

Flood Risk Assessment

To accompany a change of use planning
application at

Dunns House, Salisbury, SP2 7BF

Prepared by

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1 Executive Summary

- A The proposal is for a change of use of upper floors to residential;
- B The ground floor will remain non-residential;
- C The building lies in Flood Zone 3;
- D All accommodation floor levels provide greater than the minimum required freeboard over estimated design period flood levels;
- E No flood resilience measures are required on the accommodation floors;
- F A new emergency walkway is to be provided at first floor level to offer all residents direct and safe access and egress under flood conditions;
- G Emergency exit routes through and from the building will be on permanent display in communal areas.
- H The residents will be encouraged to sign up to flood warning schemes;
- I There is no documented evidence of flood risk from any other sources;
- J The development does not impact on flood risk elsewhere;
- K Assuming the warning and evacuation provision and procedures can be maintained over the lifetime of the development, the proposed change of use to residential use at the first second and third floors is considered acceptable.

2 Introduction

2.1 Site location

The project is at Dunns House, Salisbury SP2 7BF (see Figure 1).



Figure 1: Site location plan, as indicated with North topmost. (source: open street map)

2.2 Proposed development description

The proposal is a change of use of the upper three floors into residential. The ground floor will be retained as non-residential.

2.3 Vulnerability

2.3.1 Classification of vulnerability

The change of use alters the vulnerability classification of the building - currently the building usage is classed as "Less Vulnerable" after the change of use it becomes "More Vulnerable".

3 Policies

3.1 Standing Advice

Generally the following applies:

You need to follow the Environment Agency's standing advice if you're carrying out a flood risk assessment for a development classed as:

- involving a change of use into one of these vulnerable categories or into the water compatible category.

3.2 Environment Agency Guidance on Standing Advice

The FRA should be:

- appropriate to the scale, nature and location of the development;
- proportionate to the degree of flood risk.

For all development covered by standing advice, a FRA should include:

- the site address;
- a description of the development;
- the estimated flood level for your development, taking into account the impacts of climate change over its lifetime;
- details of the finished floor levels;
- details of your flood resistance and resilience plans;
- any supporting plans and drawings any other information.

Floor levels

- floor levels are set at least 600 millimetres (mm) above the estimated flood level. You may be able to reduce this to 300mm if there is a high level of certainty about your estimated flood level. If there is a particularly high level of uncertainty it may need to be increased;

- if floor levels cannot be raised in this way, you will also need to include extra flood resistance and resilience measures. These measures should protect the property to at least 600mm above the estimated flood level.

The building design should also:

- prioritise excluding flood water where possible;
- speed recovery in case water gets in.

4 Flood risk analysis

4.1 Sources of potential flooding

Flood risk from various sources at the site is analysed in this section.

4.1.1 Flood risk from sea and rivers

Flooding can occur from the sea due to a particularly high tide or surge, or combination of both.

The site is not at risk from tidal flooding.

Flooding can also take place from flows that are not contained within a river channel due to high levels of rainfall in the catchment.

With reference to the Environment Agency Flood Map, Figure 2, the site lies in Flood Zone 3. This means that the site has a High probability of fluvial flooding (greater than a 1 in 100yr annual probability of fluvial flooding).

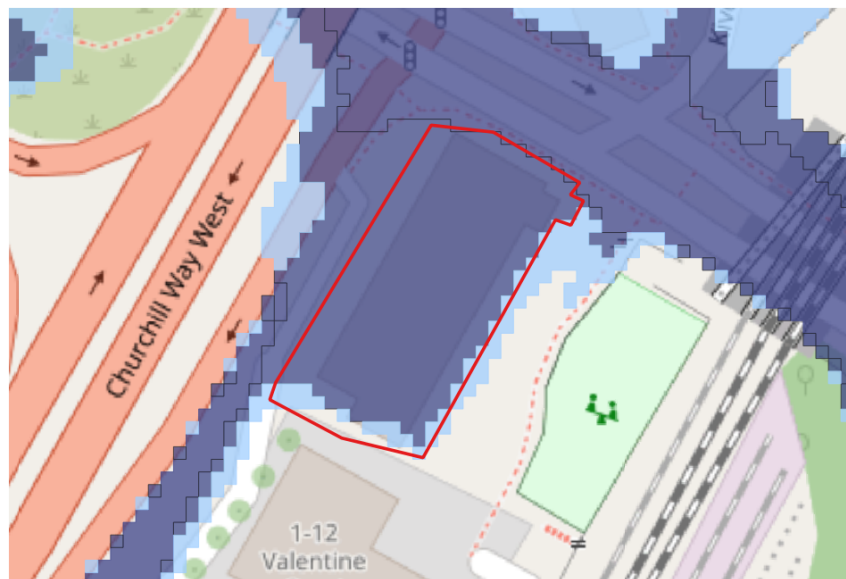


Figure 2: Flood Mapping from the EA online data. The site falls within Flood Zone 3

Historic flooding

The site is not shown to lie in an area of historic flooding.

