, or from flash flooding from small watercourses, is short (hours rather than days).
- The preceding weather conditions prior to the flooding: wet weather lasting several weeks will lead to saturated ground. Rivers respond much quicker to rainfall in these conditions.
- Whether a site is defended, noting that if the defences were to fail, a site could be affected by very fast flowing and hazardous water within 15 minutes of a breach developing (depending on the size of the breach and the location of the site in relation to the breach), causing danger to life.
- Catchment geology: the permeability of a catchment affects its response time, for example chalk catchments take longer to respond than clay catchments.

## 6.2 Developer contributions

In some cases, and following the application of the Sequential Test, it may be appropriate for the developer to contribute to the improvement of flood defence provision that would benefit both proposed new development and the existing local community. Developer contributions should include the following:

- Developers should check the online [Flood Map for Planning \(gov.uk\)](#) in the first instance to identify any major changes to the Flood Zones and the [long-term flood risk mapping portal \(gov.uk\)](#) for any changes to flood risk from surface water or inundation from reservoirs.
- Developer contributions can be made to maintenance and provision of flood risk management assets, flood warning and the reduction of surface water flooding (i.e. SuDS).
- Developers should also confirm that a development will not impact upon the ability of a floodplain to store or convey and seek opportunities to provide floodplain betterment, should the footprint of a development change.

- Where necessary, compensatory flood storage should be provided up to the 1% AEP plus climate change flood level and adjacent to the floodplain so that the flood storage can hydraulically fill and drain.
- Developers must be aware that that information within the Level 1 and Level 2 SFRA's will be a useful starting point for development considerations, however they must request the most recent data and update hydraulic modelling where required. The EA are due to publish a new national risk information for flooding and coastal erosion; this will include future scenarios accounting for climate change. Once this information is available, it should be used as the main source of flood risk information, unless site-specific modelling / information is available.

The Local Planning Authorities should only use planning obligations to secure contributions where it is satisfied that the contribution will fund works / measures which are:

- Necessary to make the development acceptable in planning terms;
- Directly related to the development; and
- Fairly and reasonably related in scale and kind to the development (Paragraph 57, NPPF).

## 7 Surface water management and SuDS

The Surface Water Management roles and responsibilities for different organisations and relevant legislation, policy and strategy are detailed within the Warwick District Council L1 SFRA and Stratford-on-Avon District Council L1 SFRA. (Section 9). Users should refer to this section when considering the different sources of flood risk to the site and how this can be mitigated in a sustainable way.

This contains detail on:

- role of the LLFA and LPA in surface water management;
- types of SuDS;
- sources of SuDS guidance; and,
- other surface water considerations including Groundwater Vulnerability Zones (GVZs), Groundwater Source Protection Zones (GSPZs), and Nitrate Vulnerability Zones (NVZs).

### 7.1 Updated SuDS guidance

Since publication of the Level 1 SFRA, the [Defra National standards for sustainable drainage systems \(SuDS\) \(gov.uk\)](#) were published in June 2025.

Previously SuDS guidance was developed to sit alongside the PPG and provide non-statutory standards as to the expected design and performance for SuDS. The new National Standards remain as a non-statutory specification but form a material consideration for LPAs when assessing planning applications. These standards aim to reflect and reinforce good practice and use of SuDS, reflecting the four pillars of SuDS design.

The National Standards contain two sets of standards. The first type (Standard 1) is known as the hierarchy standard and gives criteria for the prioritisation of final runoff destinations. The other standards (Standards 2-7) detail the minimum requirements of design criteria that surface water drainage systems should satisfy alongside how they are to be appropriately built, maintained, and operated.

## 8 Recommendations

### 8.1 Considering the Exception Test for the proposed development sites

When required, to pass the Exception Test it must be shown that the development will provide wider sustainability benefits that outweigh the risk, and that the development will be safe throughout its lifetime without increasing risk elsewhere. The former is a planning-related consideration and the Level 2 SFRA helps to answer the latter part of the Test.

In principle, all of the sites assessed within this Level 2 SFRA are likely to pass the flood risk element of the Exception Test by:

- Undertaking a sequential approach to site planning so development is steered away from areas within the site and/ or sub-parcels at the highest risk.
- Considering safe access/ escape routes in the event of a flood (from all parts of the site, if say the site is severed by a flood flow path). If access and escape are affected, an Emergency Flood Response Plan may be required.
- Designing buildings with finished floor levels above the estimated flood level (fluvial 1% AEP event with an allowance for climate change), including an allowance for freeboard.
- Using areas in Flood Zone 2 for the least vulnerable parts of the development in accordance with Table 2 in the PPG. No development should be permitted in Flood Zone 3b (aside from Essential Infrastructure).
- Where development is considered within Flood Zone 3b, 'water compatible uses' should be applied, such as public open space, NFM measures and blue-green infrastructure.
- Testing flood mitigation measures if these are to be implemented, to ensure that they will not displace water elsewhere (for example, if land is raised to permit development on one area, compensatory flood storage will be required in another).
- Considering space for green infrastructure in the areas of highest flood risk.

