



TEWKESBURY TOWN COUNCIL

PLANNING COMMITTEE

Wednesday 1st November 2023

To: Cllr. Joanne Raywood, Cllr. Simon Raywood, Cllr Alan Hayes, Cllr. Paul Jones, Mr Ryan Maggs and Mr Richard Carey

You are summoned to a meeting of the Planning Committee, to be held in the Court Room,
Tewkesbury Town Hall, on

Wednesday 1st November, at 7.30 pm.

Members of the public and press are welcome to attend.

Debbie Hill
Town Clerk
25th October 2023

AGENDA

1. **Welcome.**
2. **To receive apologies for absence**
3. **To receive declarations of interest**
4. **To receive and consider requests for dispensations**
5. **Public participation** *(to provide members of the public/press with the opportunity to comment on items on the agenda or raise items for future consideration. In accordance with Standing Orders this will not exceed 12 minutes in total and 3 minutes per person)*
6. **To approve the minutes of the Planning Committee meeting held on 18th October 2023**
7. **To receive updates on matters arising from the minutes – for information only**
8. **To note correspondence**

9. **To receive the Borough Councillor's report (if applicable)**
10. **Change of use of the first and second floor of Cross House from Class E to Class C3.**
Cross House Church Street Tewkesbury Gloucestershire GL20 5AB
Ref. No: 23/00731/FUL
11. **Proposed works to two trees in rear garden: T1 - Yew - Crown reduction by 1.5m T2 - Douglas Fir - Poor specimen and outgrown its location, the removal will also stop the holly being suppressed**
Planning Application
74 High Street Tewkesbury Gloucestershire GL20 5LA
Ref. No: 23/00929/TCA
12. **As recommended after inspection by Matt Hale. T32 Self sown Purple plum - the tree is very close to Abbey House and has outgrown its location - remove tree to avoid damage to building. T2 Lawson Cypress cultivar -This tree is located in Abbey Lodge back Garden but is in the conservation area. This tree has outgrown the area it was planted in and has not been managed, it now has grown very tall and is blocking out the light to the kitchen in Flat 4. Detailed plan submitted showing the location and updated photos showing current size and proximity to the buildings.**
Planning Application
Abbey Office Church Street Tewkesbury Gloucestershire GL20 5RZ
Ref. No: 23/00924/TCA
13. **Increase existing ridge height to facilitate loft conversion, installation of side dormer and rooflights. Partial render of existing property.**
Planning Application
Christowe Abbots Walk Tewkesbury Gloucestershire GL20 5TA
Ref. No: 23/00868/FUL
14. **Erection of a surface-mounted ancillary storage building anchored to existing hardstanding.**
Planning Application
Corus Panels And Profiles Severn Drive Ashchurch Tewkesbury Gloucestershire GL20 8SF
Ref. No: 23/00855/FUL
15. **Change of use of two commercial units to residential houses**
Planning Application
The Builders Yard Swilgate Road Tewkesbury Gloucestershire
Ref. No: 23/00902/FUL
16. **Replacement sash windows, replacment finials, new graphics/signage**
Planning Application
7 Barton Street Tewkesbury Gloucestershire GL20 5PP
Ref. No: 23/00895/LBC
17. **Regularisation of fascia**
Planning Application
2 Barton Street Tewkesbury Gloucestershire GL20 5PP
Ref. No: 23/00836/LBC
18. **Footpath AAS7 (Route A-B-C-D-E) altered to follow route A-W-X-Y-E.**

Planning Application
Parcel 4256 Homedowns Tewkesbury Gloucestershire
Ref. No: 23/00903/FTP

19. Installation of a Heat pump through Octopus Energy.

Planning Application
21 Melrose Walk Tewkesbury Gloucestershire GL20 5FW
Ref. No: 23/00851/FUL

20. Demolition of an existing extension and boundary wall. Construction of new single and two storey rear extensions, covered link and replacement boundary wall.

Planning Application
10 East Street Tewkesbury Gloucestershire GL20 5NR
Ref. No: 23/00892/FUL

21. To prepare a draft submission to the Worcestershire Development Plan review

[South Worcestershire Development Plan Review | Local Plan Examination Services
\(localplanservices.co.uk\)](https://www.localplanservices.co.uk/south-worcestershire-development-plan-review)

22. To note any additional information on the Planning Portal regarding applications to which this committee has already responded, and agree further actions

23. To note any additional applications on the Planning Portal which will expire before Wednesday 1st November 2023 and agree further actions

24. To note the decisions made in September 2023, in respect of planning applications to Tewkesbury Borough Council

25. To receive an update on CIL and reconsider the timetable of our CIL reporting, to coordinate better with the schedule of CIL payments



TEWKESBURY TOWN COUNCIL

PLANNING COMMITTEE

Wednesday 18th October 2023

Present: Cllrs. J Raywood, S Raywood, A Hayes, P Jones, Mr R Maggs and Mr R Carey

MINUTES

- P.23/24.243 Welcome.**
The Chairman welcomed everyone present when the meeting opened at 7.33pm.
- P.23/24.244 To receive apologies for absence**
None
- P.23/24.245 To receive declarations of interest**
Cllr S Raywood – item 11 DPI – employed by the Planning Inspectorate
- P.23/24.246 To receive and consider requests for dispensations**
None
- P.23/24.247 Public participation** *(to provide members of the public/press with the opportunity to comment on items on the agenda or raise items for future consideration. In accordance with Standing Orders this will not exceed 12 minutes in total and 3 minutes per person)*
None
- P.23/24.248 To approve the minutes of the Planning Committee meeting held on 4th October 2023**
Proposed by Cllr Jones and seconded by Cllr Hayes
It was resolved to **approve** the minutes.
- P.23/24.249 To receive updates on matters arising from the minutes – for information only**
Re. **P.23/24.010** - There has been no further information forthcoming on 23/00287/LBC.
Re. **P.22/23.392** - There has been no further information forthcoming on 22/00462/LBC.
Five town councillors attended a workshop on the Garden Town at the Borough Council offices on 11th October . The mood of the meeting was considerably more

positive than at previous meetings that were held prior to 2020 and many assurances were given that we would be listened to.

P.23/24.250 To note correspondence

The Town Council has received confirmation from TBC of TPO 415 for two individual oak trees and a group of oak trees at Tewkesbury Park.

P.23/24.251 To receive the Borough Councillor's report (if applicable)

Cllr Bowman could not attend to give a report in person but gave a verbal report to the chairman earlier in the day. Tewkesbury Borough Council has lost another appeal case due to its lack of an adequate Five-Year Housing Land Supply. A statement will be issued shortly.

P.23/24.252 Single-storey rear extension to dwelling

Planning Application

15 Tretawn Gardens Newtown Tewkesbury Gloucestershire GL20 8EF

Ref. No: 23/00854/FUL

Observations:

No objection

P.23/24.253 To consider what issues the Council needs to raise with the Planning Inspector, with respect to the South Worcestershire Development Plan, bearing in mind that our response to the Regulation 19 consultation, that was submitted in December 2022, will be considered as part of the evidence base

[South Worcestershire Development Plan Review | Local Plan Examination Services \(localplanservices.co.uk\)](#)

As a consultee, the Council can engage with the review process, either verbally or by a written submission. Both forms of submission carry equal weight but a written submission has the advantage of being able to convey the majority view of the council, in a form of words agreed by the Council. The chairman recommended that the Council should make its submission in written format. Any individual councillor may, of course, make their own submission, either verbal or written, but in doing so should make it clear that in doing so they are not speaking on behalf of Tewkesbury Town Council.

The Town Council has already submitted a detailed response to the Regulation 19, but since that date it has consulted a hydrology consultant regarding current proposals for the site east of Bredon Road, which forms a part of the SWDP. The Hydrologist's report highlights the importance of maintenance of SUDs and other alleviation measures. The Town Council's submission could therefore focus on the need to ensure that measures will be in place to enable a sustainable plan for maintenance to be carried out, with assured adequate funding and a durable organisation to organise and carry out the work.

An initial draft response will be prepared and circulated amongst committee members, so that a final draft response can be agreed by the committee on the 1st

November, following a meeting with the hydrologist on 30th October, and presented to Full Council for approval on 13th November.

P.23/24.254 To consider recent correspondence concerning the future of cemetery provision in Tewkesbury, particularly in respect of the proposed garden town, and to determine next steps

Councillor J Raywood reported that, at last week's workshop on the Garden Town, she raised this correspondent's concerns, so it is now recorded as something that needs to be thought about. The ensuing discussion at the workshop raised the observation that cemeteries cannot be situated in locations where the highest anticipated groundwater level is less than 1m below the base of the graves. (HM Government guidance on protecting groundwater from human burials: October 2023) How many locations in Tewkesbury are therefore suitable for the purpose? Perhaps the most suitable elevated sites in the parish are currently subject to applications to build housing.

As the Town Council, like all parish councils, is a burial authority, this issue will be brought to the attention of Full Council, to see how they wish to proceed further.

P.23/24.255 To note any additional information on the Planning Portal regarding applications to which this committee has already responded, and agree further actions

None

P.23/24.256 To note any additional applications on the Planning Portal which will expire before Wednesday 1st November 2023 and agree further actions

None

P.23/24.257 To note the decisions made in September 2023, in respect of planning applications to Tewkesbury Borough Council

Noted

There being no further business, the meeting closed at 8.23pm.

Chairman's signature

1st November 2023



First draft submission to the South Worcestershire Development Plan Review

In December 2022 this council responded to the Regulation 19 Consultation, expressing particular concerns with regard to potential adverse impacts on Tewkesbury, with particular respect to road infrastructure and flooding.

Since that time, the Town Council has consulted a consultant hydrologist for advice on an application to Tewkesbury Borough Council, to build 500 houses, which would constitute the first phase SWDPR 54 Mitton. The hydrologist's advice has helped us to understand that, while the SuDs and other flood alleviation measures detailed in the application will serve to protect the residents of Tewkesbury from a heightened risk of flooding, we will only be protected for as long as they are scrupulously maintained. We therefore request that development on site SWDPR 54 Mitton should only be permitted subject to the following conditions, as advised by our consultant hydrologist.

- Approved consent from the Environment Agency has been received for the construction of the surface water outfalls for discharge into the Carrant Brook.
- A maintenance plan including details of scheduled regular inspections is implemented for the proposed attenuations basins. The SuDs features should be maintained for the lifetime of the development.
- Water quality monitoring of the Carrant brook should be undertaken as part of the development proposals so that should any contamination or water quality issues arise, the proposed development can be eliminated as a source.
- The site developer, the contractor and future dwelling occupiers should sign up to Flood Risk Alerts and Warnings

We append a copy of the consultant hydrologist's report to this submission.

The extreme distress and disruption that were suffered by residents of this parish during the floods of 2007 must not be repeated. On that occasion, homes that had never been flooded before were suddenly and unexpected inundated, as a result of development that impacted on the floodplain.

