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Ampney Park

Flood Risk Assessment

Project Number: 12005

Issue Date: 3rd November 2023

Revision: P2

Suitability: S4 (For Approval)

Contents

Appendices

Quality Assurance

File Name: 12005-MNW-XX-XX-RP-C-0502-S1-P2_AmpneyParkFRA.docx

Document Issue Details:

Revision	Issue Date	Issue Status	Distribution
P1	08 November 2023	S4 - Approval	Design Team

Prepared	Checked	Approved	Date
JP	DJ	BC	08 November 2023

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Whilst all reasonable care has been taken in this assessment, we cannot guarantee that during the lifetime of this development the flood risk may not exceed that stated in this report. This report has addressed the risk of flooding to the site from surface water runoff, and the conclusions stated in it are based on our best estimate using available data with a precautionary approach taken where possible. We must make it clear that the assessment of weather generated flooding is inexact and that analysis is limited by the accuracy and availability of recorded data. Higher flood risk may occur in the future due to the actions or omissions of third parties, or to poor maintenance, blockage, storm events in excess of the design standard quoted, inaccuracy or unavailability of data. Flooding beyond that estimated in this report may also occur due to climate change.

1.0 Introduction

1.1.1 Mann Williams Ltd have been appointed by Simon Morray Jones on behalf of the applicant to undertake a Flood Risk Assessment for a proposed development at Ampney Park, Ampney Crucis, GL7 5RY.

1.1.2 The site is approximately 7.2 Ha within the county of Gloucestershire and is a Grade II listed building.

1.1.3 The Ampney Park site comprises an historic Grade II listed Main House, Stone Barn, Service building, Stables Cottage, Stables and Grooms Flat, Modern indoor equestrian arena, Paddocks, Tennis court, Wooden Stables and yards and a Grounds building kitchen and yard.

1.1.4 The existing stables, arena and menage paddock are redundant equestrian infrastructure not in use within the grounds and are proposed to be removed.

1.1.5 The new development proposals include the creation of a wedding venue and associated parking for guests. Within the development site boundary, various buildings will be renovated as part of the overall scheme and detailed within the report.

1.1.6 A drainage strategy for Ampney Park, Ref:12005-MNW-XX-XX-RP-D-0451-S2-P1_Ampney Park - Drainage Strategy is reported separately to this FRA.

1.1.7 The proposal seeks to enhance the site, ensuring that the proposal is sympathetic to its setting and meets the objectives of the Cotswold District Councils Local Plan, specifically the Local Plan Strategic Objective 6 “Climate Change and Flood Risk”.

1.1.8 The Environment Agency (EA) Flood Risk Map for Planning shows the majority of the site to be within Flood Zone 1, with parts of the site falling into Flood Zones 2 & 3. All proposed development works are to be within Flood Zone 1.

1.1.9 Due to the size of the development boundary and parts of the site being situated in Flood Zones 2 and 3, this application is required to be accompanied by an FRA.

1.1.10 This FRA considers the consequences of flooding, the risk to people and property, and describes mitigation which does not increase flood risk elsewhere and shows that the use will be safe for its lifetime.

2.0 Site Location & Setting

2.1.1 The site is located at Ampney Park, Ampney Crucis, GL7 5RY in the Cotswold District of Gloucestershire. Approximate site co-ordinates are grid reference: SP064019. The site is located to the North of the A417, off Church Lane, Ampney Crucis, Cirencester.