4.1.2 Flood risk from groundwater

Groundwater flooding occurs when water levels in the ground rise above surface levels. It is most common in low-lying areas underlain by permeable rock (aquifers), usually

due to extended periods of wet weather. The site's geology is classified as having a Low susceptibility to groundwater flooding.

Since the proposed development does not involve any basement elements and all residential units are at first floor and above, the impact of groundwater flooding on the development will be negligible.

4.1.3 Flood risk from sewer and highway drains

Flooding occurs when combined, foul or surface water sewers and highway drains are temporarily over-loaded due to excessive rainfall or due to blockage.

There are no indicators to Sewer flooding at the site.

Hence, the risk of sewer flooding to the proposed site can be considered to be Low.

Highway flooding adjacent to the site manifests as surface water flooding.

4.1.4 Flooding risk from surface water

Flooding occurs when rainfall fall on a surface (on or off the site) which acts as run-off which has not infiltrated into the ground or entered into a drainage system.

Present day risk With reference to the 25.03.2025 release of the Flood Map for Planning data set, Figure 3, the site is at not at risk from surface water flooding. The adjacent highway is shown to be at High risk.



Figure 3: SW flood risk mapping of current risk. The site is not shown to be at risk.

Future risk With reference to the 17.09.2025 release of the E.A online SW data set, Figure 4, the front of the site is shown to be at Low risk from surface water flooding. For the design period, 1 in 100yr+ CC, there is a no surface water flooding depth on site as shown in Table 1.



Figure 4: SW flood risk mapping including climate change. The rear of the site is in an area at High future risk

Depth	Probability of occurrence
0 - 0.2m	Nil
0.2 - 0.3m	Nil
0.3 - 0.6m	Nil
0.6 - 0.9m	Nil
0.9 - 1.2m	Nil

Table 1: Design period, 1 in 100yr + CC SW flood depth and highest related probability of occurrence at the site

4.1.5 Flood risk from infrastructure failure

Flooding occurs because of canals, reservoirs, industrial processes, burst water mains or failed pumping stations.

The site is not shown to be at flood risk due to reservoir failure hence the flood risk to the site from reservoir failure is considered to be Negligible.

4.1.6 Impact on flood risk elsewhere

SW arising: Since the change of use does not change the impermeable areas on the site the impact on flood risk elsewhere is Negligible.

5 Levels

External ground level.

Refer to survey as submitted under separate cover.

Generally external ground level at the building perimeter is circa 47.6m AOD.

5.1 Floor level data

Existing first floor FFL is no less than 2.6m above external ground level (as shown on elevation plans as submitted under separate cover).

Hence at first floor the FFL is no lower than 50.2m AOD.