In section 7 of our response to the Regulation 19 Consultation, the Town Council stated that we look for betterment in any development, regarding flood alleviation measures. We understand that it would be unreasonable to expect any developer to mitigate for the impacts of works of other developers, in the past or in the future, but we believe that it would be unreasonable for a neighbouring district authority to plan for its own projected housing needs in a way that could potentially have an adverse impact our parish.



**H Fraser
Consulting**

Contaminated Land
and Hydrogeology

Assessment of flood risks associated with Land East of Bredon Road

Tewkesbury



Prepared for: Tewkesbury Town Council
Town Hall
High Street
Tewkesbury
GL20 5AL

Date: 01/09/2023

Status: Draft

Reference: 30787 R1D1

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H Fraser Consulting

Contaminated Land
and Hydrogeology

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Where this report relies on field data these will have been interpreted with reasonable skill care and diligence, but these data may not fully represent true conditions. Ground conditions may vary from those assumed on the basis of data relied on in this report.

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Version History

Version	Author	Approved by	Issue date	Comment
30787R1D1	Jack Croft Greg Walton	Joe Gomme	01/09/23	Draft report issued to client

Final report signatories

Author	Approved by
E-signature	E-signature
<author name>	<approver name>

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1. INTRODUCTION

Tewkesbury Town Council (TTC) has instructed H Fraser Consulting Ltd (HFCL) to undertake an assessment of flood risks with a parcel of Land East of Bredon Road, Tewkesbury. This land is located within or in close proximity to Flood Zones 2 and 3 (as designated by the Environment Agency) associated with the River Severn, River Avon and the Carrant Brook.

1.1 Objective

A Flood Risk Assessment (FRA) has already been completed by third parties in support of a planning application at the site. HFCL aimed to review the study, including the effects of climate change, and provide more focus on the impact of development on downstream and off-site receptors. In particular, this report examines whether the development will change floodplain storage and affect the rate of run-off during a storm event. In addition HFCL was asked to make recommendations as to whether additional data acquisition, more detailed risk assessment or mitigation is necessary to address risks to offsite receptors.

1.2 Scope of works

The following work has been undertaken:

- Desk study including collation of Environment Agency data, commercial flood risk data, Strategic Flood Risk Assessment (SFRA) and construction proposals;
- Review of previous work;
- Site walkover;
- Flood risk assessment;
- Reporting and recommendations.

2 DEVELOPMENT

2.1 Site location

The "site" is located to the north of Tewkesbury town, with the western boundary along Bredon Road and the eastern boundary along the Carrant Brook. The site is approximately 48 ha in size, enclosing a number of fields east of Bredon Road/Tewkesbury Road, Bredon's Hardwick, Bredon, Wychavon, Worcestershire. The site location is presented in Figure 2.1

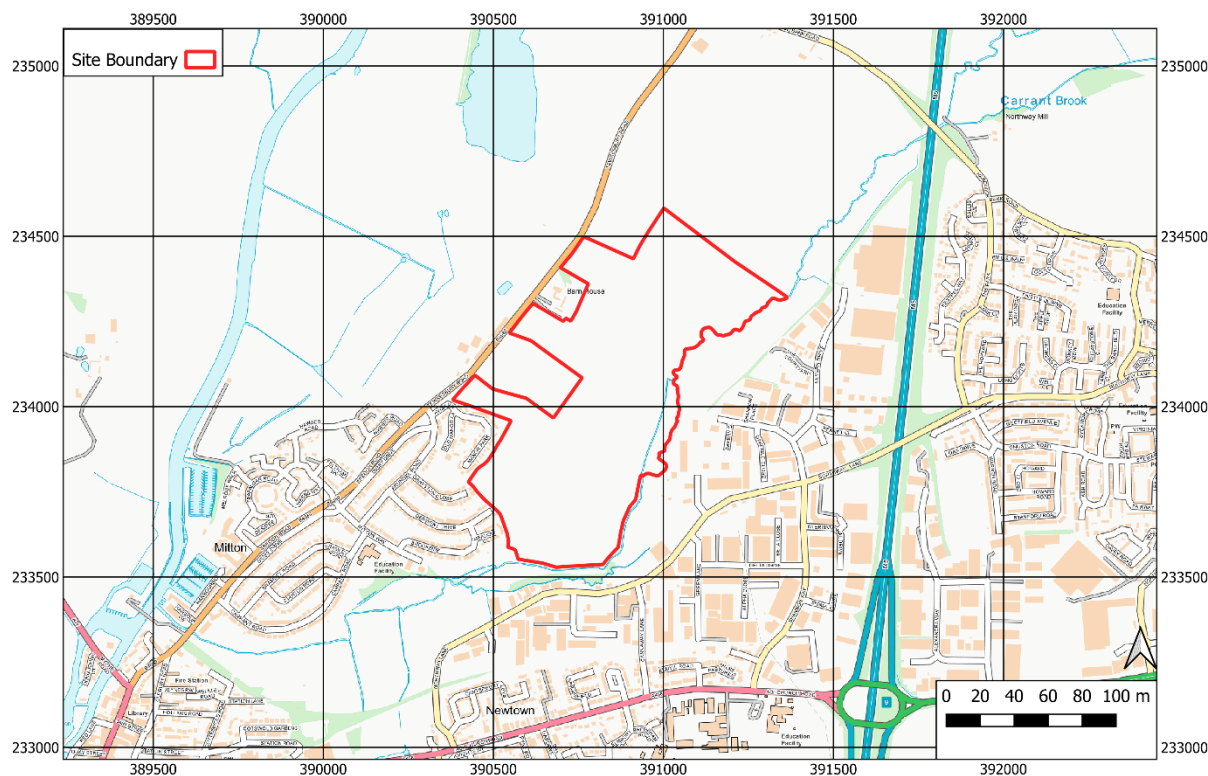


Figure 2.1 Site location

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2.2 Existing development

The site is currently used as agricultural land. The land sits within the flood plain of the River Avon, and slopes gently from slightly over 30 m aOD close to Bredon Road to 12 or 13 m aOD along the eastern boundary. It is divided into a number of fields which are separated by hedgerows, and short (c.1 m) fences. At the eastern border of the site, particularly where the Carrant Brook flows south-westward, mature trees are abundant.

The aerial view of this site currently is shown below in Figure 2.2.



Figure 2.2 Aerial image of the existing site layout

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2.3 Proposed development

The proposed site development would change the land use from agricultural to residential dwellings. The dwellings will be constructed towards the westerly side of the site.

Approximately 27 new dwellings will be built, as well as accommodating the necessary infrastructure including highways, pedestrian footpaths and cycle routes. An orchard will be developed between these dwellings for residents to use. Approximately 14 ha of open parkland will be situated on the east side of the site, providing recreational open space for residents, as well as additional drainage.

The proposed development will increase the impermeable areas at the site, therefore decreasing the amount of surface water that could infiltrate. To provide attenuation of the increased surface waters, five attenuation basins have been proposed as part of the Sustainable Drainage Strategy. The attenuation basins will be placed between the park and dwellings to reduce flood risk. These attenuation basins are discussed in section 6. An extract of the proposed development is presented in Figure 2.3 below.

Figure

2.3

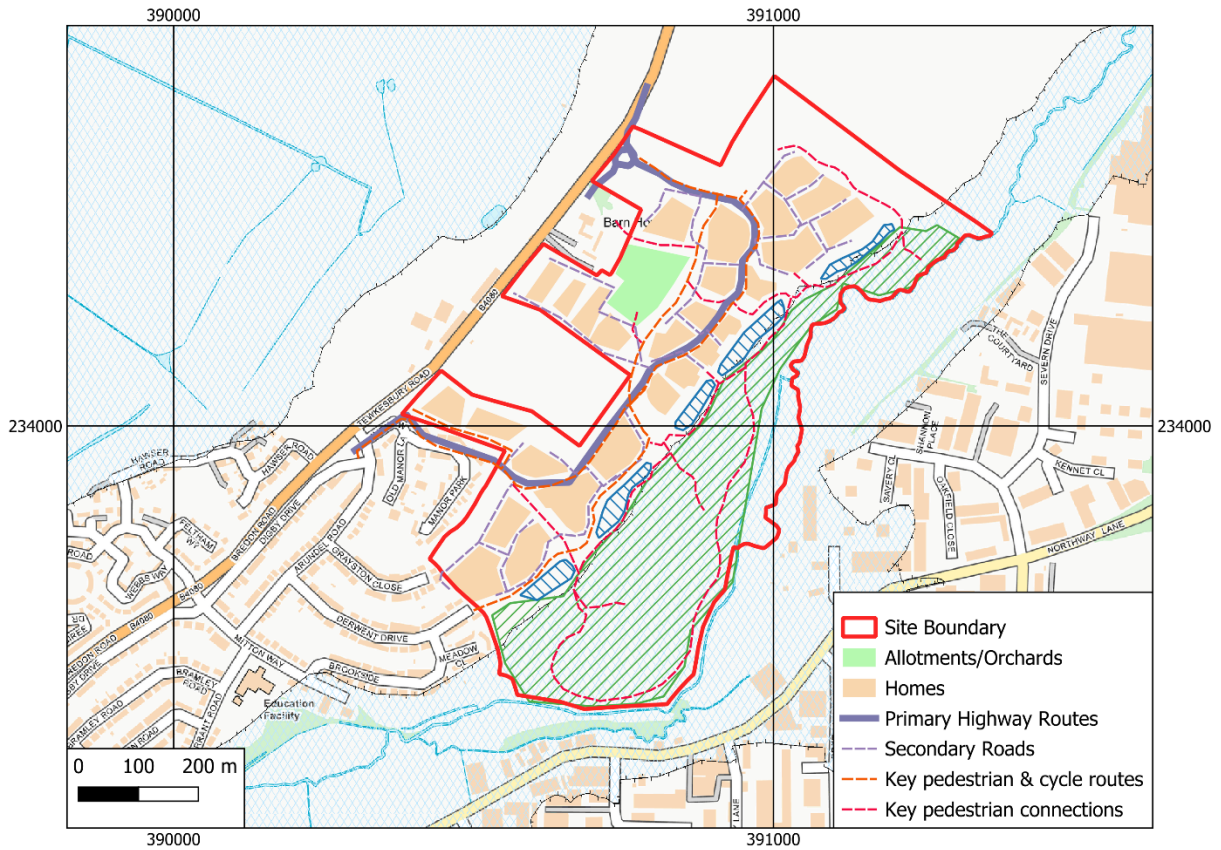


Figure 2.3 Proposed development on the site

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2.4 Surrounding land use

The site is located near residential areas of Old Manor Lane and Manor Park. Towards the southeast across the floodplain, the land is used for industry with the M5 Ashchurch Interchange located c.1 km further east. The site will surround three sides of Tewkesbury Allotments, towards the centre west.

