



**Land South of Ranelagh Road, Havant,
Hampshire PO9 1NR**

**Flood Risk Assessment dated September
2016**

Land South of Ranelagh Road, Havant, Hampshire PO9 1NR

Flood Risk Assessment dated September 2015

1.0 Introduction

- 1.1 Planning consent has been granted for a residential development on land south of Ranelagh Road, Havant, Hampshire PO9 1NR.
- 1.2 The topographical survey indicates a site which slopes gently from north to south with a general level of approximately 7.52m AOD on the north eastern corner of the site falling to a level of approximately 6.30m AOD on the southern boundary giving an overall fall over the site of 1.2m.
- 1.3 The Technical Guidance to the National Planning Policy Framework was published to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding with the requirement for a flood risk assessment which appraises, manages and reduces the risk of flooding.
- 1.4 This site specific flood risk assessment is required to meet the minimum requirements set out in the Technical Guidance to the National Planning Policy Framework

2.0 Flood Risk Assessment

Tidal Flood Risk

- 2.1 The site is located inland 1.8 kilometres from the sea and thus is not susceptible to Tidal Flood Risk.

Fluvial Flood Risk

- 2.2 The Environment Agency has been consulted to determine whether the site is at risk of flooding. The Floodplain Map attached, centred on land at land south of Ranelagh Road, Havant, Hampshire PO9 1NR shows that the site is outside the designated Flood Zone 3 (High Probability - flooding from a river with a 1 in 100 or greater chance of happening each year) or Flood Zone 2 (Medium Probability - flooding from rivers with up to a 1 in 1000 chance of occurring each year). The development site can therefore be designated as being within Flood Zone 1 assessed to have a less than 1 in 10000 annual probability of river or sea flooding in any year.
- 2.3 The closest sources of fluvial flooding is the Hermitage Stream 0.1km to the west of the site as shown by the EA flood map which shows that the site is not susceptible to fluvial flooding as indicated by the EA flood map.
- 2.4 Land within Flood Zone 1 is appropriate for all uses.

Groundwater Flood Risk

- 2.5 Recent site investigation works confirm Made Ground over Head Deposits over the Lewes Nodular Chalk Formation. Boreholes were excavated to 17.5m depth. Ground water was recorded at 3.2m depth and thus the site is not at risk of flooding from ground water. The Hermitage Stream also acts to limit groundwater levels because any rise in ground water levels simply increases the ground water flows into the Hermitage Stream.

Other Sources of Flood Risk

- 2.6 The topographical survey indicates a site which slopes gently from north to south with a general level of approximately 7.52m AOD on the north eastern corner of the site falling to a level of approximately 6.30m AOD on the southern boundary giving an overall fall over the site of 1.2m.
- 2.7 The new buildings will be set with finished ground floor levels a minimum of 150mm above proposed ground level. External levels will be set following the natural contours of the site falling away from the properties. Proposed ground levels will be set to follow the natural

contours of the site to ensure that flows through the site are redirected away from properties in the unlikely event of flooding taking place from other sources such as foul, surface water or combined sewers as well as surface water sheet run off or infrastructure failure.

3.0 Surface Water Management

- 3.1 The Code of Practice for Sustainable Drainage Systems provides a flexible approach to drainage systems with a wide range of components and includes a hierarchy of techniques. These are:-
1. Prevention - The use of good site design and housekeeping measures on site to prevent run-off and pollution.
 2. Source Control - Control of run off at or very near to its source.
 3. Site Control - Management of water from several sub catchment areas.
 4. Regional Control - Management of run off from several sites, typically in a detention pond or wetland.
- 3.2 With the above in mind surface water disposal will respect the hierarchy of techniques outlined above.
- 3.3 Prevention will be at the forefront of the development of the site with the site set out to maximise the areas of soft landscaping.
- 3.4 Source control is to be introduced in the following ways:-

The Environment Agency / Planning Authority require surface water run off after development to be no greater than the surface water runoff prior to development.