Although not explicitly required within the PPG, consideration should be given to the surface water risk where this is high, with regards to the Exception Test.

Regarding the Strategic sites, risk across the sub-parcels may be more concentrated than the percentage risk initially attributes to the site as a whole. If a site is split in future into smaller land parcels for development, and some of those parcels are in areas of increased flood risk, the Exception Test may need to be re-applied by the developer at the planning application stage. The development of the Strategic site assessments attempted to mitigate this through the splitting of risk descriptions for both fluvial and surface water risk into smaller sub-parcels. However, if significant parcel and boundary changes occur in the future, re-application of the Exception Test may still be required.

## 8.2 Recommendations from the Level 1 SFRA

Recommendations from this report should be considered in addition to recommendations from the Level 1 SFRA, which still stand for the site allocations and any windfall development that comes forward. The recommendations for the Level 1 SFRA are set out in Section 10 of the Warwick District Council Level 1 SFRA and the Stratford-on-Avon District Council Level 1 SFRA, which should be read in conjunction with the 2026 Addendums.

## 8.3 Requirements for developers

The sections below set out requirements for developers to consider both for developing sites assessed within this Level 2 SFRA and for developing windfall sites.

### 8.3.1 Watercourses

Any sites located where there is a Main River (including culverted reaches of a Main River) will require an easement of at least 8m either side of the watercourse from the top of the bank. This may introduce constraints regarding what development will be possible and consideration will also need to be given for access and maintenance at locations where there are culverts. Developers will be required to apply for appropriate permits so the activity being carried out over easements does not increase flood risk. Further information relating to this can be viewed on the government website [Flood risk activities: environmental permits \(gov.uk\)](https://www.gov.uk/government/topics/flood-risk-management).

Where no recent detailed hydraulic modelling is present, it is recommended that developers construct new, or update existing, detailed hydraulic models at these sites as part of a site-specific FRA using channel, structure, and topographic survey to confirm flood risk. Site-specific flood modelling will likely need to be developed in locations where it is necessary to understand the effects of proposed development schemes on the existing flood flow paths and flood volume storage, in the present day and in the future.

At the planning application stage, developers may need to undertake more detailed hydrological and hydraulic assessments of unmodelled watercourses and surface water interactions so that the potential effects of proposals can be evaluated at site level and ensure that there is no increase in risk off-site as a result of development. The modelling should evidence flood extents, depths, velocities and hazard (including latest climate change allowances), inform development zoning within the site and prove, if required, whether the Exception Test can be passed.

If an ordinary watercourse is within or immediately adjacent to the site area, consultation with the Warwickshire County Council as the LLFA should be undertaken. If alterations or discharges are proposed to the watercourse, a land drainage consent will be required.

Developers should be aware of the need to identify the route of, and flood risk associated with, any culverts within a site. CCTV condition survey will be required to establish the current condition of the culvert and hydraulic assessments will be necessary to establish

culvert capacity of both culverts on site and those immediately offsite that could pose a risk to the site. The risk of flooding should be established using site survey, including the residual risk of culvert blockage.

### 8.3.2 Flood risk management infrastructure and residual risk

For sites where existing flood defences provide a reduction in the flood risk to the site, it is important to understand the standard of protection these structures and measures provide. It is also necessary to understand how this level of protection changes over time, considering the implications of climate change.

If flood defences are required to protect a development site, evidence will be required to show that the new development does not adversely impact and increase flood risk to other areas, for example that there is no net loss in floodplain storage in circumstances where this is a material consideration. It will need to be established that these defences can be appropriately managed and maintained during the lifetime of the development. In some cases, it will be a requirement to demonstrate that there is an appropriate level of commitment to the maintenance of the standard of protection afforded by existing defences, where reliance is placed on the standard they provide.

Any development proposed adjacent to a canal should include a detailed assessment of how a canal breach would impact the site, as part of a site-specific FRA. The [Canal and River Trust \(canalrivertrust.org.uk\)](http://canalrivertrust.org.uk) provide guidance on development near canals.

### 8.3.3 Access and escape routes

Access and escape routes should be considered at the site, but also in the vicinity of the site, for example, a site may have low surface water risk, but in the immediate locality, access/escape routes to and from the site could be restricted for vehicles and/or people. For sites assessed within this Level 2 SFRA, an initial overview of potential access and escape options is provided within the detailed site assessments and potential constraints identified.

### 8.3.4 Surface water flood risk and SuDS

Surface water risk should be considered in terms of the proportion of the site at risk in the 3.3%, 1% and 0.1% AEP events (with an appropriate allowance for climate change), whether the risk is due to isolated minor ponding or deeper pooling of water, or whether the risk is due to a wider overland flow route.