3 DESK STUDY

3.1 Sources of information

Data has been derived from the following sources:

- Geological information has been derived from on-line sources of the British Geological Survey (BGS), including BGS' Geology of Britain Viewer, GeolIndex and Lexicon;
- Geological Survey of England and Wales 1:50,000 geological map series, Sheet 216, Tewkesbury, Solid and Drift, 1988;
- On-line mapping and aerial photography have been derived from Streetmap, Googlemaps, and GoogleEarth;
- Strategic Flood Risk Assessment for Local Development Framework, Tewkesbury Borough Council (Halcrow Group Ltd. September 2008);
- Phase 1 and Phase 2 ground investigation (BWB Consulting Ltd. Ref BMW2671, document MIT-BWB-ZZ-XX_RP-YE-0001_P1_&P2_P4, February 2018);
- Flood Risk Assessment and Drainage Strategy (RPS, 2023, Ref HLEF85814, March 2023);
- Site development plans and existing drawings;
- Environment Agency publicly available flood mapping data (<https://check-long-term-flood-risk.service.gov.uk>);
- Environment Agency Product 4, 5 &6 (Detailed Flood Risk Data), Reference number 319133, Date of issue 03.08.2023; Package includes data for:
 - Willowbrook;
 - Carrant Book;
 - River Avon;
 - River Severn;
 - Tewkesbury tributaries.

3.2 Topography

The site's topography is a general trend downwards from the northwest to the southeast of the site. A topographic survey was carried out by RPS in September 2016 (Drawing number UAJ3325_A). The survey is included within the Flood Risk Assessment and Drainage Strategy (RPS, 2023, ref: HLEF85814). According to the site topographic survey, the site elevation ranges from c.30.97 m aOD towards the west to 11.18 m aOD towards the southeast (± 0.15 m). The LiDAR data at the site is presented in Figure 3.1 below.

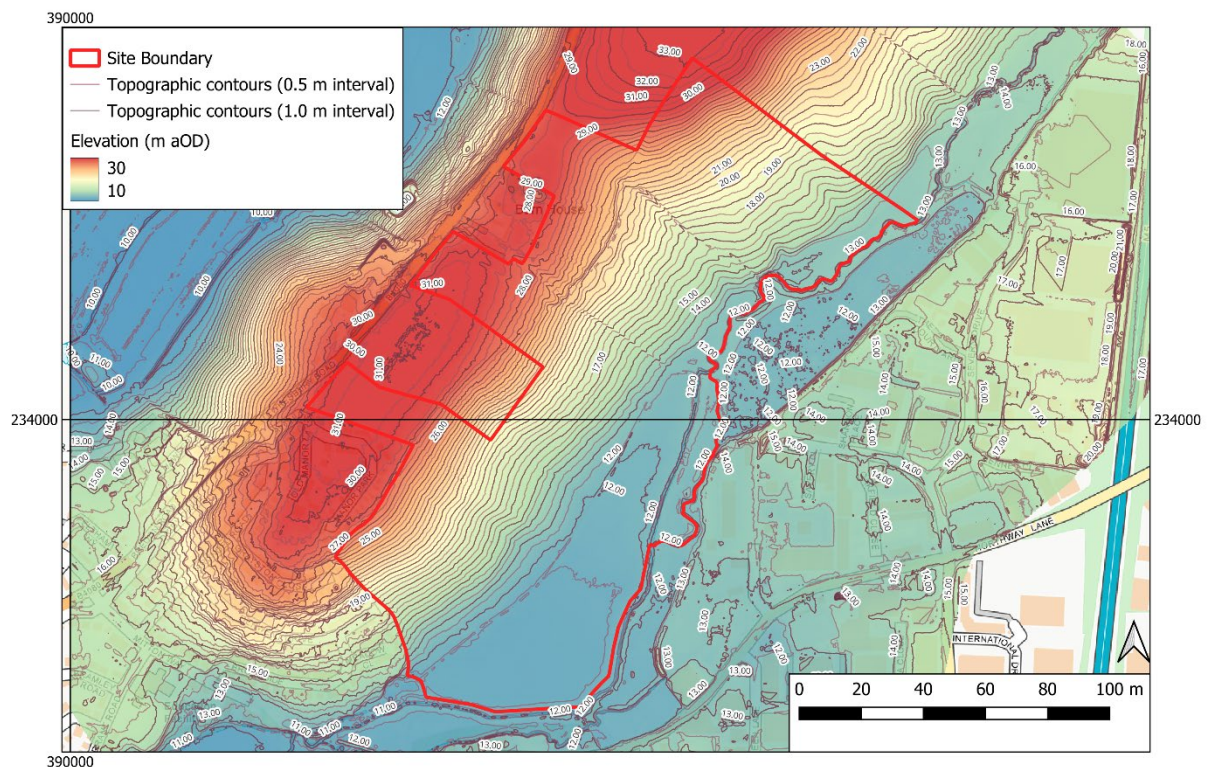


Figure 3.1 LIDAR topography of the site

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3.3 Geology

3.3.1 Regional mapping

Towards the west of the site, the higher elevated ground is underlain by sand and gravel superficial deposits of the Crophorne Sand and Gravel Member (CRTD). This covers an area of c.31,000 m² at the western edge of the site.

Towards the lower ground east of the site, adjacent to the Carrant Brook, the site is underlain by Alluvium (ALV). ALV is characteristic of a freshwater river deposit, comprised of a range of clay, silt, sand and gravel, which covers an area of the site of c.90,000 m².

The bedrock beneath the superficial deposits is regionally mapped as the Charmouth Mudstone Formation comprised of shales and mudstones.

The bedrock and superficial geology are shown in Figure 3.2 and Figure 3.3 below.

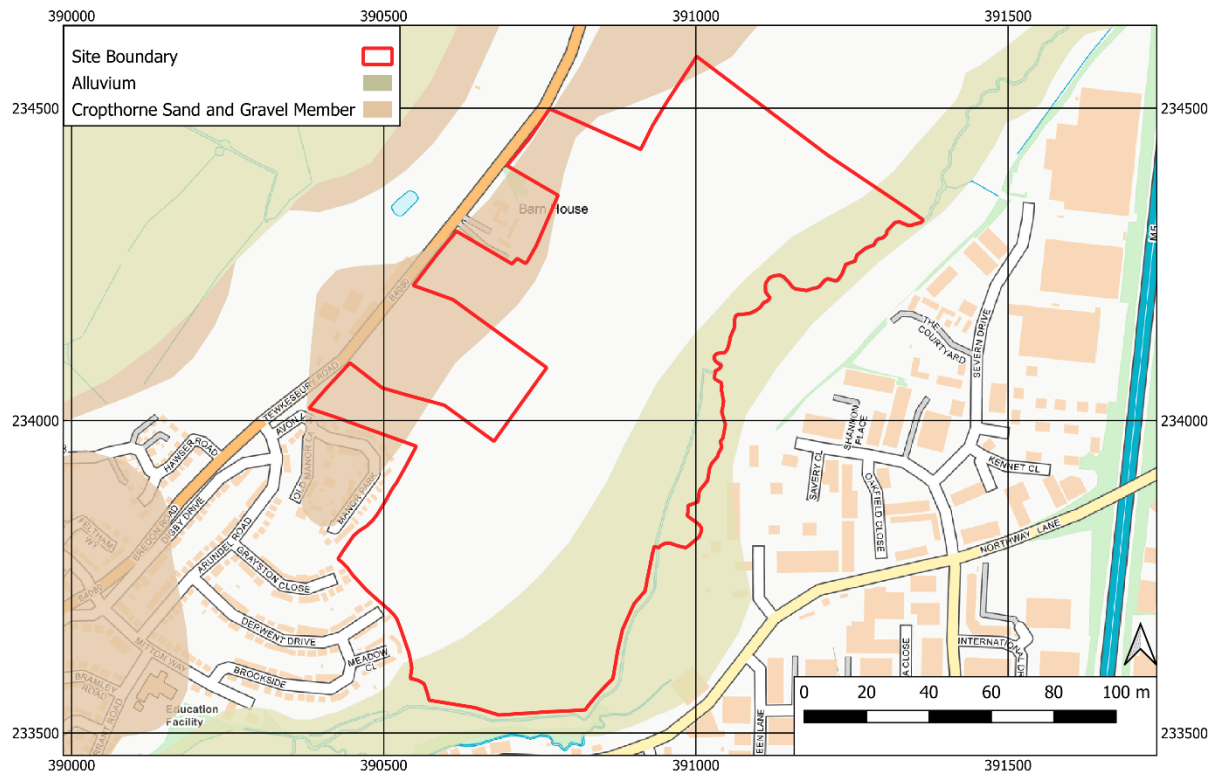


Figure 3.2 Superficial geology

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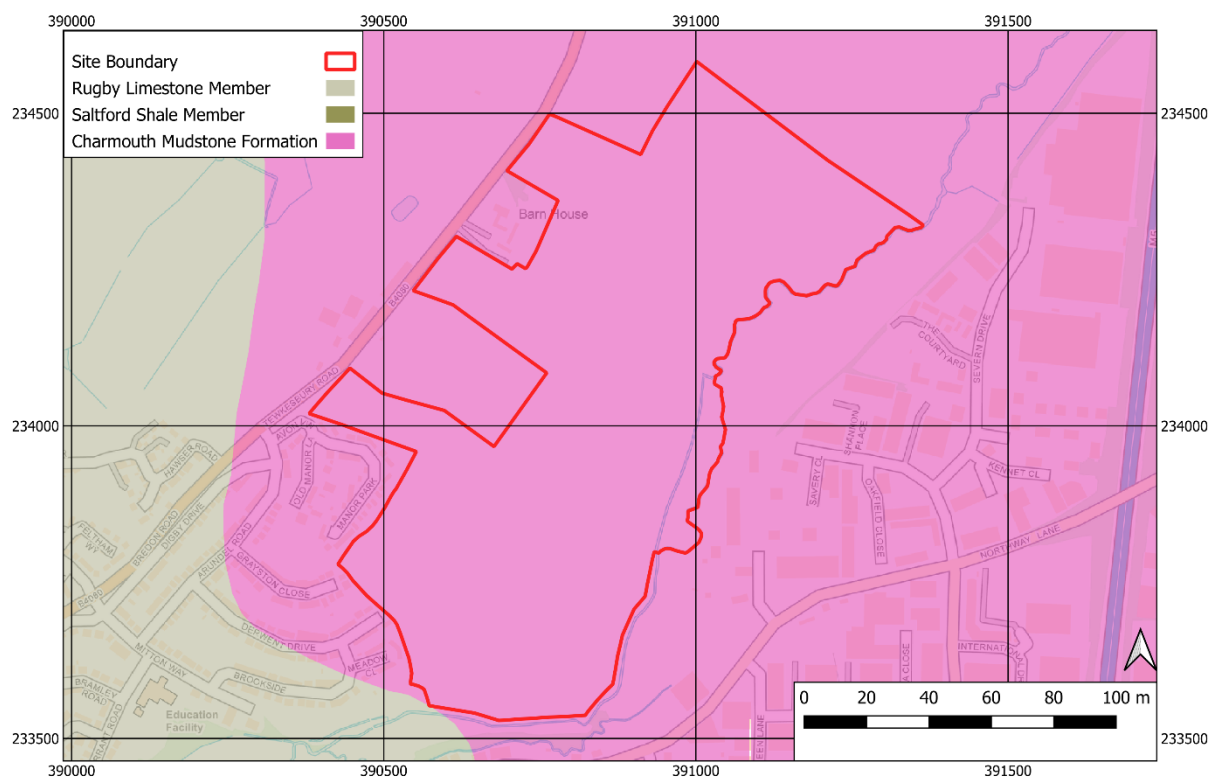


Figure 3.3 Bedrock geology

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3.3.2 BGS borehole database

A review of geology was conducted using BGS borehole data. These have been summarised in Table 3.1 below, and their locations are presented in Figure 3.4. We note that the nearest of these boreholes is more than 1 km from the site, so they are representative of subregional conditions rather than site conditions.

