

FLOOD RISK ASSESMENT

in support of a replacement conservatory at the front of
13 Sea Way, Elmer, PO226JX for Mrs F Howard

SITE

13 Sea Way is a small 1940's seaside bungalow. At some point in the past a glazed porch area has been erected across the full width of the front elevation.

The adjacent coastline benefits from sea defences maintained by the Environment Agency, comprising timber groynes, rock revetments to earth banks and offshore islands.

TOPOGRAPHY

The ordnance survey state the road level at the adjacent junction of Sea Way and The Hard as 2.4m. From this point the driveway and garden surrounding number 13 continue relatively flat and level at around 2.5m above ordnance datum.

The existing main floor level is around 2.8m above ordnance datum with the porch floor level being around 2.6m.

PROPOSED DEVELOPMENT

This proposal relates to the demolition of the existing porch and the erection of a new conservatory extending across the site of the existing porch into the garden, approximately doubling the size of the original extension.

The floor level of the new extension will be raised to match the main floor level of 2.8m above ordnance datum.

FLOODING HISTORY

According to the government 'flood map for planning' the property and gardens lie fully within Flood Zone 3. However it and the surrounding properties, benefit from sea defences along the coastline.

Whilst the area has been known to flood in the past due to over topping of the sea defences there are no records of any recent events. This is likely due to the improvements carried out just before the turn of the century which involved the formation of rock island offshore which have reduced the effect of wave action and erosion.

The Environment Agency calculates a 1 in 200 tidal surge level of 3.9m maximum above Ordnance Datum, however this is expected to rise significantly by the end of the century, principally due to climate change.

Whilst the rock islands require little maintenance and are likely to continue to protect the coastline for the foreseeable future, rising sea levels will reduce their effectiveness over time, allowing greater wave heights to reach the shoreline.

It is recognised that further improvements will be required to the islands and the associated sea defences if the area is to continue to benefit from its current level of protection.

CONCLUSIONS

The area is subject to flood defences put in place by the Environment Agency and the current long term flood risk assessment for the area by the governments flood warning information service is low.

However, despite the protection these defences afford against a major disaster it is still foreseeable they could be over topped during a major storm or that storm water could be temporarily prevented from draining away due to the adjacent sea levels. Consequently it would seem prudent to protect against low levels of flooding.

The form any flooding is likely to take makes the introduction of storage chambers impractical and bunding around the property would simply increase flood levels in the surrounding development. Also, the assumed causes of any potential flooding should abate as the tide recedes, so any flooding will be of relatively short duration.

Given the extensions relationship to the existing property, it is impractical to raise it's floor level above that of the main bungalow.

The existing building comprises a solid ground floor construction and masonry walls so appears to offer some temporary resistance to water ingress in the event of low levels of flooding.

It is therefore proposed to adopt a 'water exclusion' strategy for the new extension and incorporate flood resistant materials for at least the first 300mm above floor level as shown on the accompanying planning drawings.