CA 1 / 2011 / 0 6 9 0 / FL

-2 NOV 2011



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Flood Risk Assessment

The Old PO, Kings street, Robin Hoods Bay

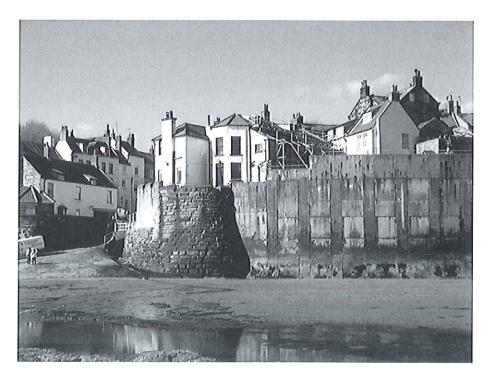
The property is situated on the Kings Street which is a 1 in12 hill, from the rear of the property to the front (kings street) it drops 1.85M's and forms natural rapid drainage into the sea via the street. The proposal will not alter or increase any surface or foul water collection into the street or drains. The rear ground floor will be approximately 8.2M AOD given the BM set in New Road 90M's to the north and the incline of New Road average plus the front to rear ground floor difference.

Sources of flooding

The Sea

The sea would be the main threat and the sea wall is 1.5M off the rear boundary. From the sand bed to the top of the sea wall is approximately 8M's and the algae is evident to 1.5M's high, which depicts the typical high tide mark. The HAT will be expected at 4M's with storm turbulance hitting 1-2M's higher making the overall threat from rising waters well over the 1 in 1000 mark and the storm (wave) topping over the wall at 1 in 100, but with the incline of the site discharge back to the sea via kings street will happen rapidly and leave no standing water penetration likely.

The Sea Wall



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Sea level rise with the area of robin hoods bay based on UKCP (United Kingdom Climate Projections) follow a similar increase to PPS25 on a 95% frequency and medium CO2 emissions scenario the difference between current highest astronomical tide (6.3M AOD) and the 2085 PPS25 predicted HAT is 0.55M, where as UKCP have predicted a relative sea level rise of 0.58 for a 95% frequency of the same year.

The overall threat of flooding is at a minimum and should the sea level rise sufficiently (7M's) to cause flooding it is likely the sea wall, retaining wall will all fail causing the building collapse before it can be effected from flooding. The building is grade A listed in a conservation area, making floor proofing difficult and given this report unnecessary.

OS Map