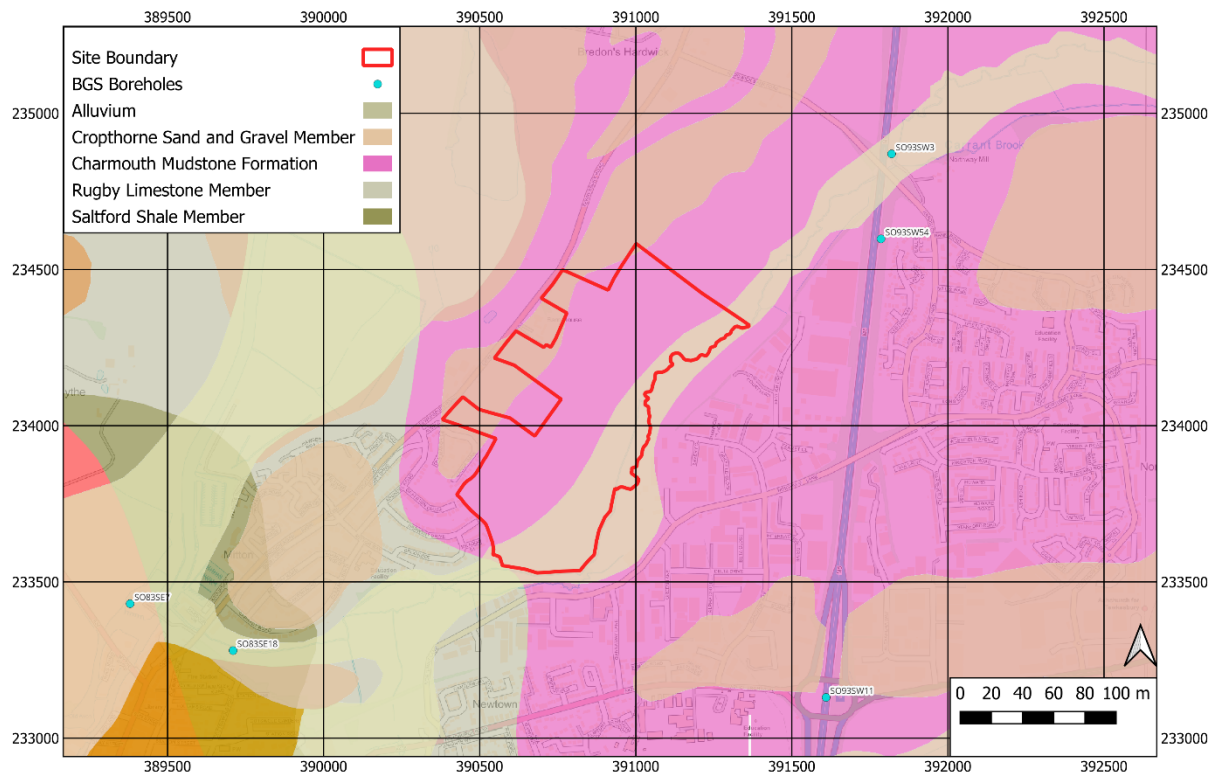


Figure 3.4 BGS borehole locations

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Table 3.1 BGS borehole data

Borehole Reference	Easting	Northing	Geology
SO93SW3	391820	234870	Firm, brown silty clay with little gravel (alluvial deposit). Clay stiffens to hard blue silty clay with depth.
SO93SW54	391786	234598	Silty clay with gravel. Clay stiffens to hard, grey, silty clay that eventually transitions to mudstone with depth.
SO93SW11	391610	233130	Firm to stiff, mottled brown and blue friable silty clay. The clay stiffens and changes colour to hard, blue silty clay at further depths.
SO83SE18	389710	233280	At the top of the borehole were drift deposits of yellow clay and pebbles. At

			3.56m the geology changes to Lower Lias clay of grey/blue.
S083SE7	389380	233430	Black/grey clay, at depth white shells were encountered.

3.4 Previous site investigation

A phase 1 and phase 2 geo-environmental assessment, including an intrusive site investigation (SI) (June 2017), was carried out by BWB Consulting Ltd¹. The ground investigation comprised of eight trial pits (TP01-TP05 and SA01-SA03), eight windowless sample boreholes (DS01-DS08), 13 dynamic cone penetration tests, environmental soil and groundwater samples, groundwater and ground gas monitoring. The exploratory hole plan, the soakaway tests and the borehole logs are presented in full in Appendix E. A summary of the geology proven by the SI is presented in Table 3.2.

Table 3.2 Summary of encountered ground conditions as part of the SI

Minimum depth from (m bgl)	Maximum Depth to (m bgl)	Geological Formation	Strata description
0.0	0.4	Topsoil	Soft brown slightly gravelly sandy CLAY with abundant rootlets.
0.2	2.0	Head deposits	Soft brown slightly sandy slightly gravelly CLAY with occasional rootlets.
0.25	5.0	Alluvium	Very soft to firm brown and grey silty sandy CLAY with occasional organic material and shell fragments.
0.25	2.3	Crophorne Sand and Gravel Member	Orange clayey sandy angular to subrounded fine to coarse flint and chalk GRAVEL.
0.6	>5.45	Charmouth Mudstone	Firm becoming stiff grey mottled olive laminated slightly gravelly CLAY to weak mudstone with occasional shells and relic organic material.

¹ BWB Consulting Ltd, ref BMW2671, document MIT-BWB-ZZ-XX_RP-YE-0001_P1_&P2_P4, February 2018.

A number of groundwater strikes were encountered during drilling works. A summary of the standpipe construction is presented in Table 3.3.

Table 3.3 Summary of groundwater strikes encountered as part of the SI

BH_ID	Groundwater strike (m bgl)	Groundwater strike (m aOD)	Aquifer
DS02	1.7	27.94	Charmouth Mudstone Formation
DS04	1.7	28.52	Croptorne Sand and Gravel Member
DS07	2.8	12.79	Charmouth Mudstone Formation
DS08	2.0 & 4.5	9.62 & 7.12	Alluvium and Charmouth Mudstone Formation
TP05	1.40	10.63	Alluvium

Five boreholes were installed for groundwater and ground gas monitoring. Unfortunately DS08 was screened across mixed strata resulting in unreliable data, and is therefore discounted from this report. A summary of the standpipe construction is presented in Table 3.4.

Table 3.4 Summary of standpipe construction

BH_ID	Screened Strata	Depth of screened section (m bgl)	Depth of screened section (m aOD)
DS01	Charmouth Mudstone Formation	2.0 – 4.0	30.48 – 20.48
DS04	Croptorne Sand and Gravel Member	1.0 – 2.0	29.22 – 28.22
DS05	Charmouth Mudstone Formation	2.0 – 5.0	10.61 – 7.61
DS07	Charmouth Mudstone Formation	2.0 – 5.0	13.59 – 10.59
DS08	Alluvium and Charmouth Mudstone Formation	2.0 – 5.0	9.62 – 6.62

Permeability testing was carried out as soakaway tests at three locations (SA01 – SA03). The soakaways were carried out within the Head deposits, the Croptorne Sand and Gravel Member and the Alluvium. The results are summarised in Table 3.5.

Table 3.5 Summary of permeability

Location	Geology	Permeability (m/s)
SA01	Head deposits	7.4×10^{-7}
SA02	Crophorne Sand and Gravel Member	2.0×10^{-5}
SA03	Alluvium	Water added did not sufficiently drain away to enable extrapolation.

3.5 Hydrogeology

3.5.1 Aquifer classification

The Alluvium is classified as a Secondary A aquifer by the EA.

The bedrock Charmouth Mudstone is classified as Secondary (undifferentiated) aquifer.

A desk-based study of nearby borehole data was undertaken that revealed just 2 boreholes that struck water, these are displayed below in Table 3.6 and Figure 3.5.

Table 3.6 BGS boreholes that encountered groundwater

Borehole Reference	Northing	Easting	Groundwater
S093SW10	233160	391630	Struck at 0.91 m bgl
S093SW24	233190	390810	Groundwater strike was not recorded, however the notes in the borehole log revealed that the groundwater 'resembles the saline water of Cheltenham'
S083SE3	233450	389850	Struck at 2.13 m bgl

