

ABBAY FIELDS SWIMMING POOL, BRIDGE STREET,
KENILWORTH, CV8 1BP

FLOOD RISK ASSESSMENT
TO SUPPORT SECTION 73 APPLICATION TO AMEND CONDITIONS
OF PLANNING PERMISSION REF. W/21/0170

Final Report v1.1
September 2023

Report Title **Abbey Fields Swimming Pool, Bridge Street, Kenilworth, CV8 1BP**
Flood Risk Assessment
Final Report v1.1

Client Couch Consulting Engineers Ltd

Date of issue 28 September 2023

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1 INTRODUCTION

1.1 Purpose of Report

Weetwood Services Ltd ('Weetwood') has been instructed by Couch Consulting Engineers Ltd to prepare a Flood Risk Assessment (FRA) report to accompany a Section 73 planning application for the permitted redevelopment (Warwick District Council planning ref. W/21/0170) of Abbey Fields Swimming Pool, Bridge Street, Kenilworth ("the site").

A FRA report was prepared by Couch Consulting in April 2020 (Ref. 7380-P1-FRA) to accompany the previous planning application (Ref. W/21/0170). The Environment Agency raised a number of matters in response to the report within its consultation letter dated 24 February 2021 (Ref. UT/2021/119109/01-L01). Weetwood prepared a FRA Addendum - Additional Flood Risk Information technical note in June 2021 (Ref. 5191/TN/Final/v1.2/2021-06-28) to address the points raised by the Environment Agency. As part of this Weetwood obtained and refined the Kenilworth Hazard Mapping hydraulic model (Environment Agency, 2013) to better represent the pre development, baseline flood risk at the site. The post development flood risk was also assessed by Weetwood by including the proposed development into the amended baseline model.

The Environment Agency subsequently removed its objection to the application in its letter dated 14 July 2021 (Ref. UT/2021/119109/02-L01) and planning permission was granted on 16 September 2021.

This FRA has been prepared to accompany a Section 73 planning application to amend the plans approved by planning permission ref. W/21/0170. The full set of proposed changes are set out in the submitted Design and Access Statement and Planning Statement and include amendments to the proposed ground levels and ridge height of the of the permitted development.

The assessment has been undertaken in accordance with the requirements of the revised National Planning Policy Framework (NPPF) updated on 5 September 2023 and the Planning Practice Guidance (PPG) updated on 25 August 2022.

1.2 Structure of the Report

The report is structured as follows:

- Section 1** Introduction and report structure
- Section 2** Provides background information relating to the development site
- Section 3** Presents national and local flood risk planning policy
- Section 4** Assesses the potential risk of flooding to the development site
- Section 5** Presents a summary of key findings and the recommendations

1.3 Relevant Documents

The assessment has been informed by the following documents:

- Strategic Flood Risk Assessment, Warwickshire County Council, September 2013
- Warwick Local Plan 2011-2029, September 2017

2 SITE DETAILS AND PROPOSED DEVELOPMENT

2.1 Site Location

The approximately 1.38 ha site is located west of Bridge Street at Ordnance Survey National Grid Reference SP 285 722, as shown in **Figure 1**.

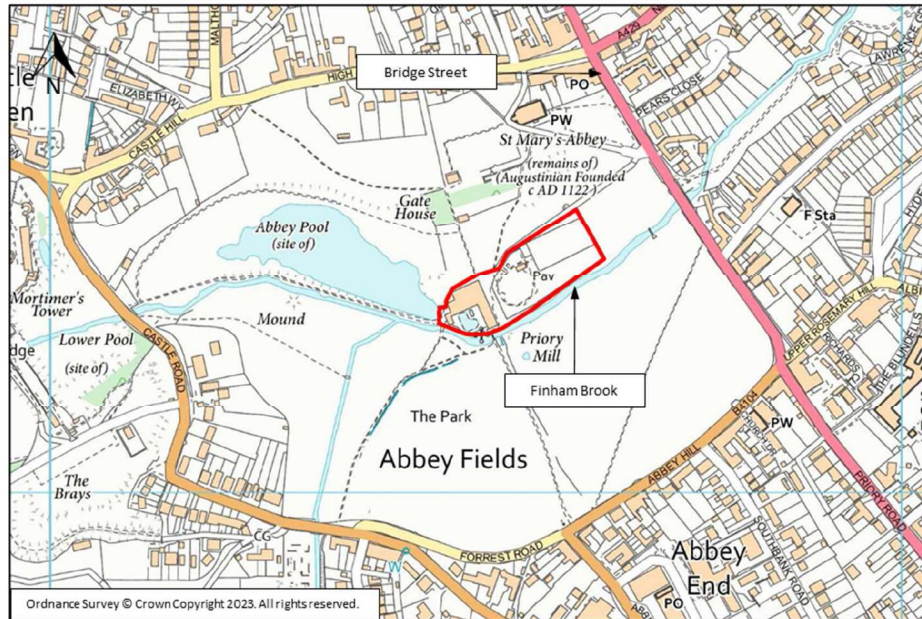


Figure 1: Site Location and Location of Surface Waterbodies

2.2 Existing and Proposed Development

The site currently comprises the existing Abbey Fields Swimming Pool.