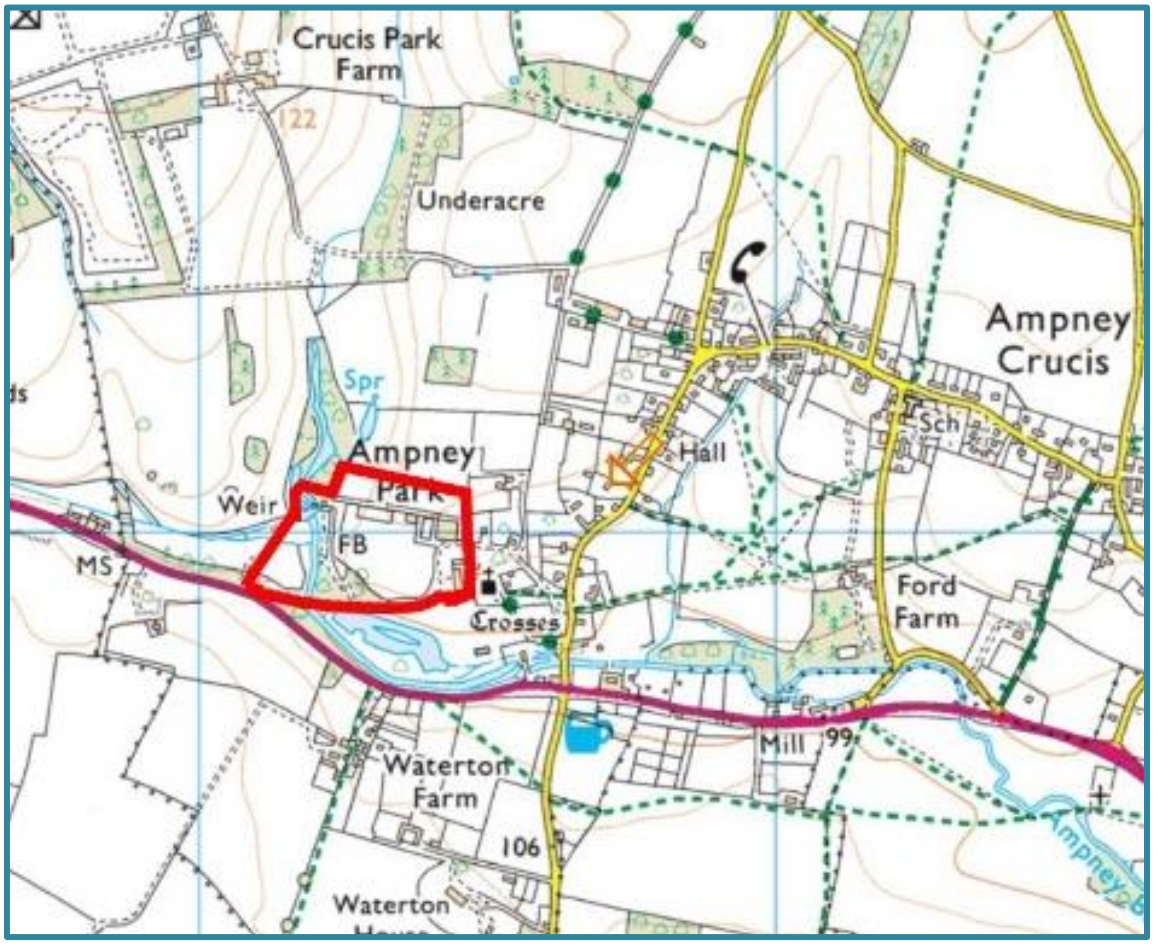


Figure 1 Ampney Park location within the wider landholding and context with Ampney Crucis (Streetmap).

2.1.2 The Ampney Park site is in the following setting:

- To the north landform rises into extended parkland and meadows, and a spring situated outside the development boundary to the north west.
- To the west, land falls away to Ampney Brook which flows southwards before changing to an easterly direction adjacent to London Road.
- South of the site is London Road, Ampney Brook and further meadows and mixed agricultural use.
- East of the site is village of Ampney Crucis with mixed residential and commercial buildings with rear gardens at a similar elevation.

2.1.3 Generally, the site falls from the Northeast to the Southwest towards Ampney Brook and a hydraulically connected lake which lies with the properties redline boundary.

Figure 2 Ampney Park site with hydraulic features highlighted. (https://maps.bristol.gov.uk/pinpoint/)

3.0 Existing Site/Ground Conditions/Infiltration Characteristics

3.1.1 The site area is approximately 7.2 Ha in size.

3.1.2 The majority of the site is greenfield with the main house and existing redundant equestrian infrastructure on site considered to be brownfield (previously developed).

3.1.3 Within the site boundary is the main river of Ampney Brook along with a Lake which are hydraulically connected as illustrated in Figure 5.

Figure 3 Aerial photography of the site, with redline boundary (gridreferencefinder.com)

