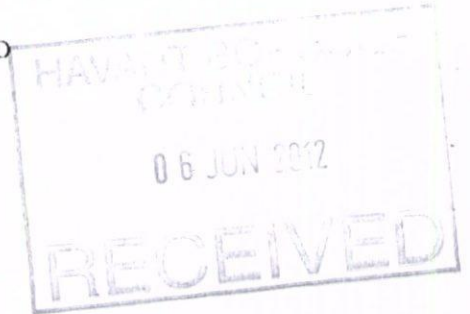


D & B. A

BUILDING DESIGN CONSULTANTS

The Studio, 11 Anthill Close, Denmead, Hants PO7 6ND
Telephone: 02392 233337



**PROPOSED EXTENSIONS
19 EASTOKE AVENUE
HAYLING ISLAND**

FLOOD RISK REPORT

The proposal is to extend an existing single-family bungalow to provide additional habitable space.

The Environment Agency Flood Map for this area puts this site in the Risk 3 Zone, which is within the risk area of flooding from the sea but is nonetheless considered to be Low risk.

The shoreline is protected partly by walls, revetments and jetties with the general level of the wall varying between 3.6 and 3.75m AOD.

According to the Council document the 'East Solent Shoreline Management Plan', Stage II, Vol. 4, '...these defences should be maintained and up graded along the existing line to provide adequate future defences against flooding...'

Local knowledge indicates that the last flood in this area was in 1966, since when the Council have improved sea defences to their present level.

The Environment Agency 1:200 year event prediction for flood levels up to the year 2060, which is accepted by the Local Authority, predicts a maximum flood level of 3.800 metres above Ordnance Datum. (Although, PPS25 predicts much higher tides by 2115 in which case, unless defences are improved, Seaview Road would be part of the sea, and as a result sets more onerous conditions for new development than previous recommendations with regard to flooding)

The Council's accepted ground floor level for new developments in flood risk areas of 4.0 metres AOD derives from this figure. The existing dwelling has a ground floor level of approximately 3.7, which is well below this recommended level and is therefore subject, under predicted extreme conditions of being, 700mm under water for a short period.

Any predictions are, at best, estimates based on sea level rises resulting from climate change, as yet not an exact science and a general sinking of the South-East due to movement of tectonic plates.

Whilst the Environment Agency do not comment on householder applications advice is available to introduce measures that will mitigate Flood damage.

In this instance raising the floor level is not possible but the proposed floor level will be set as existing. In the construction, flood proofing can be introduced where appropriate and the use of materials internally that are able to withstand the effects of flooding will be specified together with locating services, meters, electrical sockets etc. at a higher level.

The Environment Agency recommends an adaptive approach to flood defence measures that in this instance, could be considered and added at a later date when future tide levels are more certain.

These would include a brick built boundary wall of a suitable height and a flood barrier at the entrance to withstand floodwater, flood barriers at door openings and airbricks and non-return valves to drains.

In extreme circumstances if the predictions are correct and defences not improved this area would be inundated and it would not be possible for residents to remain in this house, extension or not. Unlike the previous application, which was approved, this application includes for rooms to be constructed in a new raised roof. In the event of a potential flood, furniture from the ground floor could be safely stored at first floor level for the duration of the problem.

In conclusion this proposal simply extends a single-family home in an area, which is at present whilst known to have flooded in the past is considered by the Environment Agency of Low Risk of flooding i.e. 1:200 annual probability of extreme high tides. Predictions of future flooding are estimates of future trends not indisputable facts and except in the most extreme forecast, measures outlined above can be adopted that mitigate the effects of flooding.

D&BA
10th October 2011