The proposal for the “*Demolition of existing swimming pool and outdoor pool and redevelopment to provide two new indoor swimming pools and associated changing facilities with ancillary cafe, boundary treatment and landscaping*” was granted planning permission by Warwick District Council on 16 September 2021 (Ref. W/21/0170).

It is understood that in preparation for implementation of the above, historical finds were discovered that would need to be avoided, which now require the proposed site levels to be increased. The proposals are therefore to amend the proposed levels via a Section 73 planning application. The updated proposed site plan is provided in **Appendix A**.

The NPPF classifies commercial development as Less Vulnerable to flood risk.

2.3 Surface Waterbodies in the Vicinity of the Site

Finham Brook, a designated main river, is located adjacent to the southern site boundary and flows in an easterly direction.

2.4 Topographic Levels

A topographic survey of the site has been undertaken by 3D Survey Scan (**Appendix B**) and LiDAR data has been used to develop a digital terrain model of the site and surrounding area as illustrated in **Figure 2**.

Site levels are in the region of 73.16 to 75.92 m AOD.

Ground levels on the access route leading to Bridge Street are shown to range between 74.1 to 74.7 m AOD.

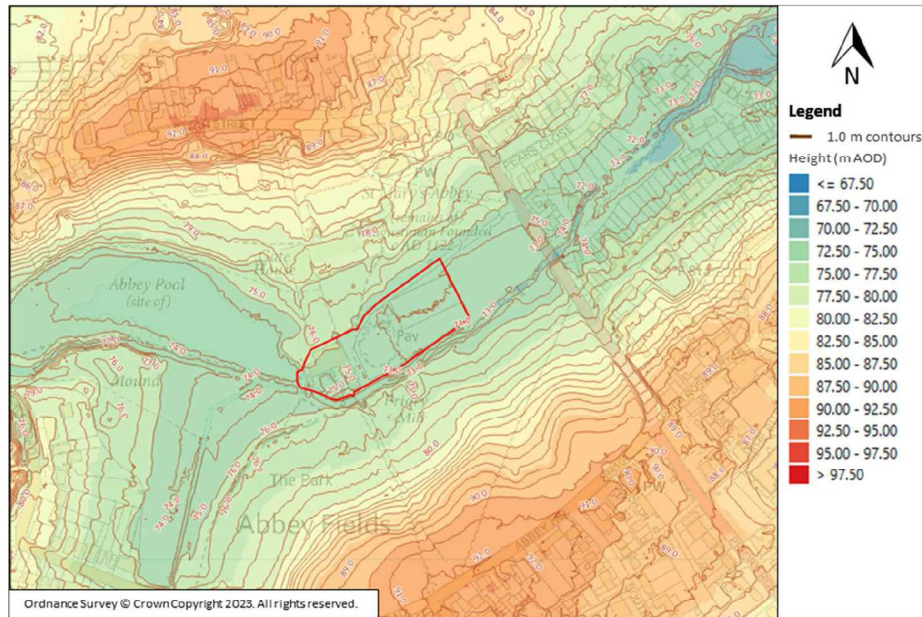


Figure 2: Digital Terrain Model from LiDAR Data

2.5 Ground Conditions

According to the Soilsapes soils dataset produced by the Cranfield Soil and AgriFood Institute¹, soil conditions at the site and within the surrounding area are described as loamy and clayey floodplain soils with naturally high groundwater.

British Geological Survey mapping of surface geology² indicates the underlying bedrock formation comprises sandstone (Kenilworth Sandstone Formation), overlain by sand and gravel (River Terrace Deposits).

According to the MAGIC website³ the superficial deposits at the site are classified as a Secondary A aquifer whilst the underlying bedrock is classified as a Principal aquifer.

The site is shown to be located within a designated groundwater source protection zone III – Total Catchment.

¹ www.landis.org.uk/soilsapes/

² <https://www.bgs.ac.uk/map-viewers/geoindex-onshore/>

³ <https://magic.defra.gov.uk/MagicMap.aspx>

3 PLANNING POLICY AND GUIDANCE

3.1 National Planning Policy and Policy Guidance

The thrust of national planning policy, as articulated in the NPPF is that inappropriate development in areas at risk of flooding should be avoided where possible, as summarised below:

- Inappropriate development in areas at risk of flooding should be avoided and that development should be directed away from areas at highest risk (whether existing or future), but where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere (NPPF para. 159).
- The policy of seeking to steer development to areas with the lowest risk of flooding, from any source, is implemented through the application of the flood risk Sequential Test. Development should not be allocated or permitted if there are reasonably available sites, appropriate for the proposed development in areas with a lower risk of flooding. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding (NPPF para. 162).
- If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives) the Exception Test may have to be applied. The need for the test will depend on the potential vulnerability of the site and of the vulnerability of the development proposed (as set out in Annex 3 of NPPF; also PPG Table 2) (NPPF para. 163). For example, the Exception Test need not be applied for less vulnerable development in any flood zone, or for more vulnerable development in flood zones 1 or 2.
- Where the Exception Test must be applied, application of the test for development proposals at the application stage should be informed by a site-specific flood risk assessment. For the test to be passed it should be demonstrated that: (a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; (b) and the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall (NPPF para. 164). Both elements of the test should be satisfied for the development to be permitted (NPPF para. 165).
- A site-specific flood risk assessment should be provided for all development in flood zones 2 and 3 [whilst] in flood zone 1, an assessment should accompany all proposals involving: sites of 1 ha or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use (NPPF para. 167).
- Development should not increase flood risk elsewhere (NPPF para. 167).
- Development should only be allowed in areas at risk of flooding where the flood risk assessment (and the sequential and exception tests, as required), demonstrate that: a) within the site, the most vulnerable development is located in areas of lowest flood risk (unless there are overriding reasons to prefer a different location); b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment; c) the development incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate; d) any residual (flood) risk can be safely managed; and e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan (NPPF para.167).
- Applications for some minor development and changes of use should not be subject to the sequential or exception tests (NPPF para. 168). The exceptions are stated in Footnote 56.

Guidance on application of the sequential and exception test is provided in the PPG. For example:

- The approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. This means avoiding, so far as possible, development in current and future (i.e. taking climate change into account) medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding (PPG para. 023).
- Where it is not possible to locate development in low risk areas, the Sequential Test should go on to compare reasonably available sites within medium risk areas and then, only where there are no reasonably available sites in low and medium risk areas, within high risk areas (PPG para. 024).

- Initially, the presence of existing flood risk management infrastructure should be ignored, as the long-term funding, maintenance and renewal of this infrastructure is uncertain. Climate change will also impact upon the level of protection infrastructure will offer throughout the lifetime of development (PPG para. 024).
- The Sequential Test should be applied to 'Major' and 'Non-major development' proposed in areas at risk of flooding, but it will not be required where; the site has been allocated for development and subject to the test at the plan making stage (provided the proposed development is consistent with the use for which the site was allocated and provided there have been no significant changes to the known level of flood risk to the site, now or in the future which would have affected the outcome of the test); the site is in an area at low risk from all sources of flooding, unless the Strategic Flood Risk Assessment, or other information, indicates there may be a risk of flooding in the future; the application is for a development type that is exempt from the test, as specified in footnote 56 of the NPPF (PPG para. 027).
- For individual planning applications subject to the Sequential Test, the area to apply the test will be defined by local circumstances relating to the catchment area for the type of development proposed. For some developments this may be clear, for example, the catchment area for a school. In other cases, it may be identified from other Plan policies. For example, where there are large areas in Flood Zones 2 and 3 (medium to high probability of flooding) and development is needed in those areas to sustain the existing community, sites outside them are unlikely to provide reasonable alternatives. Equally, a pragmatic approach needs to be taken where proposals involve comparatively small extensions to existing premises (relative to their existing size), where it may be impractical to accommodate the additional space in an alternative location. For nationally or regionally important infrastructure the area of search to which the Sequential Test could be applied will be wider than the local planning authority boundary (PPG para. 027).
- 'Reasonably available sites' are those in a suitable location for the type of development with a reasonable prospect that the site is available to be developed at the point in time envisaged for the development. These could include a series of smaller sites and/or part of a larger site if these would be capable of accommodating the proposed development. Such lower-risk sites do not need to be owned by the applicant to be considered 'reasonably available' (PPG para. 028).
- The Exception Test should only be applied as set out in Table 2 [of the PPG ("Flood Risk Vulnerability and Flood Zone Incompatibility")] and only if the Sequential Test has shown that there are no reasonably available, lower risk sites, suitable for the proposed development, to which the development could be steered (PPG para. 032).

3.2 Local Planning Policy

The Warwick District Local Plan 2011 - 2029 was adopted by Warwick District Council in September 2019. The following policy is relevant in respect of flood risk:

Policy FW1; Reducing Flood Risk

Planning applications should be submitted in line with the revised validation checklist that has guidance on the national approach to meeting the sequential and exception tests and meeting the requirements of the NPPF.

Developers are advised to review the Environment Agency's1 flood map for planning at the earliest possible opportunity to consider what development would be appropriate for a potential development site to ensure that proposals are in line with the following policy requirements:

- a. There will be a presumption against development in flood zone 3, and no built development will be allowed in the functional floodplain. Development must be steered to areas with the lowest probability of flooding.*
- b. Land that is required for current and future flood management will be safeguarded from development. Where development lies adjacent to or benefits from an existing or future flood defence scheme it will be expected to contribute towards the cost of delivery and/or maintenance of that scheme.*
- c. New development that lies within the floodplain will be required to implement a flood alleviation scheme to reduce the risk of flooding to the proposed development site and deliver significant flood risk reduction benefits to the wider community.*