A strategic assessment of SuDS options has been undertaken using regional datasets for sites assessed within this Level 2 SFRA. A detailed site-specific assessment of suitable SuDS techniques should be undertaken at site-specific level to understand which SuDS options are most appropriate. This may need to include infiltration testing to determine the suitability of infiltration methods.

Surface water risk and mitigation should be considered as part of a detailed site-specific FRA and surface water drainage strategy.

## 8.4 Use of SFRA data and future updates

It is important to recognise that the SFRA has been developed using the best available information at the time of preparation. This relates both to the current risk of flooding from all sources and the potential impacts of future climate change.

The SFRA should be a 'living document', and as a result should be updated when new information on flood risk, flood warning, or new planning guidance or legislation becomes available. New information may be provided by the Local Planning Authorities, Warwickshire District and Stratford-on-Avon District Councils respectively, along with Warwickshire County Council as the LLFA and the EA. Severn Trent Water, Thames Water and Anglian Water (dependant on site location and Water Company areas) may also provide updated guidance. Such information may be in the form of:

- New hydraulic modelling results.
- Flood event information following a future flood event.
- Policy or legislation updates.
- Updates to the EA flood mapping.
- New flood defence schemes or flood alleviation schemes.

The EA regularly reviews their flood risk mapping, and it is important that they are approached to determine whether updated information is available prior to commencing a detailed FRA.

The EA continues to periodically update both the [Flood Map for Planning \(FMfP\) \(gov.uk\)](#) and [Risk of Flooding from Surface Water \(RoFSW\) dataset \(gov.uk\)](#). A further update was scheduled for January 2026. However, the release of this updated mapping has been pushed back to an unconfirmed date.

It is recommended that the SFRA is reviewed in line with the EA's Flood Zone map updates to ensure latest data is still represented in the SFRA, allowing a cycle of review and a review of any updated data by checking with the above bodies for any new information.

# Appendices

## A

## Data sources

# B

## Detailed Site Assessments

# C

## Static Mapping

**D**

# **Amber Site Assessment**

# E Red/Amber/Green – Non-Strategic site assessment/Screening:

## E.1 RAG - Assessment

REF ID	Site name	Rank
14	Land on South-West side of Node Hill (Title No. WK469961)	Amber
30	Land at Station Lane	Green
82	Land to East of Ettington Road (A429)	Red
75	Land South of Westham Lane, Barford	Amber
200	Former Glebe Hotel, Barford	Amber
172	Land East of Wellesbourne Road, Barford, Warwickshire	Red
169	Land East of Station Lane	Red
474	Land to North of Captains Hill, Alcester	Amber
427	Land to the South of The Slough, Sambourne	Amber
429	Land East of Loxley Road, Wellesbourne	Red
559	Warwick - Myton Park Centre	Red
702	10 Greenhill Street	Red
616	Oberry Fields	Red
209	Land South of Southam Road	Red
34	Land near tennis club at Spring Farm, Kenilworth	Red
96	Land at Guy Street/ Warwick Street, and Parade	Red
55	Land South of Chichester Lane, Hampton Magna	Red

324	Land East of Lighthorne Road	Red
261	Land at Marriage Hill Farm, Bidford on Avon	Red
445	Land South of Allimore Lane, Alcester	Red
812	East of Jacksons Meadow, Bidford-on-Avon/Moorland Lodge, off Victoria Road, Bidford-on-Avon	Red
870	Edmonscote Manor	Red
142	Land South of The Cricketers, Radford Semele	Red
95	Land at Old Budbrooke Road, Hampton Magna	Red
272	Land East of Goose Lane, Lower Quinton	Red
162	Land at Chadley House, Loxley Road, Wellesbourne	Red
372	Land North of Barley Fields, Long Marston, Warwickshire	Red
683	Maybird Shopping Park	Red
866	Kenilworth School	Red
804	Land north of Saffron Meadow, Stratford-upon-Avon	Red
840	East of Welford Road, Long Marston	Red
847	Rother Street/Grove Road, Stratford-upon-Avon	Red
553	Land at Stratford Parkway Rail Station	Red
978	Canal Quarter western area	Red
860	South of Oldbutt Road	Red