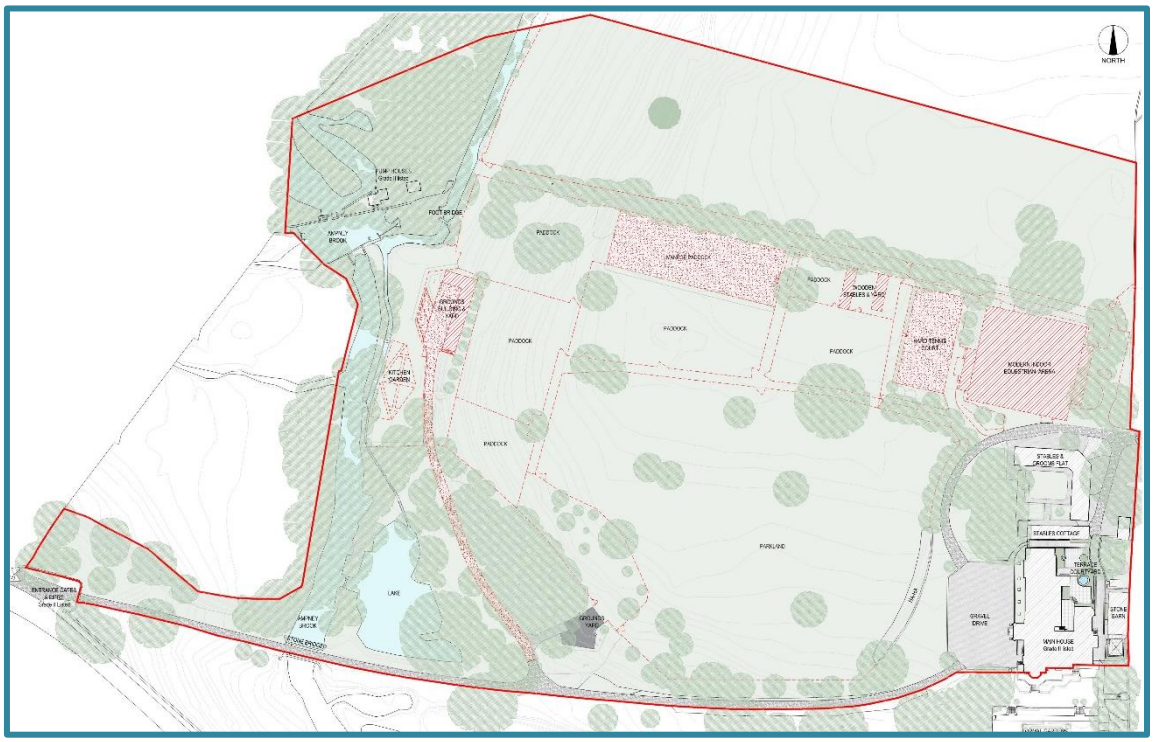


Figure 4 Existing Site Plan

3.1.4 Topographic surveys have been undertaken and show that the site is highest towards the North and East and falls towards the brook located towards the West and South. Levels are approximately 109.5m AoD at the highest parts of the site and around 100mAoD around the brook. This has been illustrated in Figure 5.

3.1.5 Geological data held by the British Geological Survey (BGS) indicates that the bedrock geology underlying the site comprises of Forest Marble Formation.

3.1.6 The Soilscapes soils data held by landis.org.uk, shows that the site is ‘Shallow lime-rich soils over chalk or limestone with freely draining drainage’.

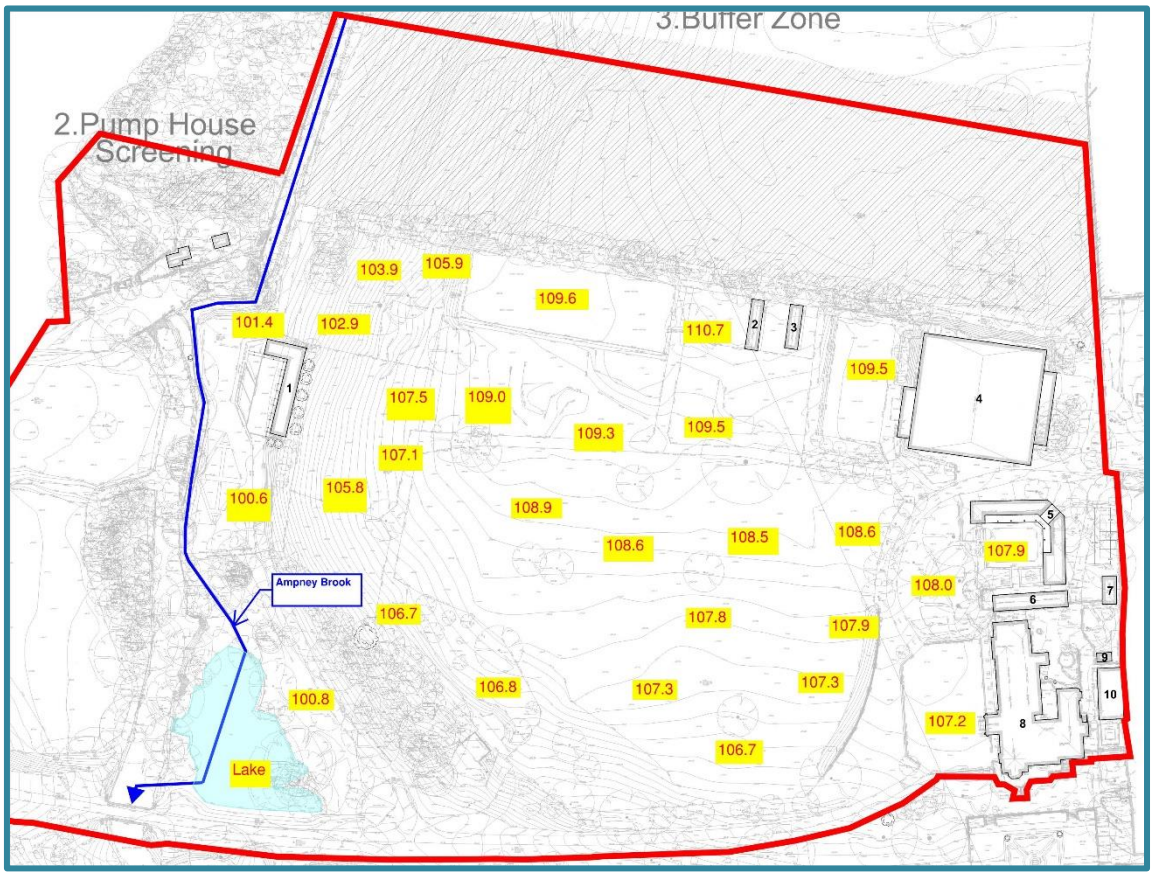


Figure 5 The Ampney Park topographic survey with annotated levels in yellow All to m AOD.

4.0 Proposed Development

4.1.1 The proposals involve the sensitive restoration of the stables accommodation and stables cottage and a seasonal ceremony space whilst creating a new wedding venue and associated parking. The proposal seeks to include measures to restore the property for a long-term benefit, comprising;

- Sensitive care for the historic buildings.
- Use authentic and traditional materials found in the area where possible.
- Create a connection between the home and the surrounding nature and countryside.
- Using sustainable methods of drainage throughout the scheme to reduce or eliminate the risk of flooding.