- d. All new development proposals will contribute to meeting 'good status' as defined by the Water Framework Directive (WFD). This will include delivery of geomorphological, chemical and biodiversity enhancements and include a minimum eight metre buffer strip from the top of bank of all watercourses.*
- e. New development must be resilient to surface water, fluvial and pluvial flooding. Where new development lies in an area of flood risk it must be designed to be flood resilient with safe dry access for vehicles and pedestrians. Finished floor levels should be 600mm above the predicted flood level and include a freeboard (see glossary) for climate change to ensure new development is safe.*

Where development lies adjacent to a watercourse, the supporting planning application will include a WFD assessment to demonstrate how the waterbody will not deteriorate in status and will be enhanced, and:

- *There will be no impact upon priority habitat or designated sites of nature conservation;*
- *Modified watercourses will be restored in line with the recommendations of the Severn River Basin Management Plan;*
- *Culverting open watercourses will not be allowed.*

3.3 Water Framework Directive

The Water Framework Directive (WFD) provides a legal framework for the protection, improvement and sustainable use of inland surface waters, groundwater, transitional waters, and coastal waters across England, and seeks to:

- Prevent deterioration in the status of aquatic ecosystems, protect them and improve the ecological condition of waters
- Achieve at least 'good' status for all waterbodies by 2015
- Promote the sustainable use of water as a natural resource
- Conserve habitats and species that depend directly on water
- Progressively reduce or phase out the release of individual pollutants or groups of pollutants that present a significant threat to the aquatic environment
- Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants; and
- Contribute to mitigating the effects of floods and droughts.

The WFD applies to any proposed development which has the potential to impact on a waterbody. Where this is the case, the Environment Agency may require evidence demonstrating that the proposed development does not compromise the aims of the WFD.

3.4 Environmental Permitting and Land Drainage Consent

Under the Environmental Permitting (England and Wales) Regulations 2016 an Environmental Permit for Flood Risk Activities⁴ is required from the Environment Agency for any permanent or temporary works, including works:

- In, over or under a designated main river
- Within 8 m of the top of bank of a designated main river or of the landward toe of a flood defence (16 m if it is a tidal main river or a sea defence).

In addition, any permanent or temporary works within the floodplain of a designated main river may also require an Environmental Permit for Flood Risk Activities. A permit is separate to and in addition to any planning permission granted.

Land drainage consent may be required from the lead local flood authority or drainage board for work to an ordinary watercourse.

Undertaking activities controlled by local byelaws also requires the relevant consent.

⁴ <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>

4 REVIEW OF FLOOD RISK

4.1 Historical Records of Flooding

The Environment Agency Historic Flood Map⁵ and Appendix A, Figure A2 vii of the 2013 Strategic Flood Risk Assessment (“Historic Flood Records”) indicate that there are no records of flooding at or within the immediate vicinity of the site.

4.2 Flood Risk from Rivers (Fluvial)

The Environment Agency Flood Map for Planning (Rivers and Sea)⁶ (**Figure 3**) indicates the site to be located primarily in flood zone 3, with some flood zone 2 within the northern extremity of the site. This is partly reiterated on Figure A1 vii of the 2013 Strategic Flood Risk Assessment; however, flooding in the north/east of the site is shown to be less extensive. It is considered that the Strategic Flood Risk Assessment flood zone maps are outdated and the Flood Map for Planning is the best available information.

Table 1 of the PPG defines flood zones as follows⁷:

- Flood zone 1: Low Probability. Land having a less than 1 in 1,000 annual probability of river or sea flooding
- Flood zone 2: Medium Probability. Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding
- Flood zone 3a: High Probability. Land having a 1 in 100 or greater annual probability of river flooding or a 1 in 200 or greater annual probability of sea flooding
- Flood zone 3b: Functional Floodplain. Land where water from rivers or the sea has to flow or be stored in times of flood. Land having a 1 in 30 or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively or land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as a 1 in 1,000 annual probability of flooding).

Flood zone 3b is not separately distinguished on the Flood Map for Planning. However, Figure A1 vii of the 2013 Strategic Flood Risk Assessment (refer to extract in **Figure 4**) suggests that a portion of the site in the west may be located in the functional floodplain, which would be regarded as flood zone 3b.

The zones do not take account of the possible impacts of climate change and consequent changes in the future probability of flooding.

⁵ <https://data.gov.uk/dataset/76292bec-7d8b-43e8-9c98-02734fd89c81/historic-flood-map>

⁶ <https://flood-map-for-planning.service.gov.uk/>

⁷ <https://www.gov.uk/guidance/flood-risk-and-coastal-change#flood-zone-and-flood-risk-tables>

