

From:
To: [Planning](#)
Subject: photos re planning app nym/2018/0177/fl
Date: 02 May 2018 11:34:45

Can you please add these additional photos and geology information to my comments re planning app nym/2018/0177/fl They show how the cliff is constantly moving and the drainage pipes from 1950s coming out of the quarterdeck. neil purves, willow dene, church lane, Fylingthorpe, north yorkshire, y224pn Thanks Neil Purves

NYMNPA

02/05/2018





Robin Hood's Bay: Coastal erosion and geology



Robin Hood's Bay has a history of coastal erosion and landslides. In 1780 much of the original road into the village, King Street, was lost and since 1780 more than 200 properties have been lost as a consequence of cliff top recession. Up to 22m of coastline has been lost since 1895 particularly near the Victoria Hotel and the main road into the village.

The Problems

The main problems are:

- the condition of existing coastal defences on the southern section of the village
- coastal erosion and slope instability along the unprotected sections of coast adjacent to the northern part of the village

It is mainly exposure to wave action which is causing the slow retreat of the coast. The dominant waves are from the north and northeast where the fetch is over 1500 km long. The main wave energy therefore runs southwards, straight along the northern cliff face and impacts almost directly on to the village frontage.

Profiles of the cliffs show that geomorphological influences are significant. There is evidence of active slope erosion, cliff-top recession and slope instability. Movement within the clay slopes above the sea cliffs is dependent on retreat of the lower sections of the sea cliffs. As the cliffs retreat, landslides on the mid-slope section lose support from beneath and reactivation of landslips may occur with the till slopes degrading to a more stable slope angle. The movement affects localised areas of the slope with loss of land at the top of the slope as witnessed by realignment of the coastal cliff path. The movement tends to occur as 'one-off' slips rather than being a continuous, gradual process.

Recession rates depend on the strength of the underlying rocks. An average rate of 0.3m per year is given for Robin Hood's Bay but this is likely to increase in the future compared to historic rates due to climate change.





Robin Hood's Bay

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