

**134 SEA FRONT
HAYLING ISLAND
PO11 9HW**

**PLANNING APPLICATION
FLOOD RISK ASSESSMENT**

Prepared by

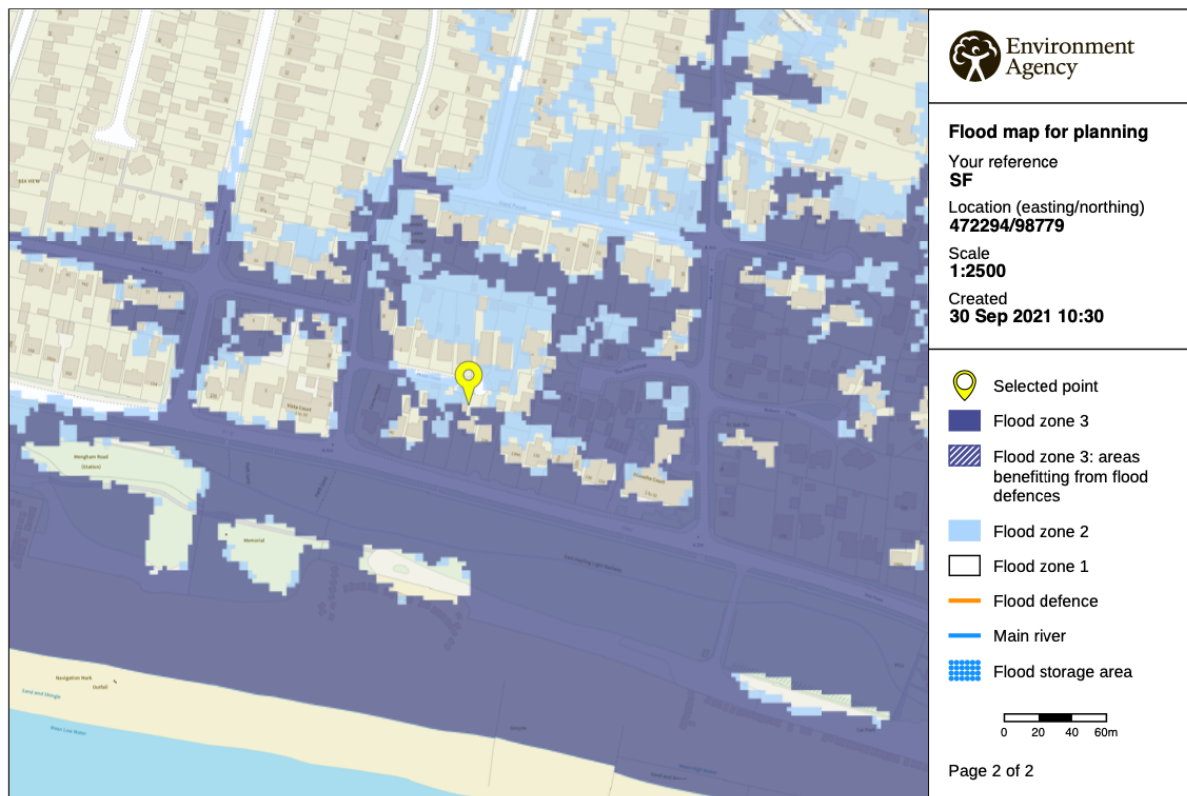


Arthurs Planning & Development

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The detailed application is submitted for a replacement 2-bedroom dwelling of one and a half storeys. The design of the house has been carefully considered to mitigate any potential flood risk by retaining the existing floor level of 5.625 AOD which is indicated as floor risk 1. The architectural form and mass of the proposed house respects and responds in a positive manner to the design language in the adjoining area and retains the amenity enjoyed by the

adjoining properties.



The proposed residential development is therefore classified as more vulnerable to flood risk, although this needs to be balanced against the fact that a residential property exists on the site presently. The lifetime of the proposed development is assumed to be 100 years for the purposes of the assessment.

Sequential Test & Exception Test

Applications for minor development or changes of use are not be subject to the sequential or exception tests; but should still meet the requirements for site-specific flood risk assessments.

Site specific flood hazards

The proposed development site lies within Flood Zone 1, 2 and 3 with the main risk of flooding coming from a tidal (sea) source.

Tidal flooding

Flood Zone 1 is where the existing and proposed properties is located and is considered a low probability of flooding.

Flood Zone 2 Medium Probability – part of this area is within the house footprint. This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1%) in any year.

Flood Zone 3a High Probability includes the garden area - land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding.(Land shown in dark blue on the Flood Map).

Flood model data for the site suggests that over the lifetime of the development, flood depths of around 300mm can be expected on this section of Sea Front and will be of medium velocity. The garden area is set at 4.927 AOD height above the road level of 4.350 AOD.

Surface water flooding

Surface water at the site is currently managed by a mix of on-site infiltration and draining into the existing drainage network. The proposals for surface water management are reduced runoff by using sedum roof, porous surfaces, water butts.

Flood control and mitigation measures

The site is raised above Sea Front by approximately 1m and relatively level to Webb Close and drains into the existing surface water drainage. The proposed house responds to the flood level datum forecasts and the ground floor level at 5.625 AOD will be the same as the existing ground level, which is above the 3.6AOD 1:100-year extreme tidal flood level.

Existing Ground Level is approximately 5.625AOD

Proposed Ground Floor = 5.625 AOD

Other measures to slow the surface water run off including, water butts from down pipes and porous surfaces that will also improve the run-off rates from that of the present dwelling on the site.

Conclusions

The replacement four-bedroom dwelling on the site will provide a more appropriate form of accommodation that is above the datum level at risk from tidal flooding and the surface water run-off rate will be reduced via use of water butts, appropriate surface and planting. The proposed development can therefore be considered positive in terms of providing a safer residential unit and assist with off-site impacts by way of reduced run-off rates.