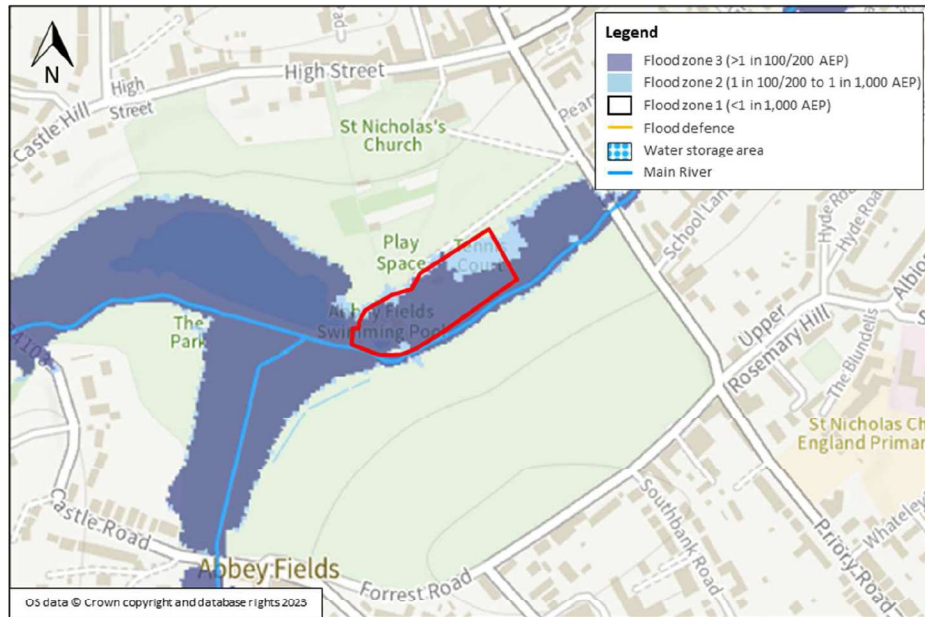


Figure 3: Flood Map for Planning

Source: gov.uk website; Accessed: September 2023

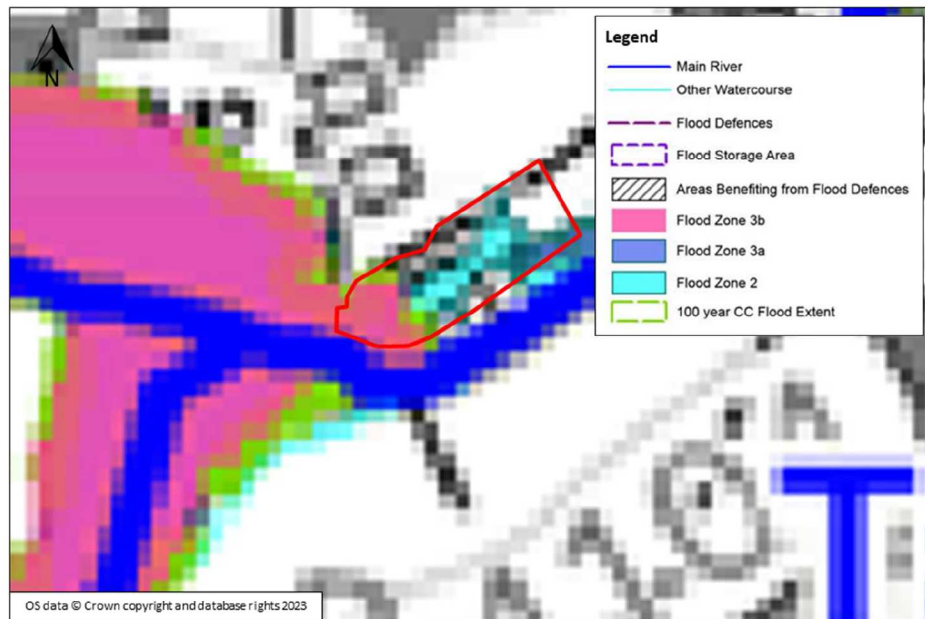


Figure 4: Strategic Flood Risk Assessment - Figure A1 vii Extract

Source: Strategic Flood Risk Assessment, Warwickshire District Council, 2013

As part of the previous 2021 planning application (Ref. W/21/0170) Weetwood undertook a hydraulic modelling study using the Environment Agency 2013 Kenilworth Hazard Mapping Model (i.e. the “supplied model”). At that time the model was reviewed and some alterations were made in order to better represent flood risk at the site. The alterations are summarised below, with full details provided in the modelling report (refer to Annex B of the FRA Addendum - Additional Flood Risk Information technical note (June 2021)).

- The bridge decks in close proximity to the site were not correctly represented in the supplied model with some decks being represented twice (in both the 1d and 2d domain) and some decks not included in either domain. These have been amended and the deck elevations taken from the topographical survey of the site, or where not available, LiDAR data and the channel survey data within the 1d model.

- The northern (left) bank of Finham Brook between Castle Road and Bridge Street has been reinforced with a z-line to improve the connection between the 1d and 2d domains, especially given the presence of the raised path between Finham Brook and the lake.
- The existing buildings on site have been represented as flood-proofed buildings.

The amended baseline model was run to simulate flooding during the present day 1 in 20, 1 in 100 and 1 in 1,000 AEP events and the 1 in 100 plus 25% and 35% climate change AEP events. The maximum modelled depth, extent of flooding and hazard rating for all events are provided in **Appendix C**.

