

Pentewan Sands – Coastal Flood Management Scheme

Update, November 2020

Background and Scope

In 2017 Pentewan Valley Parish Council and Steve Double MP approached Cornwall Council and the Environment Agency for advice on concerns they have over the deteriorating old harbour wall arm and longer-term flood and coastal erosion risk to the village and the Holiday Park. It was agreed that Cornwall Council, through the Environment Agency, would commission an appraisal of options by civil engineering consultants CH2M. This assessment was reported at the end of 2017.

The assessment concluded that the most economically favourable option is to construct setback dunes in front of the existing lock gates using existing and imported sand. This option would improve the Standard of Protection afforded by residential properties in the village and provide an asset with high aesthetic and ecological value.

£30k funding was raised in 2018 in order to develop a more detailed assessment with a deliverability review and firm costings in order to develop the project further. This funding comprised £10k from Cornwall Council Environment Service, £5k from Cornwall Council Highways, £3.5k each from Pentewan Valley Parish Council and Pentewan Sands Limited and £1k each from Pentewan Sailing Club, Pentewan Village Fund and St Austell Brewery.

In 2019 Cornwall Council commissioned Cormac Solutions Ltd to manage the appraisal and they sub-contracted the design and deliverability review to AECOM Ltd and the detailed costings and Bill of Quantities to Cormac Contracting to provide confidence in the cost estimates.

Cormac/AECOM provided the Stage 1 Report reviewing the preferred option in December 2019 and the Final Stage 2 Report on the concept design, deliverability and costings in September 2020.

Results

Stage 1 recommended the preferred option to be a setback dune structure with a rock core, making use of the contribution of granite blocks from nearby Pentewan Sands Holiday Park.

Dune with a rock core is not considered prohibitively expensive, unlike other options ruled out at the long list stage.

A dune provides a flexible solution. It does not restrict the future aspirations of some of the local community to reopen the harbour in the future. It is easily adaptable in the future if required. It is also aesthetically more in keeping with the local environment. A setback dune with a rock core will reduce the overtopping volume entering the basin which is the objective of this scheme. It also makes use of the offered contribution of granite blocks.

The structure has a design working life of 50 years and will provide at least a 1 in 40 year standard of protection in the present day.