4.1.2 Annex 3 of the Flood risk vulnerability classification indicates that the proposed development, comprising residential and commercial accommodation associated with the use of a wedding venue site is classed as “More vulnerable” except the seasonal ceremony space which is classed as “water compatible”.

4.1.3 A copy of the proposed site layout can be found in Appendix 1.

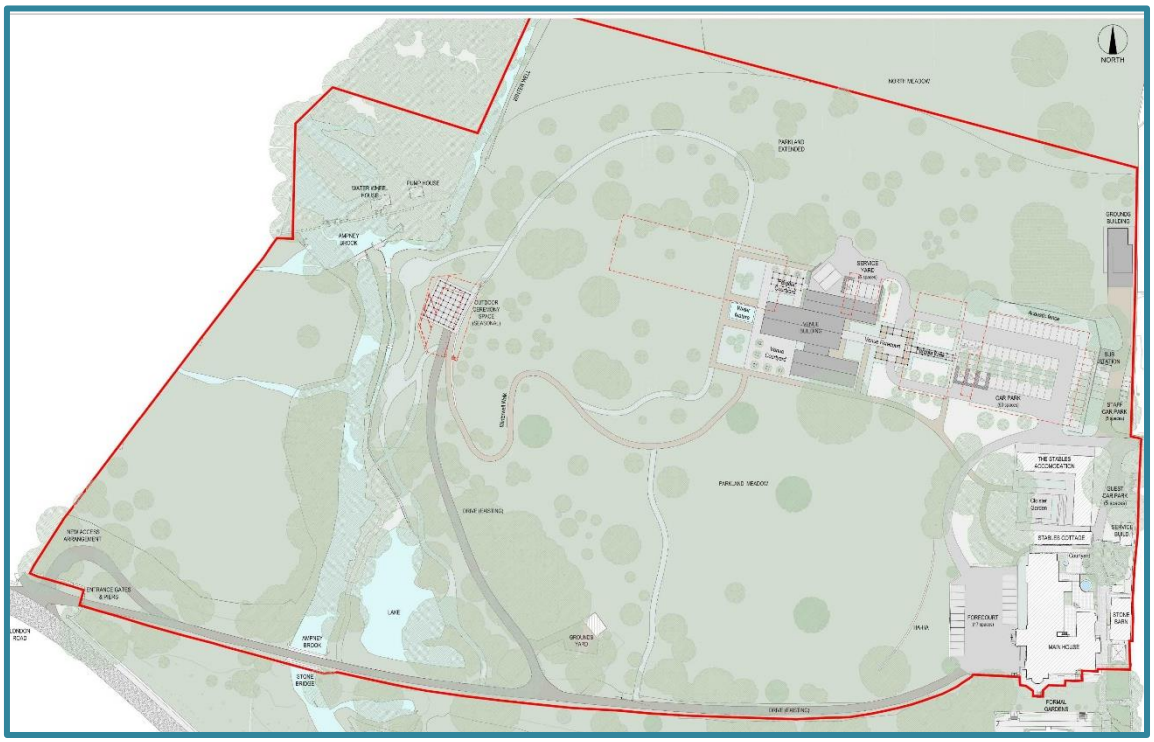


Figure 6 Proposed site plan, a detailed copy is attached in Appendix 1.

5.0 Flood Risk

5.1.1 Local Planning Authorities have a statutory obligation to consult the Environmental Agency (EA) on all applications in flood risk zones. The EA will consider the effects of flood risk in accordance with the National Planning Policy Framework (NPPF).

5.1.2 This Flood Risk Assessment considers all sources of flooding and the risks associated in accordance with the NPPF.

5.1.3 The EA Flood Map for Planning (Figure 7), shows the majority of the site to be in Flood Zone 1 with small areas of the site extending into Flood Zones 2 and 3.

Figure 7 EA Flood Map for planning with Ampney Park redline boundary

5.2 Fluvial Flooding

5.2.1 The site is located within the Ampney and Poulton Brooks (Source to Thames) main river, which is located to the West and South of the proposed site boundary.

Proposed Wedding Venue, Car Park and The Stables Cottage and Stables Accommodation

5.2.2 As Ampney Brook is located within the development site boundary, approximate levels of the brook have been obtained through the topographical survey and are found to be at approximately 100.1m - 100.4m AoD. The Finished Floor Level's of the proposed wedding venue and car park are at approximately 109.5mAoD and 108.0, eliminating the risk to the properties relating to fluvial flooding from Ampney Brook. Existing finished floor levels for the Stables Cottage and Stables Accomodation will remain as existing at 107.2m AoD and 108.0m AoD respectively.

Proposed Seasonal Ceremony Space

5.2.3 The proposed seasonal ceremony space to the west of the development replaces the existing Grounds Building. The seasonal ceremony space will be an external open structure (like a

pergola) and will be flood resilient. The design will ensure that the risk to the structure is unaffected by fluvial flooding.

5.2.4 The proposed floor levels of the seasonal ceremony space are proposed to match the existing and is illustrated in Figure 8, thus avoiding the displacement of water and preventing an increase in offsite flooding.