5.2 Climate change allowances

The revised climate change allowance for the site is +38% as shown in Figure 5

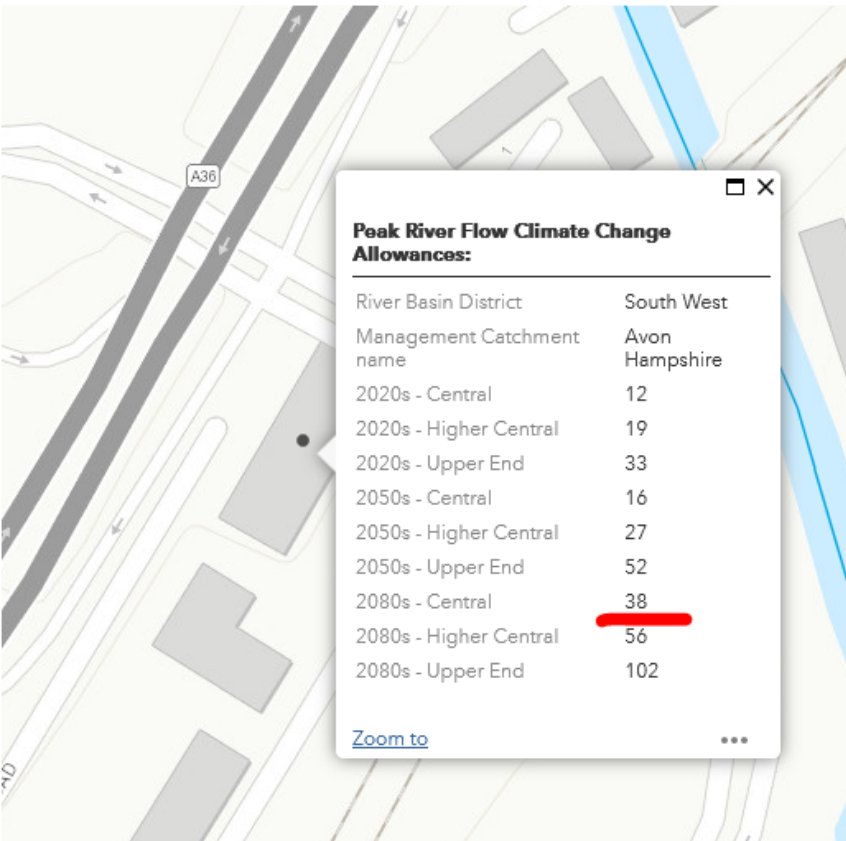


Figure 5: Revised climate change allowances

5.3 Flood level data

The flood levels are extracted from the “Salisbury Flood Risk Mapping” data as provided by the EA following a FOI Product 6 data request. There is therefore a level of certainty in these levels (ref to Section 3.2).

The 1 in 100yr + CC flood level is 48.20m AOD as shown in Figure 6.

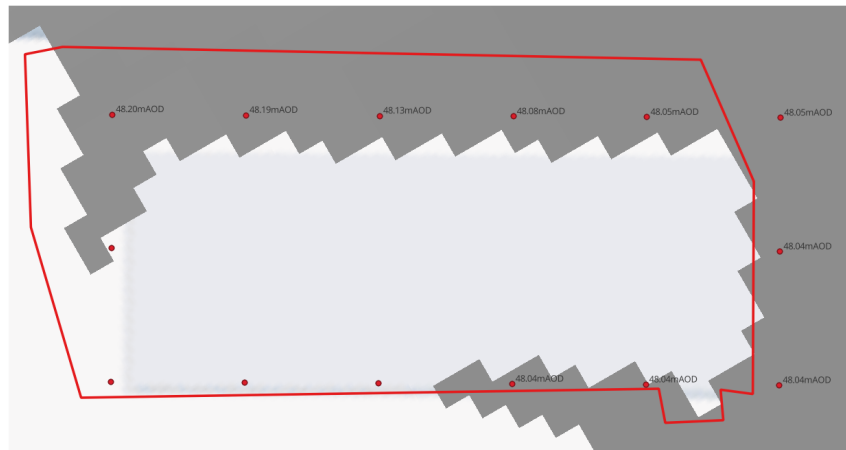


Figure 6: 1 in100yr +40% flood levels as extracted from EA data.

5.3.1 Freeboard

Required minimum for domestic accommodation is 300mm where there is a high level of certainty with the flood levels.

Provided freeboard is 2.0m, therefore satisfactory.

6 Management of flood risk

6.1 Flood risk resilience measures

Non required at accommodation level.

6.2 Management of residual risk

Any residual risk can be safely managed by not impairing access and evacuation routes, signing residents up to flood warning schemes and preparation of flood plans.

6.2.1 Safe access and egress routes

The NPPF stipulates that, where required, safe access and escape routes should be available to/from new developments in flood risk areas. Access routes should be such that occupants can safely access and exit buildings in design flood conditions.

The proposal involves the formation of an external access route from the first floor to external ground level to the rear of the building beyond the flood zone extent as shown in Figure 7 (also as to be submitted under separate cover).

This will provide occupants, and members of the emergency services with an immediate and safe access/egress route as shown in Figure 8. Such routes will be clearly designated within the building's communal areas.

It is however also important that the occupiers gain early warning of likely flood events.



Figure 7: Provision of new Access and Egress route. A new elevated walkway is proposed for emergency use during a flood event.

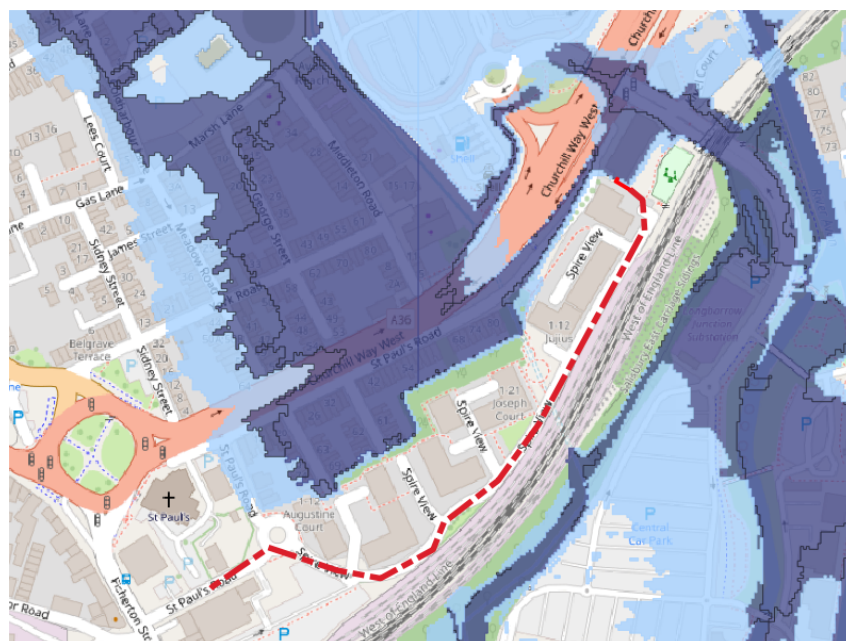


Figure 8: Access and Egress routes beyond the building are safe and immediately available.