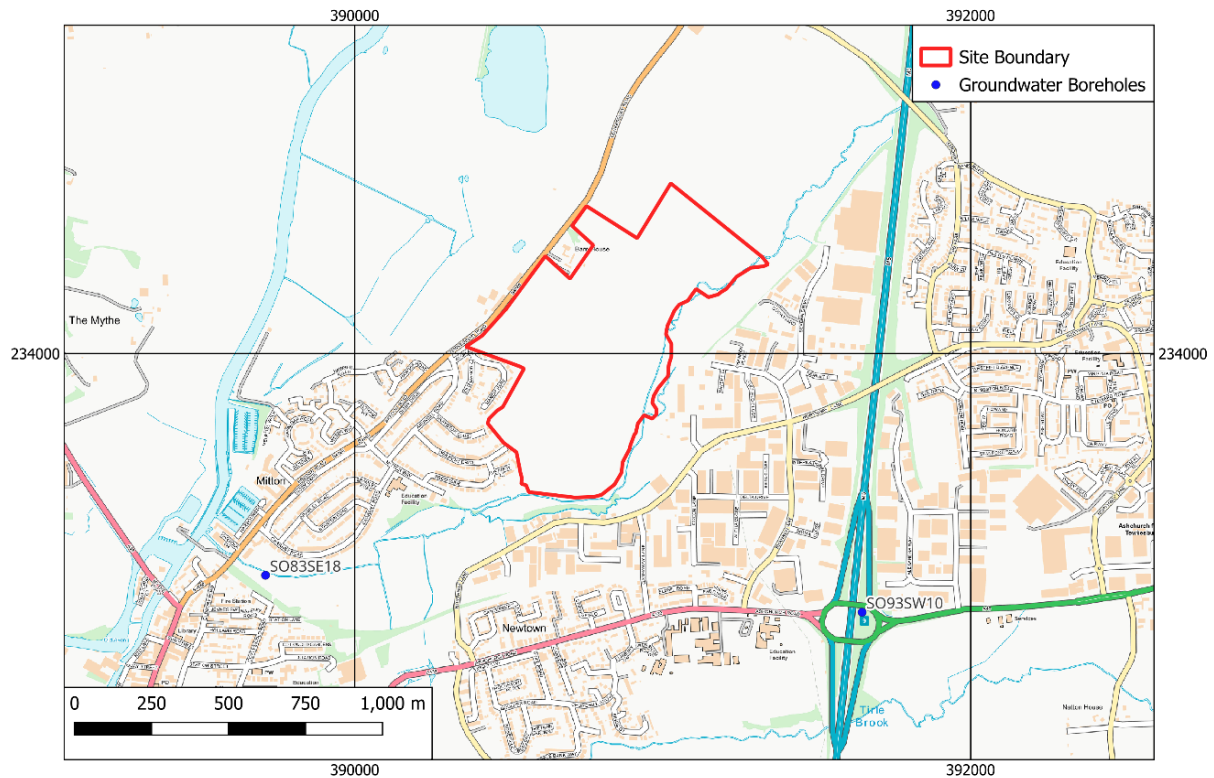


Figure 3.5 Locations of boreholes that struck groundwater

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3.6 Water bodies

A desk-based study of the nearby watercourses has been carried. The Avon River runs south-westerly c.850 m west of the site, meeting the Tewkesbury Quay c.990 m from the site. The Quay was formerly used as a bridge to increase access to the Mill Avon when Tewkesbury's river trade (enhanced by the two major rivers nearby) was prevalent. The Quay has since fallen into disrepair. This quay also marks the confluence of the Avon with the River Severn.

The eastern flank of the site is bordered by Carrant Brook, a small watercourse that flows in a southeasterly direction, meeting the Tewkesbury Quay.

3.7 Historical land use

Historical aerial imagery (Google Earth 2023) dating back to 1945 shows the site to be agricultural land with frequent sheep grazing and grass cuttings, similar to existing land use.

4 SITE WALKOVER

A site walkover was carried out by HFCL on 27 July 2023. The objective of the site walkover was to carry out a non-intrusive survey of the site conditions, the lay of the land, the nearby surface water courses and the potential reports of flooding at and near the site. In addition stops were made in the vicinity of nearby surface water bodies to aid investigation. A photographic record is presented in Appendix D.

4.1 Weather

The day was hot and overcast.

4.2 Vegetation

The site is covered by short well-maintained grassland for agriculture, divided into c.21 fields. The fields are bounded by low fences and hedgerows with frequent mature trees. Reed and brambles grow on the banks of the Carrant Brook.

4.3 Topography and land cover

The site was accessed from the northwest via a trackway off Bredon Road/ Tewkesbury Road. The site is variable in its gradient however a general gradient towards the southeast can be observed.

4.4 Services

No overheads were observed.

4.5 Boundaries

To the northwest, the site is bounded by the Bredon Road/ Tewkesbury Road and surrounds the Tewkesbury allotments. Beyond the southwestern boundary, the land is used for residential dwellings including Manor Park and Derwent Drive. To the south and east of the site, the Carrant Brook flows along the perimeter and cuts through a section of the site towards the southeast. The Landowner controls the land beyond the northern boundary.

4.6 Carrant Brook

4.6.1 Onsite access

The Carrant Brook was observed from the eastern flank of the site, flowing towards the south. A rough estimate (for guidance only) of the brook flow was noted as c.0.13 m/s. The water was noted to be brownish and fairly turbid. The banks of the brook were relatively steep with channel containing c.0.8 m depth of water. The channel was c.3.0 m wide with the banks c.1.5 m high. An approximate cross section of the brook channel would therefore be c. 4.5 m². The land nearby the brook was level for the initially before rising towards the west.

4.6.2 Offsite access

Additional stops were made on the eastern floodplain of the Carrant Brook, accessed from Shannon Way. Floodplain was noted to be covered in reedbeds, heather and stunted trees. The ground was notably soft, boggy and marshy. Frequent ponds, ditches, pools and occasional very slow flowing streams dissected the floodplain.

4.7 Surface water features

There were no other drainage channels, ponds or pools located within the site boundary.

5 FLOOD RISK ASSESSMENT

5.1 Fluvial flood map for planning

The Environment Agency's (EA) fluvial flood zone mapping for planning has been extracted and presented below in Figure 5.1.

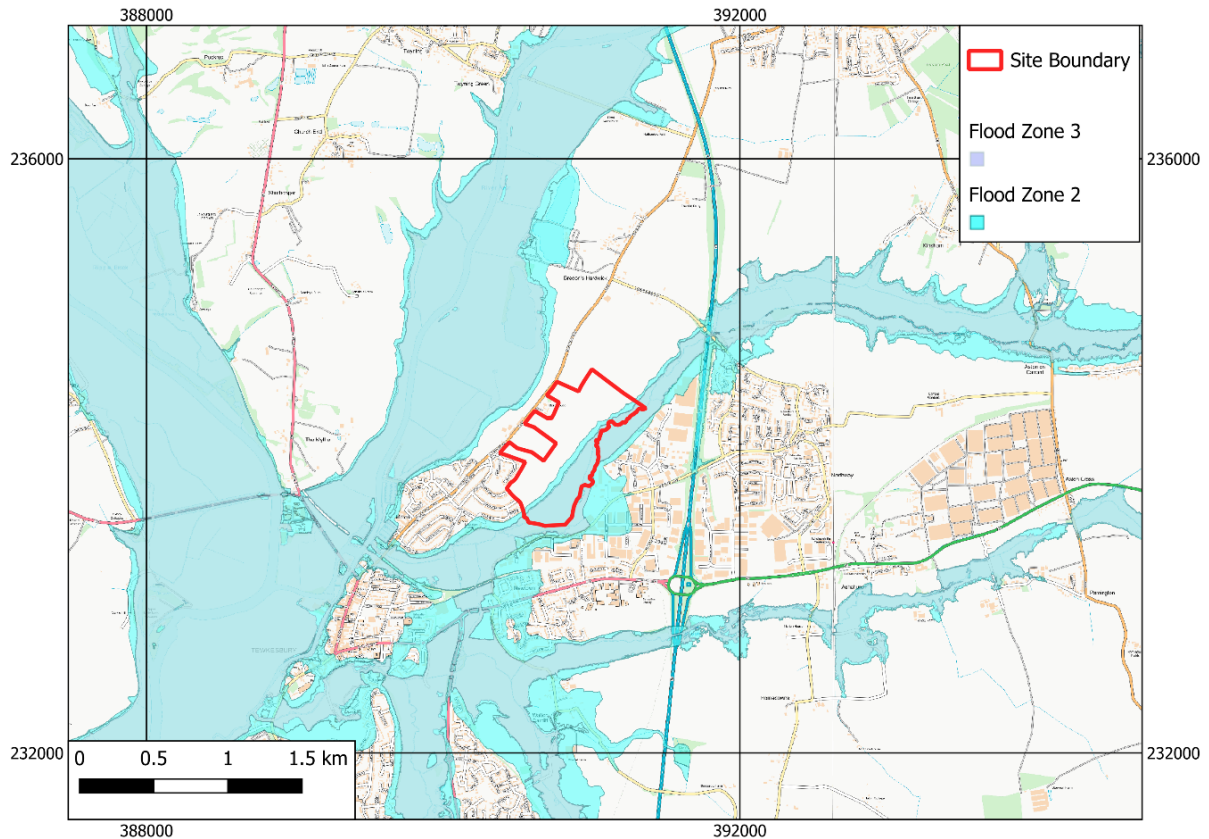


Figure 5.1 Fluvial flood map for planning

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Both flood zones 2 & 3 encroach onto the site at its eastern boundary where the topography is lowest. The majority is flood zone 3 (c. 25%); this is the most high-risk zone of flooding, giving the site a high probability of flooding. A flood event would occur during high precipitation, causing the Carrant Brook at the eastern edge of the site to burst its banks, and overflow onto the site.

Flood Zone 2 is mapped up to an elevation of c. 14.5 m aOD. Flood Zone 3 is mapped up to an elevation of c. 13.0 m aOD. As the development proposals for all built structure will be above this level, the buildings will not be impacted by floodwaters. Nor would the proposed buildings alter the movement of flood waters.

5.1.1 Risk of flooding including the benefit of flood defences

The Environment Agency's risk of flooding from rivers and the sea (RoFRS) has been extracted and presented in Figure 5.2.

