

FLOOD RISK MANAGEMENT / FLOOD PLAN

*Change of use from a double garage to a
1-bedroom single storey dwellinghouse*

**“Oakview”
16a The Quadrant.
Hassocks.
BN6 8BP
West Sussex.**

Vulnerability to flooding:

The NPPF classifies property usage by vulnerability to flooding. The existing site comprises of a double garage at ground floor level, which are classified as “less vulnerable” under the NPPF. Post development, the site will become “more vulnerable” throughout, as the proposed application is to convert the existing ground floor garage area into a one-bedroom property. As such, there will be an increase in vulnerability post development.

Environment Agency Standing Advice:

The EA Standing Advice guidance is for domestic extensions and non-domestic extensions where the additional footprint created by the development does not exceed 250m sq. It should not be applied if an additional dwelling is being created, e.g. a self-contained annexe or additional commercial unit. The proposed application creates a one-bedroom property.

Physical Design Measures:

The NPPF requires new residential floor levels to be set at least 300mm above suitable modelled 0.5% (1:200) year plus allowance for climate change flood levels. The site is defended to the 1:200 year standard, and therefore the modelled defended scenario has been used to set finished residential floor levels. The site is entirely outside of all of the modelled defended flood extents (including the 1:200 year and 1:1000 year defended flood extents in 2115). In this instance the recommendation is to set the floor level 600mm higher than the assumed flood water this would mean in this instance that the floor level would need to be approximately 900mm higher than the external ground level outside the existing garage.



Extent of flooding from surface water (map indicates that the water level is 300mm and below)

The proposal is for the change of use of the double garage into a holiday let.

From the information gathered from the flood maps the flood water level could be up to 300mm above the site ground level, with the raising of the floor level this would place the new finished floor level at the same level as possible the flood water level with water ingress only occurring if or when the surface water is disturbed in some way (vehicle using the road outside the site and causing a wash effect).

As the floor level cannot be raised to the recommended height of 600mm above the flood water level equating to 900mm above the external ground level other measures are to be put in place during the construction process to minimise the disturbance / damage / cost to the property.

The external paved access route will have a slight incline as the entrance door having a low threshold. The threshold up stand to doors should not exceed 15mm to comply with accessible housing and lifetime homes, however due to this practise it makes this point the easiest point of water access to the property so it is recommended that a flood protection door barrier be installed (Floodtite door panel [www.floodtite.com / doorpanel.html](http://www.floodtite.com/doorpanel.html)) which will protect this passage way.

As indicated on the map the rear of the site is at a level that will not be affected by flood water this means the rear patio door do not require this level of protection.

Measures that are to be added to the construction process so as to reduce damage to the property in the event of flooding are set out below:-

- *Switches / sockets, ventilation and service controls will be at a height usable by all (between 450mm and 1200mm from the floor).*
- *Internal blockwork to be class A dense concrete to give a lower permeability rating up to a height of 500mm above floor level.*
- *Waterproof screed used on floors;*
- *Closed-cell foam used in wall cavities;*
- *Waterproof ground floor internal render.*
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- *The use of lime based plaster.*
- *Exterior ventilation outlets, utility points and air bricks fitted with removable waterproof covers;*
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- *Boilers, control and water storage / immersion installed at high level;*
- *Gas meter installed at high level;*
- *Plumbing insulation of closed-cell design;*
- *Non-return valves fitted to all drain and sewer outlets;*
- *Manhole covers secured;*
- *Anti-syphon fitted to all toilets;*
- *New kitchen units of solid, water resistant material.*

Flood Warning:

The EA is responsible for issuing flood warnings. Flood warnings are issued to the emergency services and local authorities. Both private individuals and organisations can sign-up to receive warnings via phone, text or email. This system of receiving warnings is currently voluntary. Advice regarding severe flood warnings will generally be given during weather forecasts on local radio and TV. In the case of extreme events, warnings can also be disseminated via door-to-door visits by the police or locally appointed flood wardens. The EA issue flood warnings/alerts to specific areas when flooding is expected. It is recommended that the applicant registers online with the free Environment Agency Floodline Warnings/Alert Direct service at <https://www.gov.uk/sign-up-for-flood-warnings> to receive flood warnings by phone, text or email.

The applicant has prepared the following flood plan to protect life and property during a flood event, this is to be added to the rental information for the property which is provided to all guests who rent the property.

FLOOD PLAN

Before a flood:

- Find out if you are at risk of flooding.
- Find out if you can receive flood warnings.
- Prepare and keep a list of all your important contacts to hand or save them on your mobile phone.
- Think about what items you can move now and what you would want to move to safety during a flood such as pets, cars, furniture, and electrical equipment.
- Know how to turn off gas, electricity and water supplies.
- Prepare a flood kit of essential items and keep it handy. It can include copies of important documents, a torch, a battery-powered or wind-up radio, blankets and warm clothing, waterproofs, rubber gloves and a first aid kit including all essential medication.
- Consider buying flood protection products such as flood boards and airbrick covers to help reduce flood water getting into your property. During a flood:
- Tune into your local radio station on a battery or wind-up radio.
- Fill jugs and saucepans with water.
- Grab your flood kit - if you have prepared one.
- Collect blankets, torch, first aid kit, medication and food.
- Move important documents, personal items, valuables, and lightweight belongings upstairs or to high shelves.
- Raise large items of furniture or put them in large bags if you have them.
- Move people, outdoor belongings, cars and pets to higher ground.
- Switch off water, gas and electricity at mains when water is about to enter your home. Do not touch sources of electricity when standing in water.
- Fit flood protection products, if you have them, for example flood boards, airbrick covers, sandbags.
- Put plugs in sinks and baths. Weigh them down with a pillowcase or plastic bag filled with soil.
- If you do not have non-return valves fitted, plug water inlet pipes with towels or cloths.
- Move your family and pets upstairs or to a high place with a means of escape.
- Listen to the advice of the emergency service and evacuate if told to do so.
- Avoid walking or driving through flood water. Six inches of fast-flowing water can knock over an adult and two feet of water can move a car.

After a flood:

- If you have flooded, contact your insurance company as soon as possible.
- Take photographs and videos of your damaged property as a record for your insurance company.
- If you don't have insurance, contact your local authority for information on grants and charities that may help you.
- Flood water can contain sewage, chemicals and animal waste. Always wear waterproof outerwear, including gloves, wellington boots and a face mask.
- Have your electrics, central heating and water checked by qualified engineers before switching them back on.