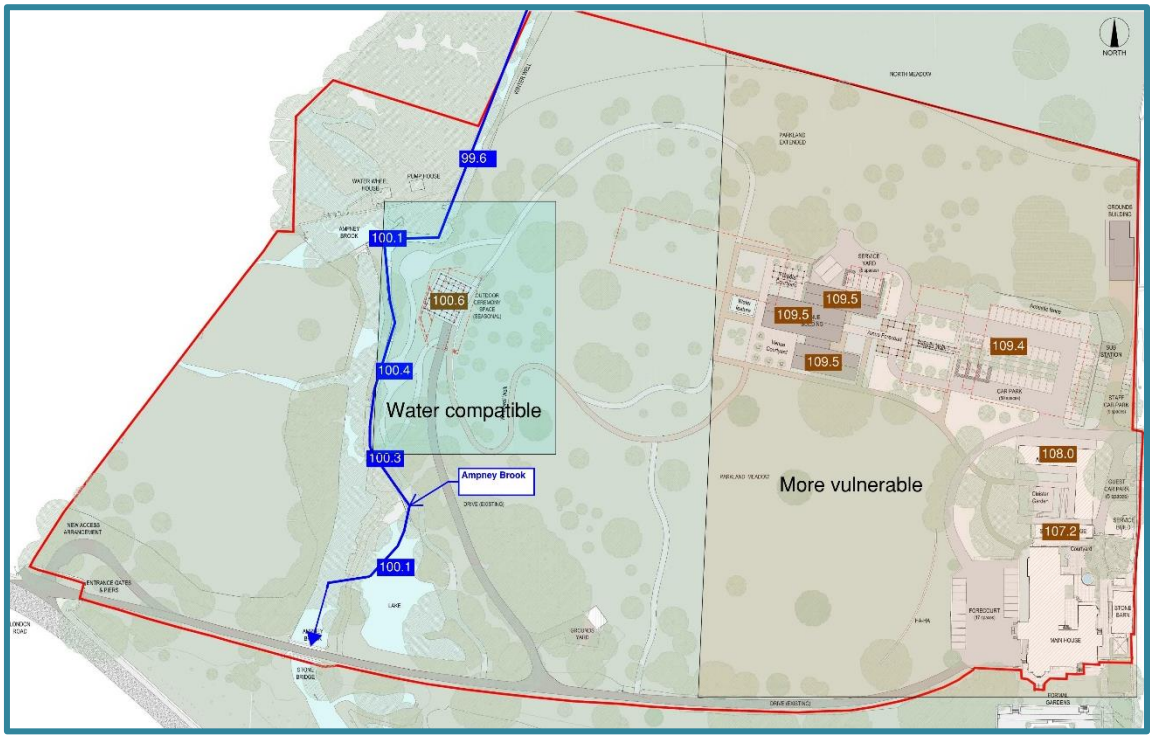


Figure 8 Development proposal with key Finished floor levels (brown) and key levels of Ampney Brook obtained from the topographical survey with Annex 3: Flood risk vulnerability classifications highlighted.

5.2.5 Given that the majority of the site is located within Flood Zone 1, where the majority of the proposed development is to take place, it is considered that the risk of flooding from fluvial sources is considered very low. The proposed seasonal ceremony space which has been highlighted as the only structure within an area at risk of flooding but will be a flood resilient structure classed as water compatible matching the existing floor levels of the existing Grounds Building.