The site investigation report has established that soakaways are feasible for the site.

Surface water will be attenuated and discharged to the Hermitage Stream as shown by HDL drawing no. 14-2260-500 C6 attached.

- 3.5 Rainfall within soft landscaped areas will be allowed to permeate through the ground in order to mimic as closely as possible the natural drainage from the site before development.

4.0 Conclusions

- 4.1 The flood risk assessment indicates that the proposed development is not vulnerable to flooding from tidal, fluvial, ground water or other sources of flooding and is thus appropriate.
- 4.2 In the unlikely event of flooding taking place an alternative over land flood route will be formed through the site to direct any flooding through the site and away from properties.
- 4.3 Sustainable surface water management techniques, as outlined above, will be adopted to minimise run off and restrict post development run off rates to that of greenfield run off rates prior to development.

EA Floodplain Map

Map legend

Click on the map to see what Flood Zone (National Planning Policy Guidance definitions) the proposed development is in.

☒ Flood Map for Planning (Rivers and Sea) [i](#)

☒ Flood Zone 3

☒ Flood Zone 2

☒ Flood defences (Not all may be shown*)

☒ Areas benefiting from flood defences (Not all may be shown*)

☒ Main River Line [i](#)

☒ Main River Line

☒ Other national environmental organisations [i](#)

☒ Natural Resources Wales Area of responsibility

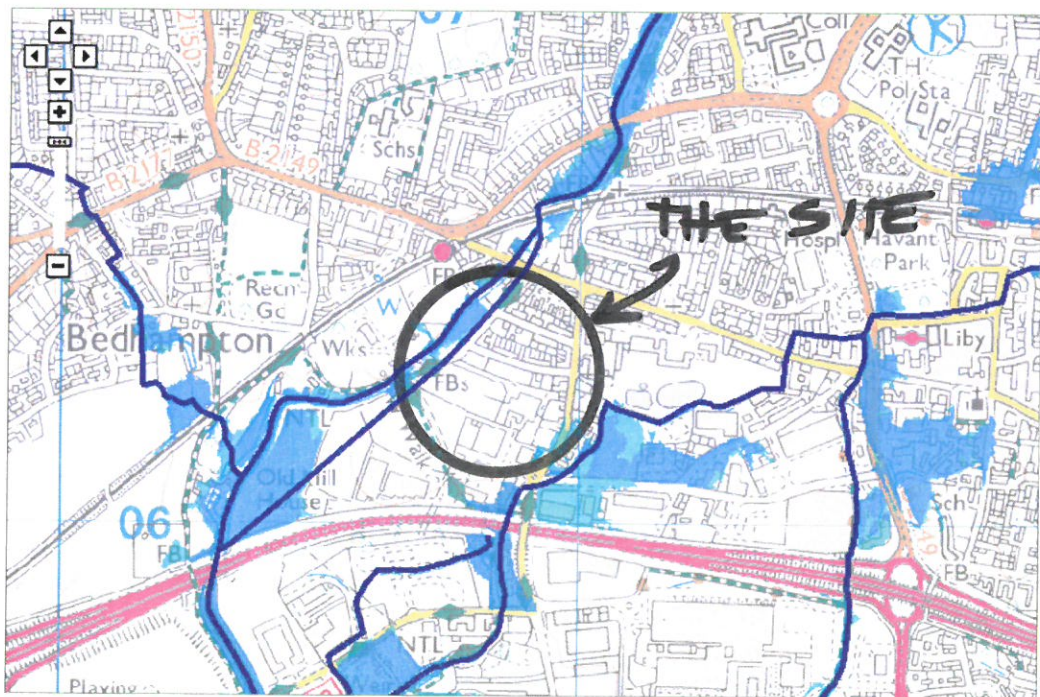
☒ Scottish Environment Protection Agency Area of responsibility

PO9 1NR at scale 1:10,000

[Other maps](#)

[Data search](#)

[Text only version](#)



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