910	Land off 1 Station Road, Long Marston	Red
832	Adjacent former Long Marston Depot, west of Campden Road [Quinton Parish]	Red
40	Land off Edgehill View, Kineton Road, Gaydon	Red
53	Land adjoining Mill House	Red
470	Land North of Banbury Road, Kineton	Amber
813	East of Campden Road, Clifford Chambers	Amber
173	Land off Shoulderway Lane, Shipston on Stour, Warwickshire	Amber
185	Land South of Loxley Road, Stratford upon Avon	Amber
360	Land South of Charlecote Road, Wellesbourne, CV35 9LU	Amber
411	Land off Allimore Lane	Amber
417	Land at Arden Heath Farm, Loxley Road, Stratford upon Avon	Amber
696	Land at Waterloo Road, Bidford-on-Avon	Amber
807	Linen Street Car Park, Warwick	Amber
833	East of Banbury Road, Stratford-upon-Avon	Amber
441	Land South of Main Street, Tiddington	Amber
337	Land at Brickyard Lane, Studley	Amber
444	Land at Old Town, Gaydon	Amber

REF ID	Site name	Rank
485	Wellesbourne Distribution Park	Amber
293	Land to East of Orchard House, Banbury Road, Kineton	Amber
601	Glebe land, Long Marston	Amber
827	South of Alcester Road, Stratford-upon-Avon	Amber
249	Barrack Street, Warwick	Green
236	Land at Crew Lane, Kenilworth	Green
234	Land off Golf Lane, Whitnash, Leamington Spa, CV31 2QA	Green
149	Land North of Coventry Road, Kenilworth	Green
303	Land to East of Springhill, Stratford Road, Shipston on Stour	Green
433	Land off Hanson Avenue	Green
443	Banbury Road, Kineton	Green
607	Land adjacent to Dale House Lane	Green
684	White Land at The Asps	Green
685	Agricultural Land at The Asps	Green
868	Hazelmere and Little Acre	Green
806	Covent Garden Car Park, Leamington Spa	Green
331	Land West of Furze Hill Road 1	Green

## E.2

## Non-Strategic Site Screening Results

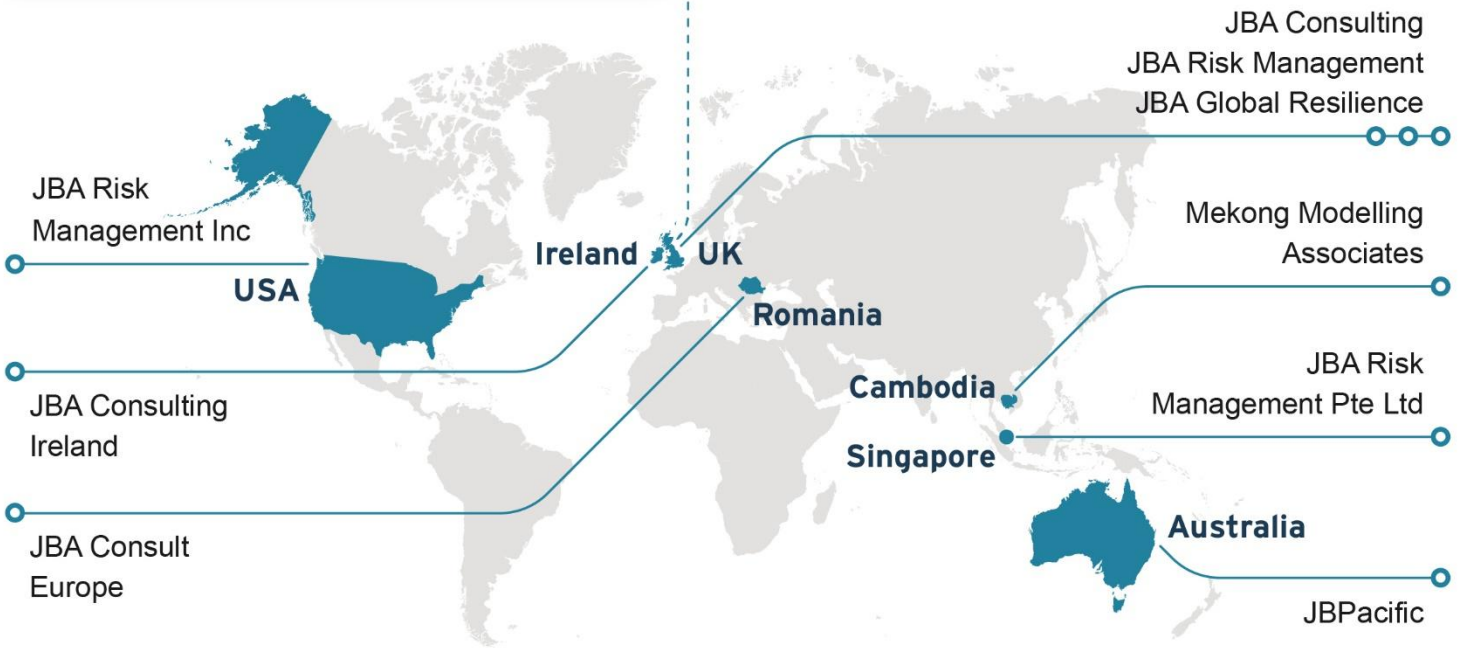
**F**

# **Strategic Site Screening**



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