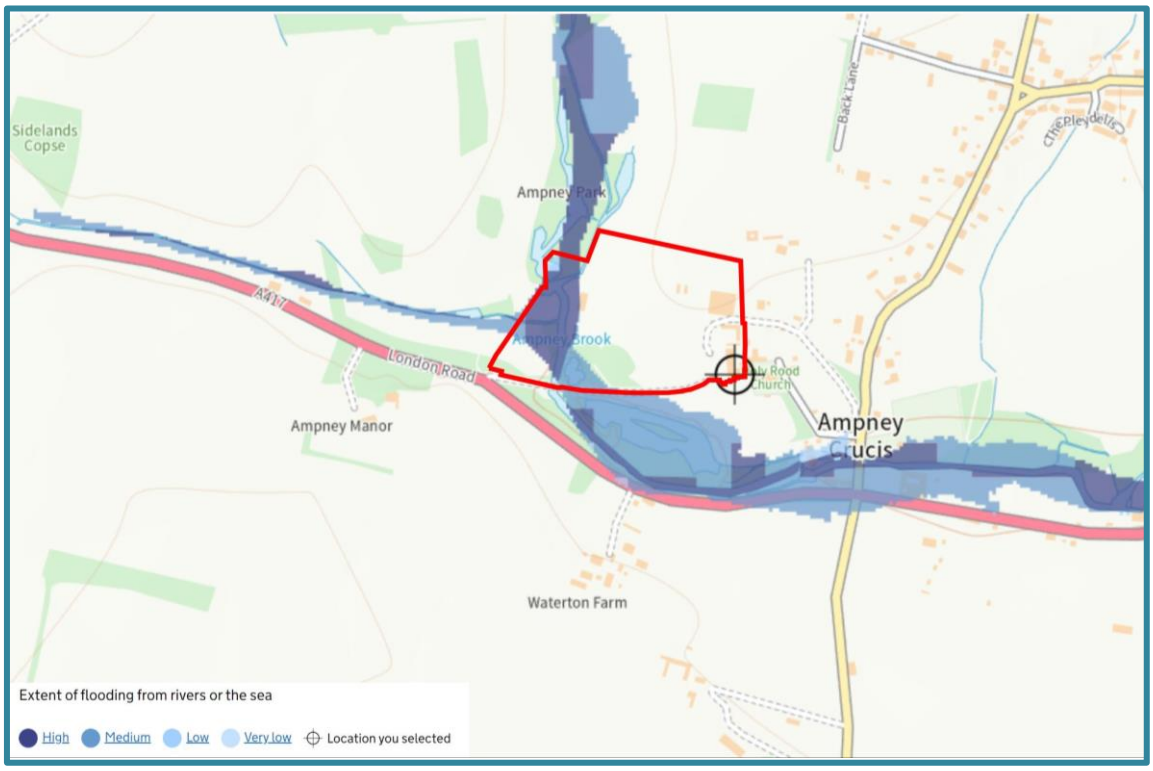


Figure 9 EA Flood Map Extent of flooding from rivers and seas (Fluvial)

5.3 Surface Water Flooding

5.3.1 The EA Extent of surface water flooding map (Figure 10), indicates the majority of the site to be at very low risk of surface water flooding.

5.3.2 The Low-Risk Scenario map (Figure 11) illustrates water flood depth on site. The map indicates that areas around Ampney brook, to the west of the site are shown to be over 300mm deep, due to the proximity to the river. The low-risk scenario map confirms that the proposed development will not be affected by surface water flooding in all areas of development except the seasonal ceremony space, which will be made to be flood resilient to surface water flooding.

5.3.3 The proposed development site is therefore shown to be safe in a Low-Risk scenario and not currently considered to be vulnerable to surface water flooding.