The current Environment Agency guidance on climate change allowances (May 2022) advises that for Less Vulnerable development in flood zone 3, the Central allowance should be used to assess flood risk for the lifetime of the development. The Central allowance for the Avon Warwickshire management catchment is +21% (2080s). However, undertaking additional hydraulic modelling is not considered to be necessary in this instance as the climate change allowances that have been assessed would be regarded as conservative. Also, the modelling indicates that the maximum flood levels in the vicinity of the proposed redevelopment were consistent for the 1 in 100 AEP event and the 1 in 100 AEP event plus 25% and 35% climate change scenarios; therefore, a similar outcome would be expected for plus 21% climate change.

The current NPPF requires the 1 in 30 AEP event to be assessed to determine the functional floodplain; however, it is considered that the flood extents for the modelled 1 in 20 and 1 in 100 AEP events are very similar, and therefore the 1 in 30 would also be expected to follow suit. Moreover, the functional floodplain is immaterial to this Section 73 planning application, which only seeks to increase proposed ground levels for a permitted scheme.

The maximum flood level within the western portion of the site is indicated to be 75.04 m AOD during the 1 in 100 and 1 in 100 plus climate change (25% and 35%) AEP events and 75.06 m AOD during the 1 in 1,000 AEP event.

It is concluded that the site is at a High risk of flooding from rivers (fluvial).

4.3 Flood Risk from Small Watercourses and Surface Water (Pluvial)

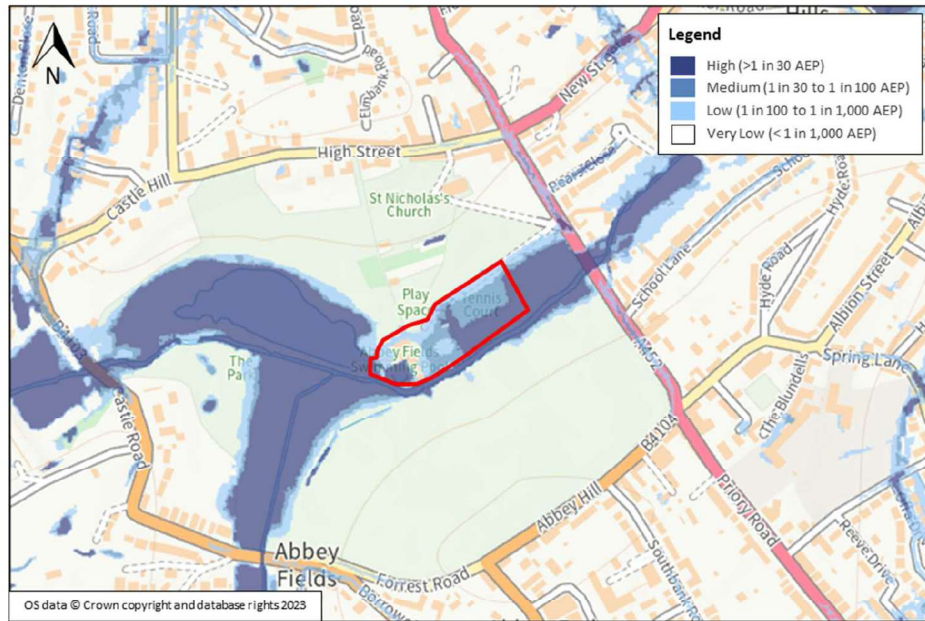
The Flood Risk from Surface Water map (**Figure 5**) indicates that the site is at high, medium and low risk of flooding from surface water. Flood depths and velocities are also provided, which indicate that flood depths would typically be 300 to 900 mm but could exceed 900 mm in some areas during a low risk event, and velocities are generally below 0.25 m/s but could exceed that in some areas.

However, the surface water flood risk identified on the Flood Risk from Surface Water map appears to be linked with fluvial flood risk from Finham Brook, rather than from surface water flood risk. It should be noted that the Flood Risk from Surface Water map presents outputs from a simplified 2D direct rainfall hydraulic model and Environment Agency guidance states *“The nationally produced surface water flood mapping only indicates where surface water flooding could occur as a result of local rainfall. It does not fully represent flooding that occurs from... rivers. Due to the modelling techniques used, the mapping picks out depressions in the ground surface and simulates some flow along natural drainage channels, rivers, low areas in floodplains, and flow paths between buildings. Although the maps appear to show flooding from ordinary watercourses, they should not be taken as definitive mapping of flood risk from these as the conveyance effect of ordinary watercourses or drainage channels is not explicitly modelled.”*