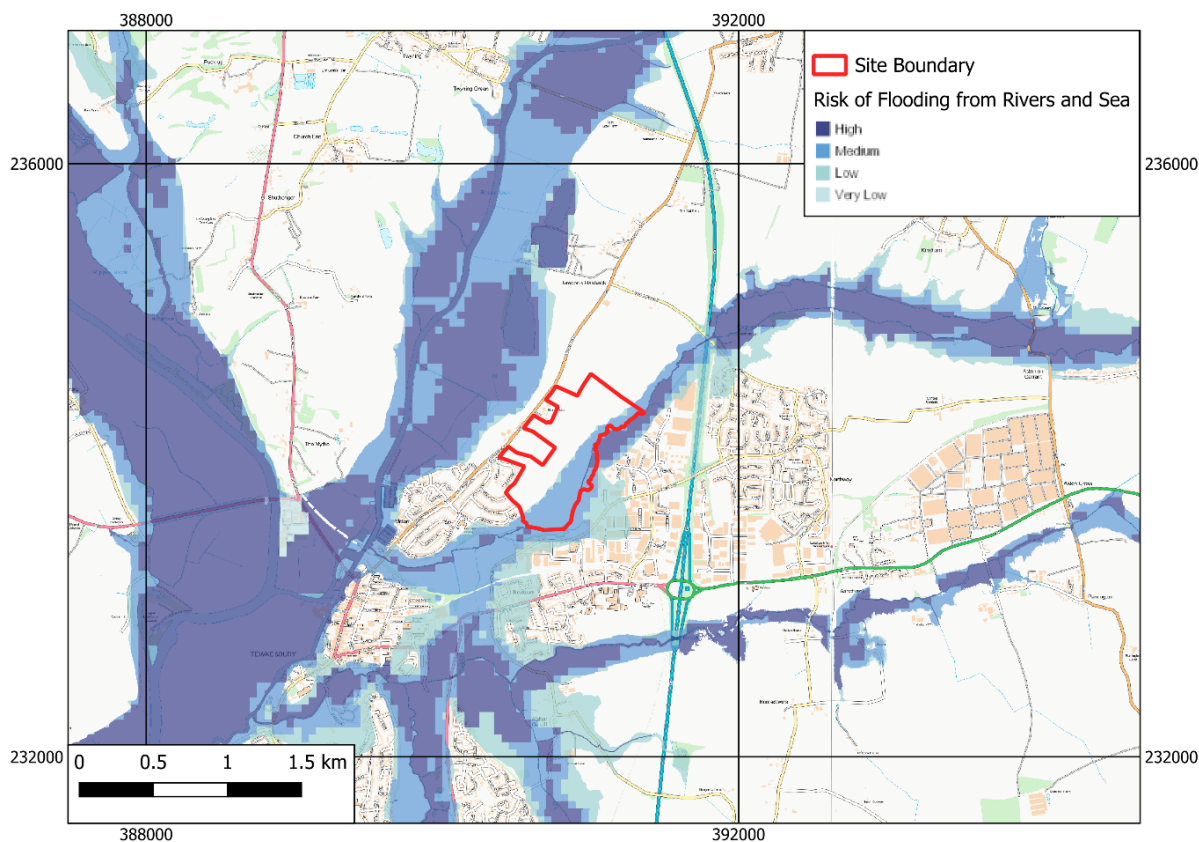


Figure 5.2 Risk of flooding from rivers and seas

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The RoFRS mapping considers the condition of flood defences, their height and benefits. The EA therefore would determine the lower part of the site to have a medium to high risk of flooding.

5.1.2 Environment Agency river modelling

The Environment Agency (EA) was approached to provide detailed fluvial flood modelling for the local area. EA's full response is included within Appendix B.

The EA provided detailed flood modelling of the River Avon, the River Severn, the Carrant Brook and the Tewkesbury Tributaries. The EA also advised that a 37% allowance for climate change should be applied to the peak river flows.

A review of the Flood Risk Assessment and Drainage Strategy (RPS, 2023, ref: HLEF85814) was undertaken [FRA, RPS 2023]² identified the fluvial flood risk at the site, using the modelling to produce the limits of the 1 in 100 year flood plus 35% climate change (CC) allowance and the 1 in 100 year flood plus 70% climate change allowance. Applying the recent EA advice, the 1 in 100 year flood plus 70% CC allowance would be a suitable flood risk limit for residential development the

² Flood Risk Assessment and Drainage Strategy, RPS, ref: HLEF85814, March 2023.

Tewkesbury area. This is provided within the FRA (RPS, 2023) drawing *Modelled Flood Extents*³ and is extracted below in Figure 5.3. The relevant data of the FRA (RPS, 2023) is presented in Appendix C.

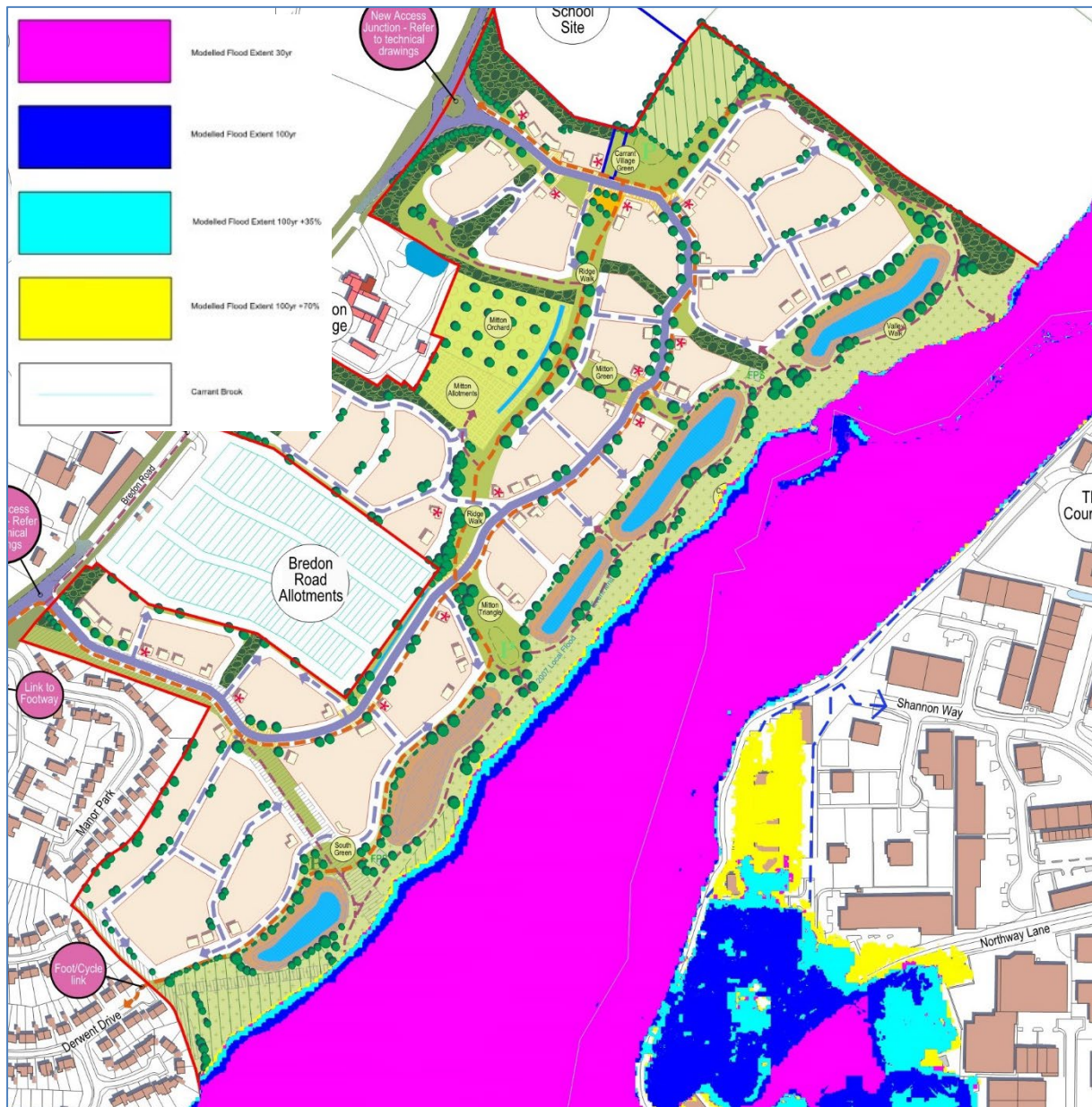


Figure 5.3 Extract of modelled flood extents
 Contains Drawing: Modelled Flood Extents, FE1, A, HLEF85814, FRA, RPS, 21.02.23.

The proposed development has excluded all residential dwellings and impermeable surfaces beyond the limit of the modelled 1 in 100 year flood plus 70% CC event. Any development within the 1 in 100 year flood plus 70% CC event has been restricted to landscaping and permeable surfaces only, including recreational areas.

³ Drawing. Modelled Flood Extents, FE1, A, HLEF85814, FRA, RPS, 21.02.23.

5.1.3 Historical flooding

The EA was approached to provide detailed fluvial historical flood outlines for the local area. The EA's full response is included within Appendix B.

According to the Environment Agency and the Tewkesbury Borough Council Strategic Flood Risk Assessment [SFRA] for Local Development Framework (Halcrow, 2008), the site has been subject to historical flooding. The EA detailed high flood waters 18 times since records began in 1939. The highest and most significant flood record was recorded in July 2007 (13.00 m aOD).

Heavy rain in July 2007 caused extensive flooding of Tewkesbury as a result of high river flows of the River Teme and River Avon, with surface runoff increasing flows in the Carrant Brook. The Environment Agency's (EA) historical flood mapping has been extracted and presented below in Figure 5.4.

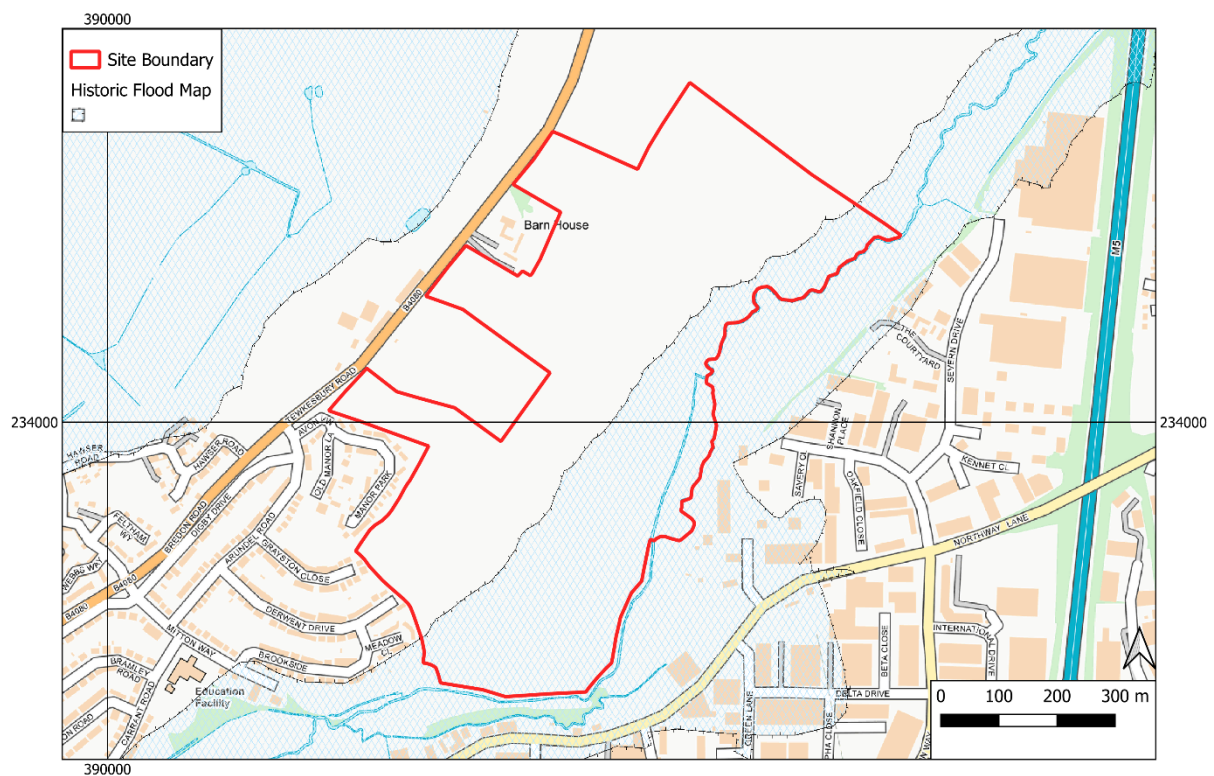


Figure 5.4 Historical flood map

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The limit of the historical flood depths reaches an elevation of 14.5 m aOD. The proposed development has excluded all residential dwellings and impermeable surfaces beyond the limit of the historical flood limits (14.5 m aOD). Any development within the historical flood limits has been restricted to landscaping and permeable surfaces only, including recreational areas.