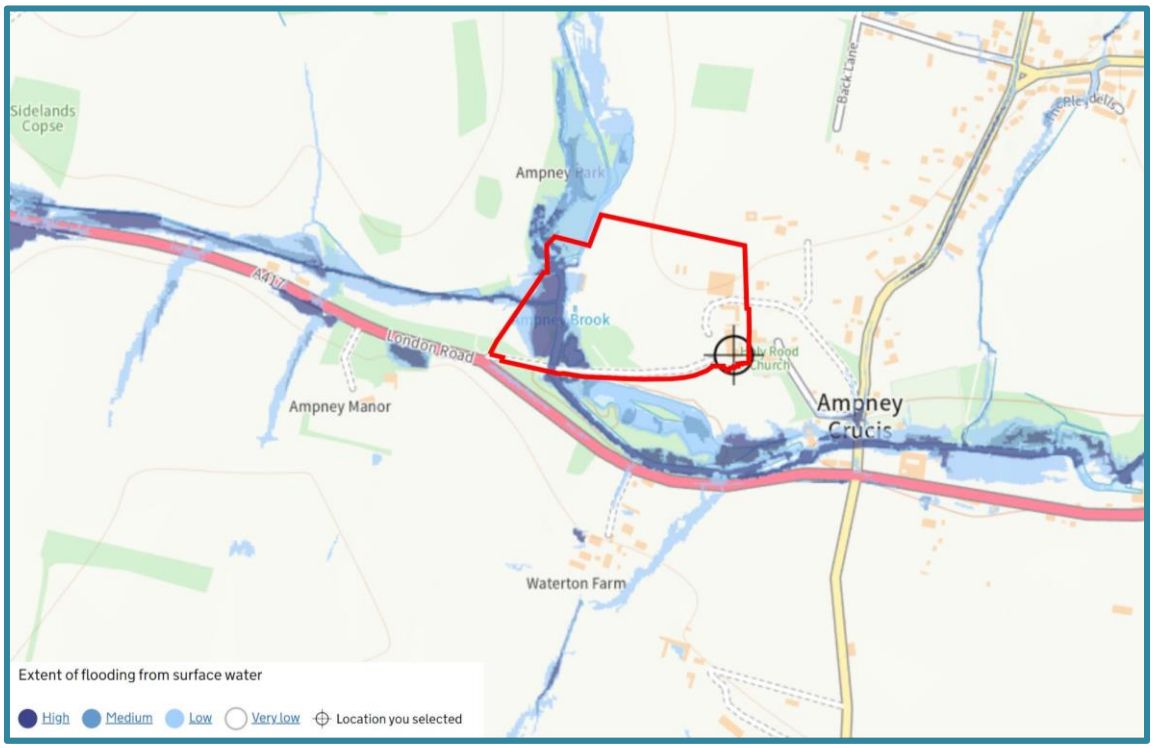


Figure 10 EA Extent of flooding from surface water map

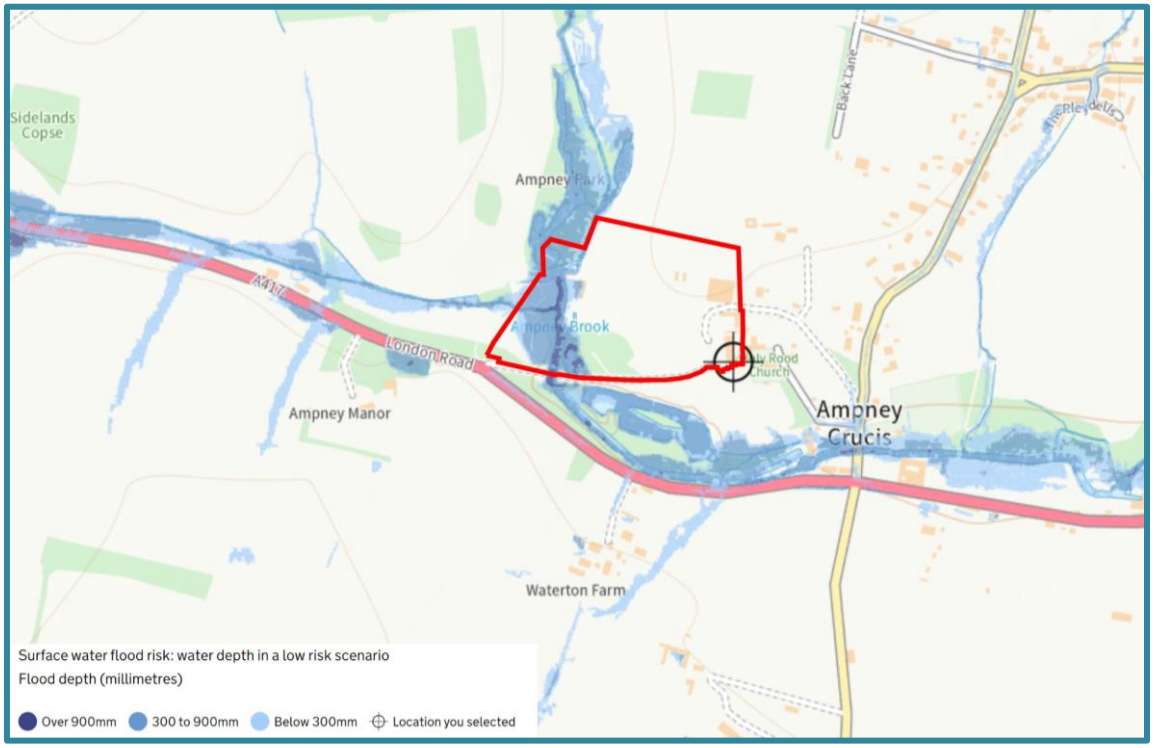


Figure 11 EA Surface water flood risk map for Low-Risk Scenario – flooding more than 300mm shown in areas to the west of the site away from the proposed development.

5.4 Reservoir Flooding

5.4.1 According to the EA's extent of reservoir flooding map, the site has been found to not be at risk of flooding from reservoirs, so is considered to be at very low risk.

5.5 Other Sources of Flooding

5.5.1 There have been no recorded incidents of Groundwater flooding within the vicinity of the site mentioned in the Cotswold District Council's SFRA dated March 2022. Considering the developments location, it is considered to be highly unlikely that groundwater flooding would occur on this site.

5.5.2 According to the government long term flood risk website (https://check-long-term-flood-risk.service.gov.uk/risk), groundwater flooding at the site is considered to be unlikely.

5.6 Historic Flooding

5.6.1 The site is not recorded as being previously flooded according to the EA historical record of flooding map.

5.7 Flooding from Sewers

5.7.1 There have been no recorded incidents of flooding from sewers within the vicinity of the site mentioned in the Cotswold District Council's SFRA dated March 2022.

5.8 Mitigation

5.8.1 Proposed external works scheme will be developed to ensure that surfaces nominally fall away from buildings to ensure any overland surface water flows will be directed away from the buildings and follow the existing and proposed exceedance roots.

5.8.2 The landscaping is to be designed to convey water away from the buildings.

6.0 Surface Water Drainage

6.1 Site wide strategy

6.1.1 Surface Water runoff generated from the development will continue to be managed via infiltration.

6.1.2 The SuDS hierarchy demands that surface water run off should be disposed of as high up the following list as practically possible:

- Into the ground (infiltration) and re-use, or then;
- To a surface water body, or then;
- To a surface water sewer, highway drain or another drainage system, or then;
- To a combined sewer.

6.1.3 It is anticipated that no additional surface water runoff will be generated by the proposed development.

6.1.4 Surface water runoff will drain partially to the ground, as existing and overland flows collected via SuDS features to slow down and improve water quality before infiltration into the surrounding greenfield areas.

6.1.5 The site will increase the number of permeable areas on-site through the creation of landscaped areas, which will provide water quality, amenity and ecology benefits. It is recommended that rainwater harvesting techniques and bioretention planters are considered/installed where this is feasible and should be reviewed as part of the detailed design process.

6.1.6 A full maintenance regime will be implemented at detailed design stage and will provide input into the operation and maintenance manual (O&M).

7.0 Safety and Means of Escape

7.1.1 The proposed development site except the seasonal ceremony space is not subject to any form of severe flooding, therefore in the event of an extreme event occurrence, access and egress to/from the site can be easily achieved to higher parts of the site as necessary.

7.1.2 It is proposed that the site owners are to be aware of any risk of flooding in advance of any proposed use of the seasonal ceremony space to ensure that relevant precautionary safety measures are in place.

8.0 Maintenance

8.1.1 Maintenance of SuDS features are essential to ensure that the surface water drainage system operates effectively and that flooding of the site and surrounding areas is prevented.