6.3 Flood warning schemes

Since it has been established that the site is sited in an area with a possibility of flooding the owners/management team of the site should (if they have not done so already) sign up to the E.A. “Flood Warnings Direct” which is a free service providing flood warnings by phone, text or email. See <https://www.fws.environment-agency.gov.uk/app/olr/register>, or call the E.A. on 0345 988 1188 for full information.

6.3.1 Flood Plan

This report also provides the owners of the building with a proforma Flood Plan (See Appendix A for an example). The plan will, when adapted bespoke to the building, provide guidance to all residents on emergency response procedures in the event of flooding to the site. This will:

- Provide details of who to contact and how;
- Provide details of how to turn off gas, electricity and water mains supplies;
- Provide details of designated safe egress routes out of the building and out of the local area at risk;
- Provide details of E.A. Flood warning codes;
- Provide details of local radio stations
- Provide a check list of essential items.

7 Conclusions

Given that:

- The proposal is for a change of use of upper floors to residential;
- The ground floor will remain non-residential;
- The building lies in Flood Zone 3;
- All accommodation floor levels provide greater than the minimum required free-board over estimated design period flood levels;
- No flood resilience measures are required on the accommodation floors;
- A new emergency walkway is to be provided at first floor level to offer all residents direct and safe access and egress under flood conditions;
- Emergency exit routes through and from the building will be on permanent display in communal areas.
- The residents will be encouraged to sign up to flood warning schemes;
- There is no documented evidence of flood risk from any other sources;
- The development does not impact on flood risk elsewhere;

and assuming the warning and evacuation provision and procedures can be maintained over the lifetime of the development, the proposed change of use to residential use at the first second and third floors is considered acceptable.

Signed:



Dr Robin Saunders CEng, C. Build E, MCABE, BEng(Hons), PhD

Date: 3rd October, 2025

A Emergency flood plan (example)

Personal flood plan

Name

Environment Agency

Are you signed up to receive flood warnings?

If not call Floodline on 0345 988 1188 to see if your area receives free flood warnings.

Let us know when you've completed your flood plan by calling Floodline on 0345 988 1188.
This will help us learn more about how people are preparing for flooding.

General contact list	Company name	Contact name	Telephone
Floodline	Environment Agency		0345 988 1188
Electricity provider			
Gas provider			
Water company			
Telephone provider			
Insurance company and policy number			
Local council			
Local radio station			
Travel/weather info			

Key locations

Service cut-off	Description of location
Electricity	
Gas	
Water	

Who can help/who can you help?

Relationship	Name	Contact details	How can they/you help?
Relative			
Friend or neighbour			

Be prepared for flooding. Act now

Personal flood plan

What can I do NOW?

☐ Put important documents out of flood risk and protect in polythene

☐ Look at the best way of stopping floodwater entering your property

☐ Find out where you can get sandbags

☐ Identify what you would need to take with you if you had to leave your home

☐ Check your insurance covers you for flooding

☐ Make a flood plan and prepare a flood kit

☐ Identify who can help you/ who you can help

☐ Understand the flood warning codes

What can you do if a flood is expected in your area?

Actions	Location
Home - Move furniture and electrical items to safety - Put flood boards, polythene and sandbags in place - Make a list now of what you can move away from the risk - Turn off electricity, water and gas supplies - Roll up carpets and rugs - Unless you have time to remove them hang curtains over rods - Move sentimental items to safety - Put important documents in polythene bags and move to safety	
Garden and outside - Move your car out of the flood risk area - Move any large or loose items or weigh them down	
Business - Move important documents, computers and stock - Alert staff and request their help - Farmers move animals and livestock to safety	
Evacuation - Prepare a flood kit in advance - Inform your family or friends that you may need to leave your home - Get your flood kit together and include a torch, warm and waterproof clothing, water, food, medication, toys for children and pets, rubber gloves and wellingtons	

There are a range of flood protection products on the market to help you protect your property from flood damage. A directory of these is available from the **National Flood Forum** at www.bluepages.org.uk

Be prepared for flooding. Act now



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