5.2 Surface water (pluvial) flood risk

The Environment Agency's pluvial (surface water) flood mapping has been extracted and presented below in Figure 5.5, Figure 5.6 and Figure 5.7.

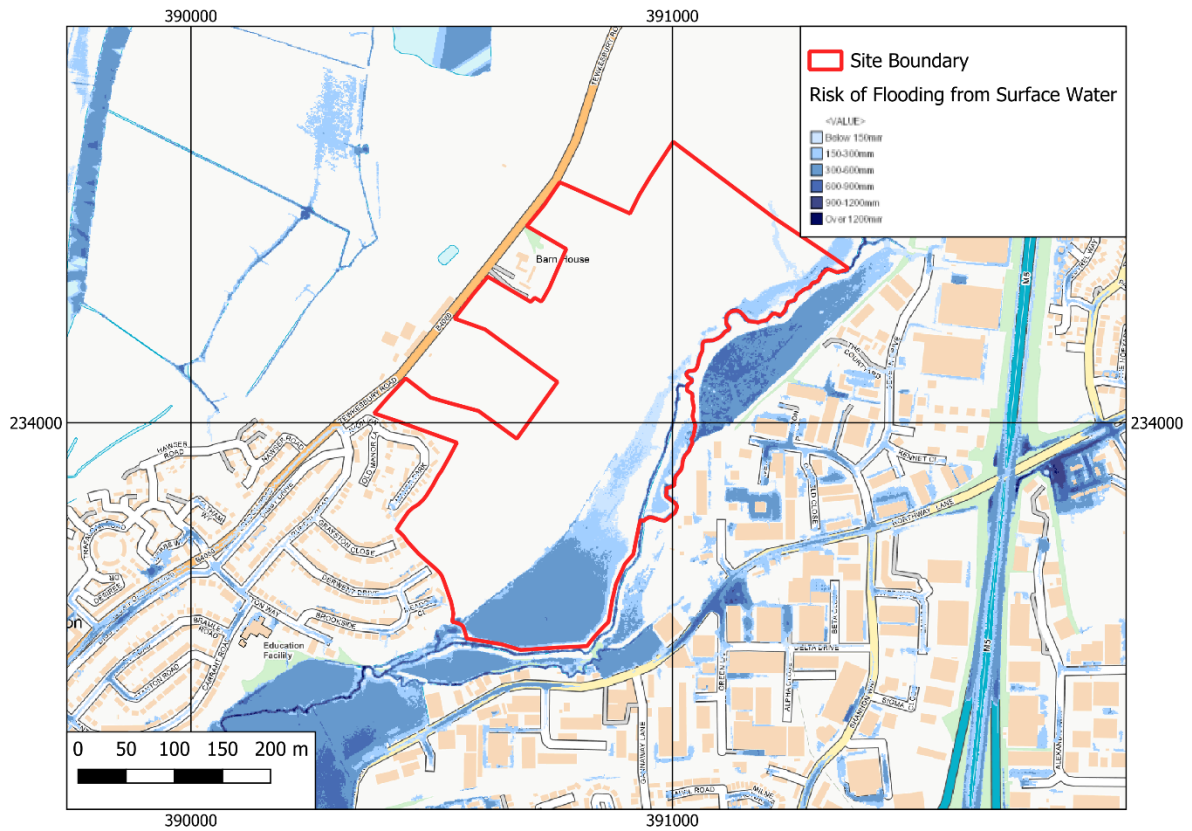


Figure 5.5 Pluvial flood risk at 0.1% AEP (high-risk event)

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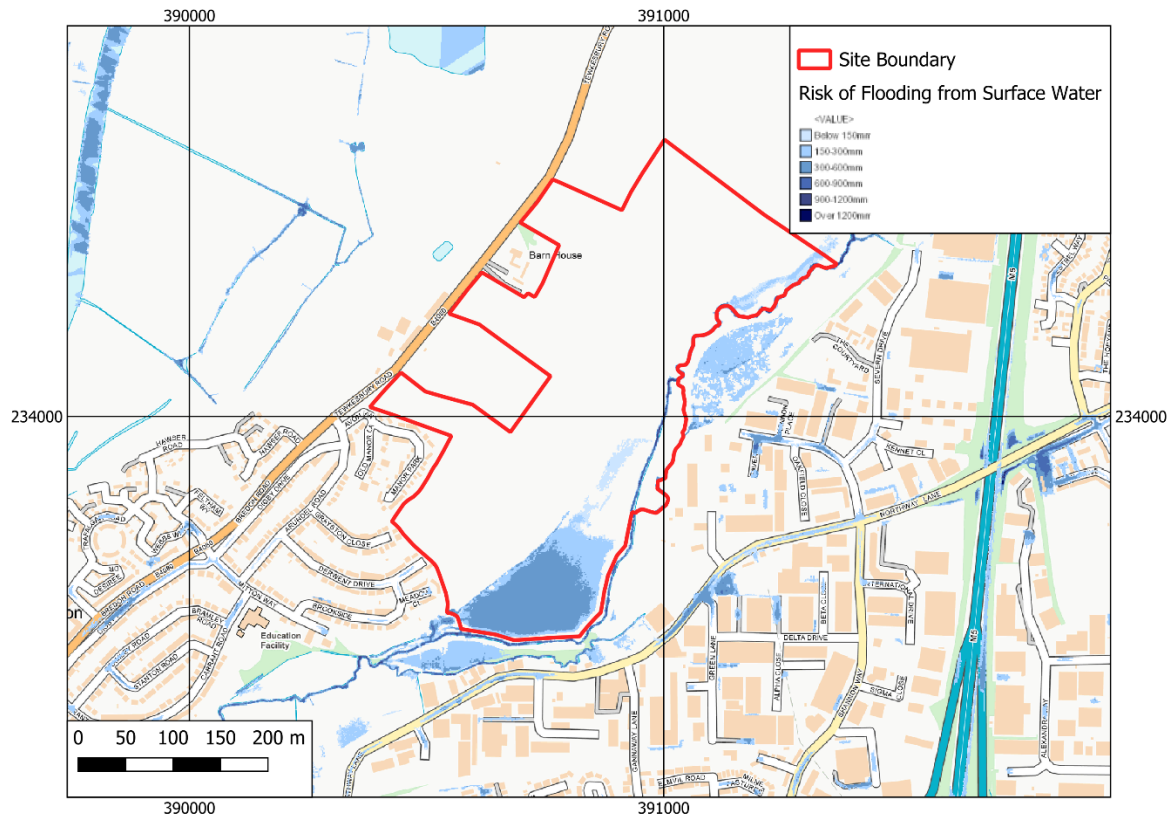


Figure 5.6 Pluvial flood risk at 1% AEP (medium-risk event)

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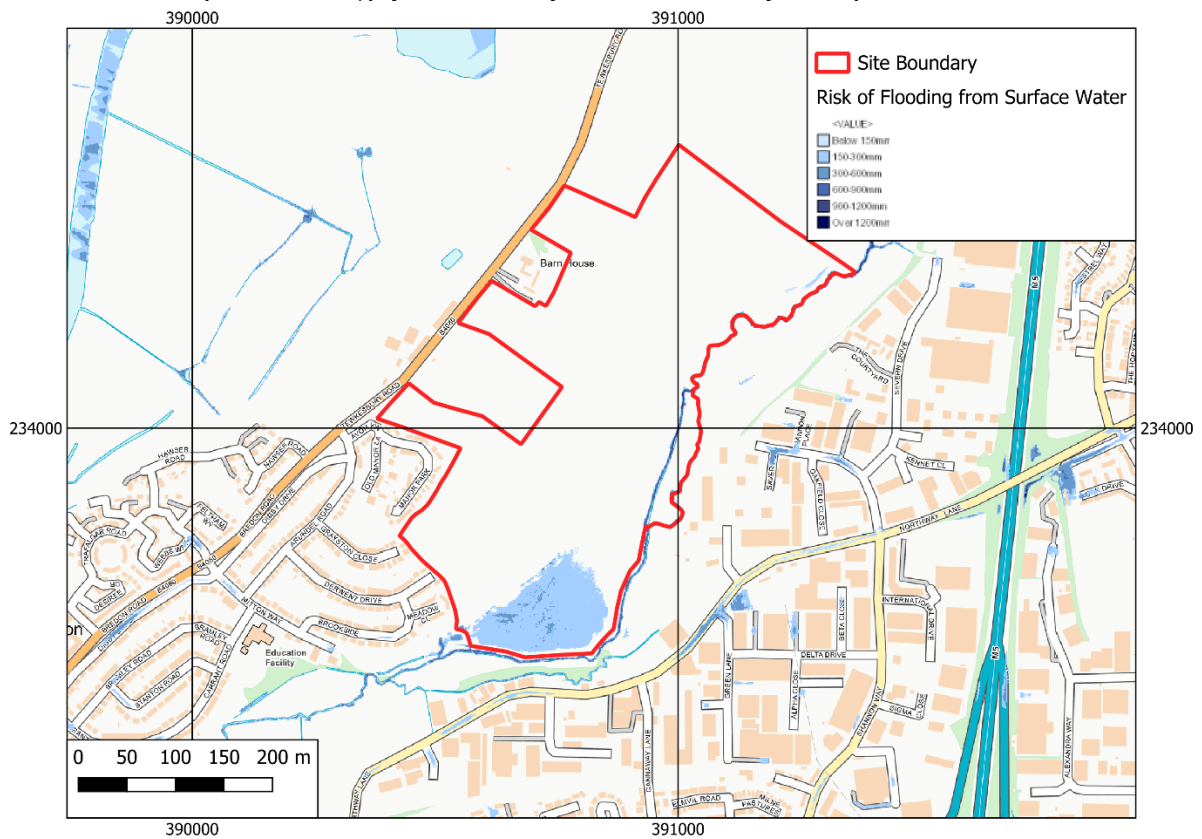


Figure 5.7 Pluvial flood risk at 3.3% AEP (low-risk event)

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All levels of flood risk posed by surface water presented by the EA affect the site. The high risk 1 in 30 year (3.3% AEP) event creates a flood risk of <300 mm maximum depth in the southeast corner of the site, again parkland. The 1 in 100 year (1% AEP) medium-risk event would reach further north with an increased maximum depth of 300-600 mm.