8.1.2 The responsibility of maintaining the surface water and foul water networks would be with the landowner or a management company for the other areas. The maintenance of any private drainage systems will be the responsibility of the property owner to maintain.

8.1.3 Where proprietary products are specified the manufacturer's instructions and recommendations should be followed.

9.0 Summary and Conclusions

9.1.1 This FRA considers the consequences of flooding, the risk to people and property, and describes mitigation which does not increase flood risk elsewhere and shows that the use will be safe for its lifetime. It has been concluded, through guidance from the EA, that the flood risk to the site is very low.

9.1.2 The majority of the site is greenfield apart from the residence and various outbuildings and associated hard infrastructure considered to be brownfield.

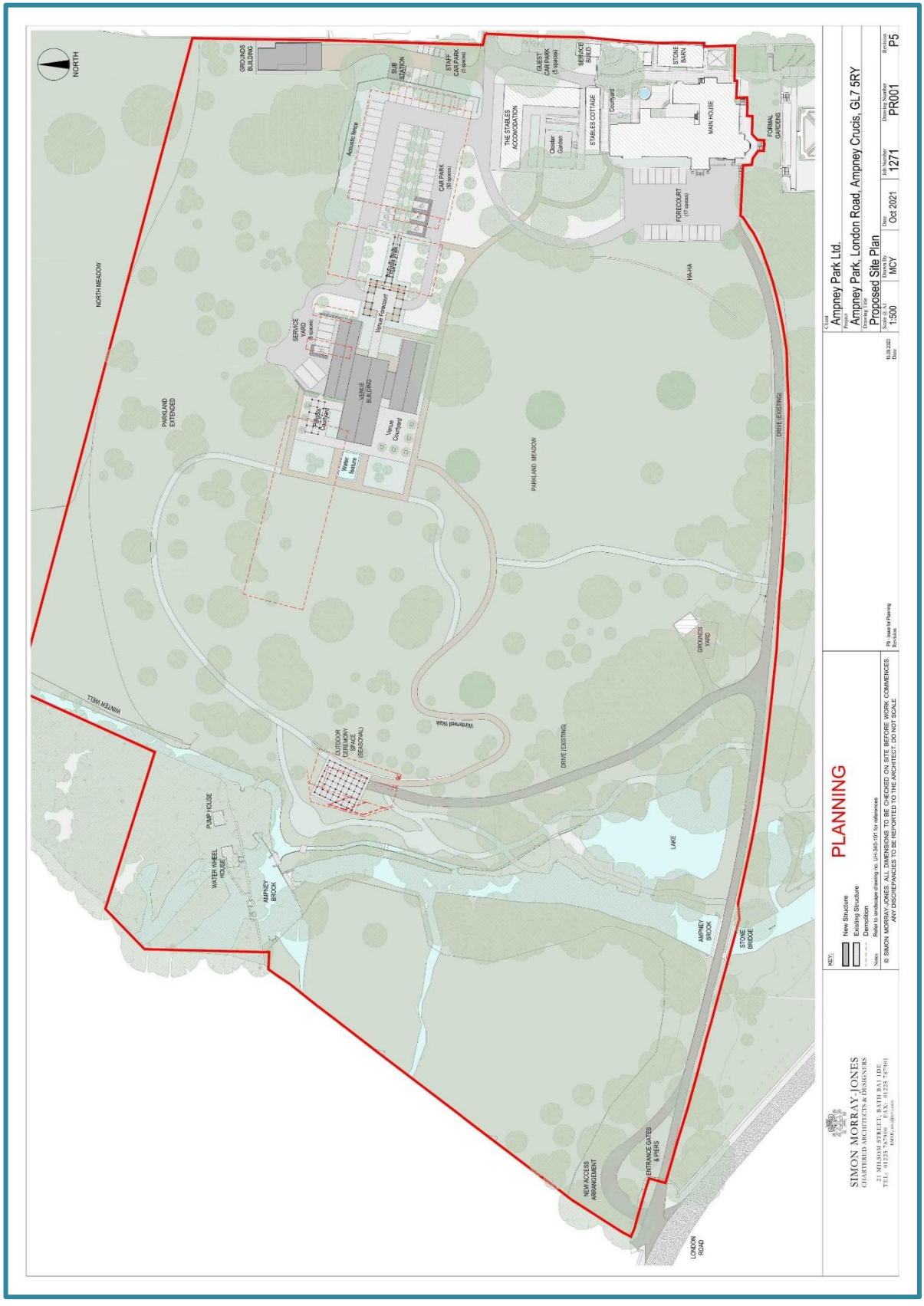
9.1.3 Surface Water runoff generated from the development is proposed to be managed via infiltration and as such will not increase the risk of offsite flooding.

9.1.4 It is proposed to redevelop the site by restoring and renovating the estate using a sustainable and sensitive approach with the aim to provide a long-term benefit for the listed building.

9.1.5 The Defra long term flood risk mapping shows the majority of the site to be at very low risk of flooding.

9.1.6 The proposal is considered to accord with the requirements of the National Planning Policy Framework (NPPF) with residual risk to the site fully mitigated, and as such considered to be at a very low risk of flooding.

Appendix 1 – Proposed Site Plan



Appendix 2 – Topographic Survey