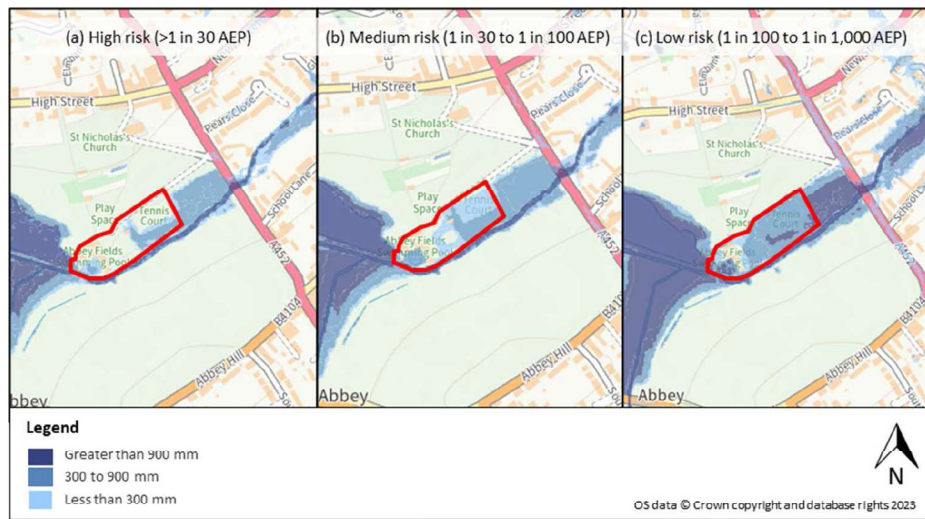
In this case, the hydraulic modelling upon which the Flood Risk from Surface Water map is based does not explicitly represent drainage channels and consequently is likely to underestimate conveyance along Finham Brook. The flood risk presented in **Figure 5** is therefore unlikely to be accurate.

In light of the above, in this instance the Flood Risk from Surface Water map is considered to present fluvial flood risk rather than surface water flood risk, and the risk of fluvial flooding at the site has more accurately been assessed via a detailed hydraulic modelling study in **Section 4.2**.

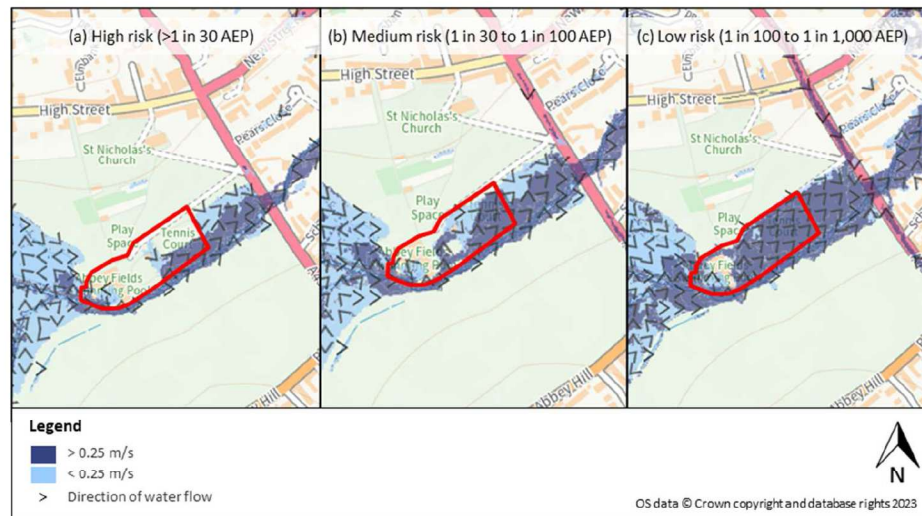
It is concluded that the site is at a High risk of flooding from fluvial sources, as identified in the above section, and is not likely to be at significant risk of pluvial surface water flooding.



(a) Extent



(b) Depth



(c) Velocity

Figure 5: Flood Risk from Surface Water
Source: gov.uk website; Accessed: September 2023

4.4 Flood Risk from Reservoirs, Canals and Other Water Impounding Structures

There are no canals or other impounded waterbodies located within the immediate vicinity of the site. The Flood Risk from Reservoirs map (not shown) indicates that the site is not at risk of flooding from such sources.

It is concluded that the site is not at risk of flooding from reservoirs, canals or other water impounding structures.

4.5 Flood Risk from Groundwater

The JBA Groundwater Flood Risk Indicator map (**Figure 6**) indicates that groundwater levels at the site may range between 0.025 to 5.000 m bgl (defined as Low to High risk) during a 1 in 100 AEP groundwater flood event.

There may therefore be some propensity for groundwater to emerge at the site; however, given the close proximity of Finham Brook it is considered that emerging groundwater could be conveyed away from the site without accumulating to significant depths.

It is concluded that the site is at a Low risk of significant (deep) flooding from groundwater.