As can be seen from Figure 5.7 the site would also be impacted by a low risk 1 in 1000 year (0.1% AEP) event. The flooding in the south of the site extends further east, covering the lower topography edge of the whole park, and the flooding increases to the maximum depth of 600-900 mm.

The proposed development has excluded all residential dwellings and impermeable surfaces beyond the limit of the surface water (pluvial) flood limits. Any development within the surface water (pluvial) flood limits has been restricted to landscaping and permeable surfaces only, including recreational areas.

5.3 Groundwater flood risk

The EA has deemed groundwater flooding unlikely in this area. Although permeable gravel occurs to the northwest and east, flash groundwater flooding through granular deposits has been deemed unlikely to occur.

5.4 Artificial flood risk

5.4.1 Reservoir flooding

The Environment Agency's reservoir flood mapping is shown below in Figure 5.8.

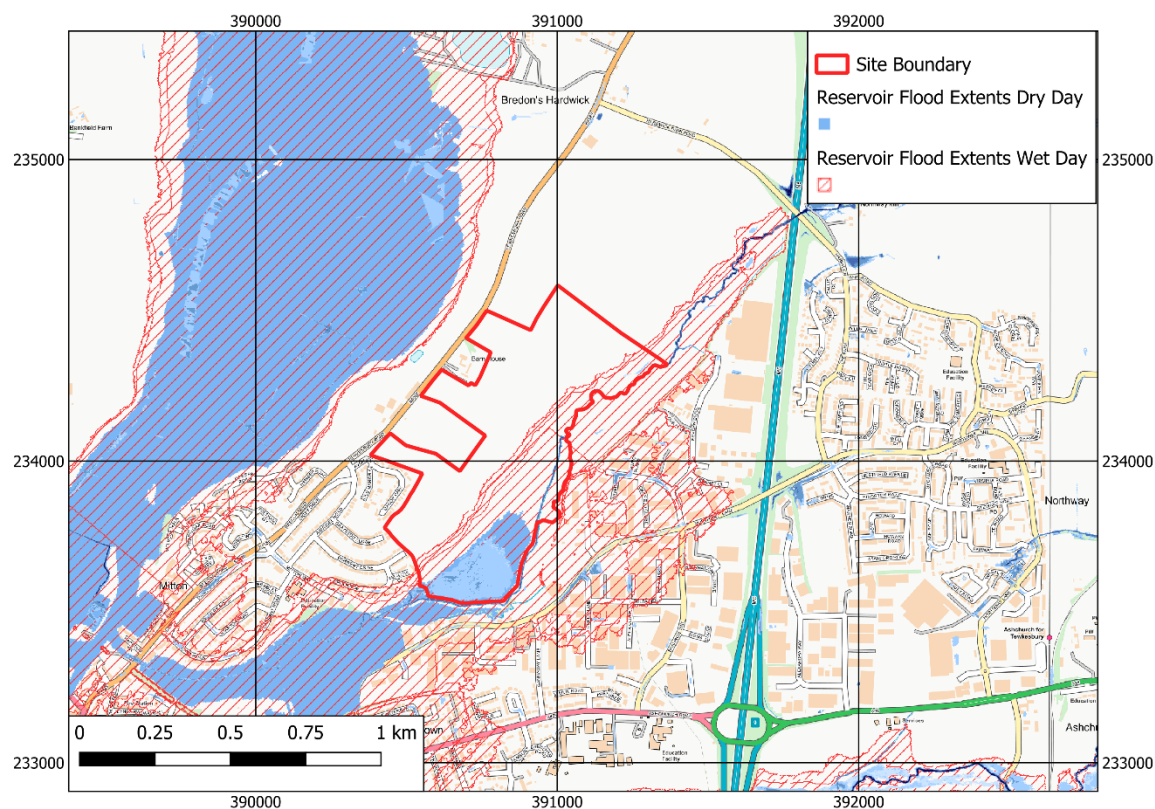


Figure 5.8 Reservoir flooding

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According to the EA's Risk of Flooding from Reservoir mapping the site is at risk of flooding from reservoirs.

A flooding event has been modelled to occur in a "wet day" and "dry day" scenario. The "dry day" scenario predicts the flooding that would occur if the dam/reservoir failed when rivers are at normal levels. The "wet day" scenario predicts how much worse the flooding might be if a river is already experiencing an extreme natural flood. As can be seen from Figure 5.8 the lower south corner of the site will be flooded on a dry day and on a wet day this covers the entire southeast flank of the site – an area not dissimilar to the historical 2007 flooding shown in Figure 5.4.

However, the risk related to a failure of a large reservoir is extremely small.

5.4.2 Sewer flooding

There are no known sewers nearby and none were observed in the site walkover.

5.5 Vulnerability classification

According to the National Planning Policy Framework⁴ developments are categorised by vulnerability to flooding, based on the usage of the development. The development is for residential dwellings; therefore the site, as a whole, is classed as **more vulnerable**. However the dwellings are restricted to the higher elevation ground towards the west and are positioned beyond Flood Zone 2 and the historical 2007 flood limit. The area of the site towards the east where the lower ground is located within the flood risk area will be conserved as open recreational ground and parks. This area towards the east is therefore classified as **water-compatible** development and is therefore suitable within Flood Zone 2 and 3.

⁴ National Planning Policy Framework. <https://www.gov.uk/guidance/national-planning-policy-framework/annex-3-flood-risk-vulnerability-classification>

6 ATTENUATION BASINS IMPACT

6.1 Floodplain storage

A review of the Flood Risk Assessment and Drainage Strategy (RPS, 2023, ref: HLEF85814) was undertaken [FRA, RPS 2023]². The relevant data of the FRA (RPS, 2023) is presented in Appendix C.

Five attenuation basins have been proposed to attenuate the increased surface water flows from the increased impermeable areas at the site. Table 6.1 has been extracted from the Conceptual Drainage Strategy⁵.

Table 6.1 Attenuation basin construction

Attenuation Basin No.	Depth (m bgl)	Top of bank level (m aOD)	Storage Volume (m ³)
1	1.5	14.7	1823
2	1.5	14.2	2033
3	1.5	14.5	1836
4	1.5	14.8	2363
5	1.5	15.7	1778

The total storage volume occupied by the attenuation basins is 9,833 m³.

Analysis of the flood zones and the historical flood mapping with the elevation of the site, detailed that the approximate maximum elevation of Flood Zone 2 and the 2007 historical flood extent was 14.50 m aOD in the area of development. Therefore the attenuation basins, with exception of Basin No.2, are positioned beyond the flood plain. This would result in no great loss flood plain storage as a result of the proposals.

6.2 Runoff rates

The FRA² with associated drainage strategy calculated that the runoff rate of the proposed development could be restricted and controlled to match the existing greenfield runoff rate of 4.4 l/s/ha. This will be achieved by attenuation from the five attenuation basins and flow-controls on the outfalls. Captured surface waters would be discharged to the Carrant Brook.

6.3 Drainage to Carrant Brook

As part of the site investigation¹, the soakaway testing proved that infiltration at this site is limited with the subsoils having a low permeability. As such, under greenfield conditions, it is likely that rainwater would likely be drained as surface water rather than groundwater. Therefore the discharging surface waters as part of the proposed site drainage (which discharge into the brook at greenfield run off rates) would likely match the natural greenfield hydrological conditions. Thus the volume of inflows to and the water levels of the Carrant Brook are unlikely to be impacted as a result of the proposed drainage scheme.

⁵ Conceptual Drainage Strategy, RPS, D01, B, HLEF85814, February 2023.

7 IMPACT TO DOWNSTREAM TEWKESBURY

7.1 Loss of floodplain storage

As detailed above, there would be no loss of flood plain storage as a result of the proposals. The town of Tewkesbury would not lose any upstream floodplain that might result in an increase in the volume of floodwaters further downstream.

7.2 Inflows to Carrant Brook

As a result of the site proposals, the area would see an increase in hardstanding and therefore loss of permeable area, upstream of Tewkesbury. In principle this might increase the volume of surface water runoff, which may increase the surface water flood risk downstream.

It should be noted that the rainfall across the existing site is likely to already discharge into the Carrant Brook due to the poor infiltration across the site. There would be no change in the size of the area drained into the Carrant Brook.

Furthermore, due to the attenuation and control of surface waters via the proposed drainage system, no impact is made in terms of increased surface water volume or increased run off flow rates. The loss of permeable area is sufficiently compensated by the proposed mitigation of the sustainable drainage systems. The town of Tewkesbury would not be impacted by the loss of permeable area.

7.3 Increased flood risk to Tewkesbury

It is therefore considered that as a result of the proposed development, the attenuation and the mitigation of the drainage strategy, that the flood risk to the town of Tewkesbury would not be increased. We do not consider that any further data acquisition is needed to support this conclusion.

7.4 Concluding statement

The development proposals would likely have **no significant impact** on the flood risk of downstream Tewkesbury and **would not cause a flood risk concern for the rest of the town.**

8 RECOMMENDATIONS AND MITIGATION

It is recommended that the following actions are reviewed by Tewkesbury Town Council in regard to the proposed development east of Bredon Road. Tewkesbury Town Council may wish to consult the relevant planning authorities to express a comment that the following recommendations are implemented as part of the development.

- Approved consent from the Environment Agency has been received for the construction of the surface water outfalls for discharge into the Carrant Brook.
- A maintenance plan including details of scheduled regular inspections is implemented for the proposed attenuations basins. The SuDS features should be maintained for the lifetime of the development.
- Water quality monitoring of the Carrant Brook should be undertaken as part of the development proposals so that should any contamination or water quality issues arise, the proposed development can be excluded as a source. This could include pre-construction works monitoring for background concentrations, during construction and post-construction works for a limited timeframe.
- The site developer, the contractor and future dwelling occupiers should sign up to Flood Risk Alerts and Warnings.

APPENDIX A

Site drawings plans

APPENDIX B

EA model data

APPENDIX C

Flood Risk Assessment

RPS 2023

APPENDIX D

Site walkover photographs

SITE WALKOVER PHOTOGRAPHS



Figure 9.1 Vegetation cover of the Carrant Brook floodplain from the east of the brook. View towards the west and to site.



Figure 9.2 Carrant Brook floodplain from the east of the brook. The floodplain was divided by a number of pools, ponds and very slow flowing streams.



Figure 9.3 The site. View to southwest along the western perimeter. Taken from the northwestern corner of the site.



Figure 9.4 The site. View to east along the northern perimeter. Taken from the northwestern corner of the site.



Figure 9.5 The Carrant Brook, at the northeast of the site. View to southeast.



Figure 9.6 The Carrant Brook, at the east of the site. View to northeast.



Figure 9.7 The eastern boundary of the site, with the level ground initially before rising to the west.



Figure 9.8 The sloping topography of the site. View to the northwest from the eastern boundary.

APPENDIX E

Ground Investigation data