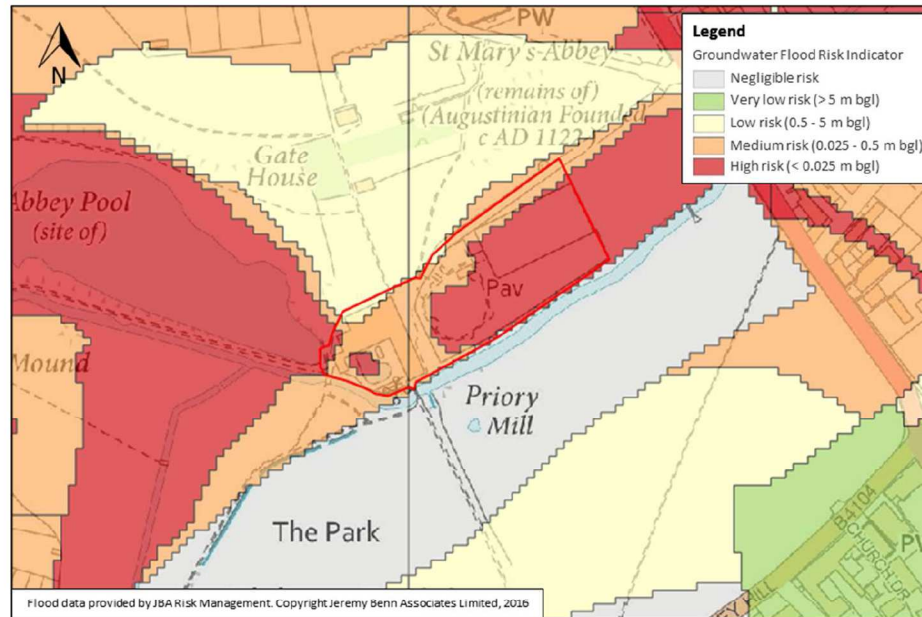


Figure 6: JBA Groundwater Flood Risk Indicator Map

Source: Blue Sky Maps; Accessed: September 2023

4.6 Flood Risk Mitigation

The risk of flooding to the proposed development from all identified sources is assessed to be low, with the exception of fluvial sources which presents a high risk. The risk of flooding to the proposed development will be mitigated through the implementation of the following measures:

- Finished floor levels of the proposed building will be set at 75.65 m AOD. This provides a freeboard of 610 mm above the peak modelled flood level expected at the site in a 1 in 100 AEP event +35% climate change. In addition, the finished floor level should be at least 0.15 m above adjacent ground levels following any reprofiling of the site, with ground levels sloping down from the buildings.
- The finished floor level of the terraced areas will be set at a minimum of 75.54 m AOD, providing a freeboard of at least 500 mm above the aforementioned flood level.

The above measures will, subject to the implementation of an appropriately designed surface water drainage scheme (assessed by others), enable any potential overland flows to be conveyed safely across the site without affecting property.

4.7 Flood Risk Elsewhere

The site already benefits from an extant planning permission (Ref. W/21/0170) and this FRA is to accompany a Section 73 application in order to increase the proposed finished floor levels.

As part of the previous planning application, flood risk elsewhere was assessed via proposed scenario hydraulic modelling. The proposed mitigation included a finished floor level that was set above the flood level expected during the 1 in 100 plus 35% climate change and 1 in 1,000 AEP events (i.e. it was designed to remain dry in all modelled events). Therefore, raising the finished floor levels further as part of this Section 73 planning application will not alter the previous conclusions with respect to impacts on flood risk elsewhere, which were previously considered to be acceptable by the Environment Agency.

It is concluded that the proposed development will have no impact on flood risk elsewhere when compared to the permitted scheme under planning application ref. W/21/0170.

4.8 Flood Risk Sequential Test

The site benefits from an extant planning permission (Ref. W/21/0170) and, as such, the application of the Sequential Test is not considered necessary for the Section 73 planning application.

4.9 Exception Test

The Exception Test need not be applied for 'Less Vulnerable' development within flood zone 3. Notwithstanding this, the assessment presented in this report demonstrates that the proposed development passes element (b) of the test, i.e. the development will be safe for its lifetime taking account of the vulnerability of its users and will not increase flood risk elsewhere.

5 SUMMARY AND RECOMMENDATIONS

This report has been prepared on behalf of Couch Consulting Engineers Ltd and relates to proposed development at Abbey Fields Swimming Pool, Bridge Street, Kenilworth to create two new swimming pools. Specifically, this flood risk assessment is to accompany a Section 73 planning application to amend the plans approved by planning permission ref. W/21/0170. The full set of proposed changes are set out in the submitted Design and Access Statement and Planning Statement and include amendments to the proposed ground levels and ridge height of the of the permitted development.

The Environment Agency Flood Map for Planning indicates the site to be located primarily in flood zone 3, with some flood zone 2 areas within the north.

The site benefits from an extant planning permission and as such the proposals satisfy the requirements of the Sequential Test. The Exception Test need not be applied for 'Less Vulnerable' development within flood zone 3. Notwithstanding this, the assessment demonstrates that the proposed development may be completed in accordance with the requirements of planning policy subject to the following:

- Finished floor levels of the proposed building will be set at 75.65 m AOD. This provides a freeboard of 610 mm above the peak modelled flood level expected at the site in a 1 in 100 AEP event +35% climate change. In addition, the finished floor level should be at least 0.15 m above adjacent ground levels following any reprofiling of the site, with ground levels sloping down from the buildings.
- The finished floor level of the terraced areas will be set at a minimum of 75.54 m AOD, providing a freeboard of at least 500 mm above the aforementioned flood level.

There will be no impact on flood risk elsewhere when compared to the permitted scheme.

APPENDIX A

Proposed Site Plan

