

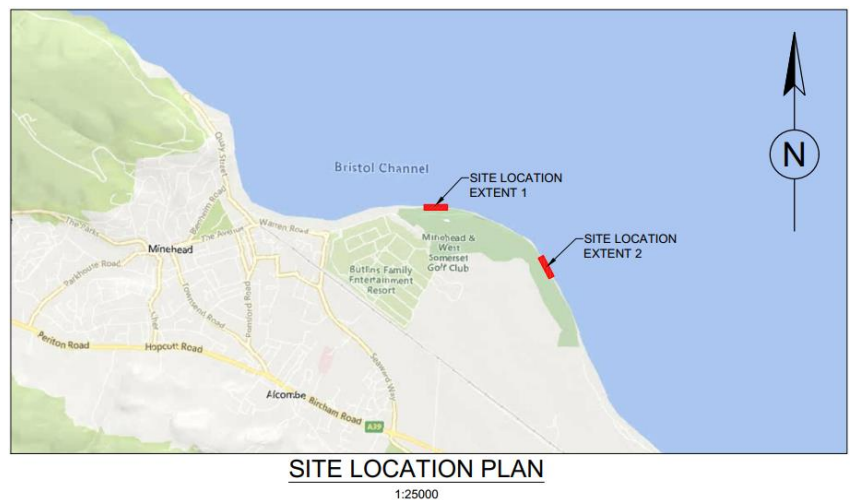
# Minehead Coastal Erosion Protection

**The Environment Agency are carrying out works to stabilise 360 metres of a vulnerable shingle ridge on the coastal frontage at the Warren. This will ensure that properties and businesses in Minehead continue to be protected from flooding.**

The Environment Agency has identified the need to carry out urgent repair and reinforcement works to coastal defences at Minehead. It is essential that these works are completed before the winter of 2023. One of our contractors, KIER, will be carrying out this work on behalf of the Environment Agency.

The current coastal flood defence to the east of the main esplanade is a shingle ridge which reduces the risk of flooding to residential and commercial properties in Minehead. The ridge is susceptible to erosion caused by winter storms. We have previously bolstered the area using Rock Armour and materials gained from the nearby foreshore.

Environment Agency asset inspectors have identified that the shingle ridge is eroding. If this is not addressed there is a risk of serious flooding to parts of Minehead. Rock Armour will be installed on the two most severely affected areas of the shingle ridge to maintain the defence and prevent further erosion leading to a breach.



**Figure 1: Site Location Plan**

Repair and maintenance have been regularly undertaken here, most recently in 2021. This phase of work will strengthen the existing defences and reduce the risk of flooding in Minehead.

## What is the flood Risk in Minehead

Parts of Minehead are vulnerable to coastal flooding particularly during North Westerly Storms and high tides.

Minehead benefits from a large Coastal Defence that is maintained by the Environment Agency. The routine annual maintenance to the beach frontage including annual beach reprofiling is a vital part of how the scheme operates to reduce flood risk in Minehead.

Recent storm events have tested the existing coastal flood defences which have continued to reduce the risk of flooding to properties in Minehead.

Environment Agency flood mapping shows the parts of Minehead that are at risk of flooding from the sea. The risk of flooding is forecast to increase in the future due to climate change.

## How will the works be carried out?

Environment Agency contractors KIER will erect two compounds in Minehead that will be used for the works. One will be in the Golf Club Members car park, and another on the beach to the East of the Slipway that will be used to safely store the machinery when not being operated.

Initially, a section of the rocks that form the terminal groin to the east of the slipway will be relocated to allow plant and machinery access to the eastern beach area adjacent to the Golf Course.

Approx 14,600 tons of 1-to-3-ton Granite rocks will be used to continue the existing line of rock armour that forms the coastal defence.

The stone will be transported from Glensanda Quarry, Scotland via a large transport ship (M/S HAGLAND SAGA) that will be anchored in the Bristol Channel, approximately 3 miles offshore. The stone will then be transferred via a self-unloading system to a dedicated armour stone barge (SeaRock 1) which will be towed by tugboats (Afon Wen Chloe May) to shore for offloading into a stockpile. In total this will be in 3 shipments over a period of high tides.







The stockpile will then become exposed on the receding tide. When the tide has dropped back to an appropriate level the rocks will then be retrieved by Plant Machinery on the beach. The stone will then be moved further up the beach to await placement in their final position to form the coastal defence.

In total there will be three ship deliveries and subsequent barge movements starting from the 18th of September. During the delivery and movement of the stone, you may hear loud noises as the stone is tipped from the barges.

This transportation option is the most sustainable and carbon friendly option for getting all the material to Minehead.

This may be a 24-hour operation with slews and tracked dumpers (Plant machinery) to allow for the maximum working access to the beach during low tides.

Tower lights will be deployed outside of daylight hours to ensure a safe and visible site during construction.



Somerset County Council along with English Coast paths have approved a footpath closure and diversion during the works.

More information can be found on Somerset Council website. [Rights of ways – Closures \(somerset.gov.uk\)](https://www.somerset.gov.uk/roads-transport/roads-transport/closures/)

Emergency service access to the slipway will not be compromised during the works. Should you require access, contact details will be on the site signage. The site will be manned by KIER 24 hours a day.

Access to the beach to the East of the Slipway will remain open but there will be banksmen supervising the movement of machinery and material who will advise on safe routes around the working site.

## **How are we mitigating the possible environmental impacts to the shore at Minehead?**

Works have been planned to be sympathetic to the historical archaeology on the shore at Minehead. Archaeological reports showed evidence of medieval fish traps uncovered at low spring tides on the foreshore. We have taken this into account during the planning of the works in a bid to ensure that the barge will not offload the rock on these or other important sites and the activity has the minimum impact on the environment.

Scour holes may appear and be visible at low tide from the tugboats holding the barges in place as they deliver the rock to the shoreline. These scour holes will, over time naturally refill through with a sequence of high tides when suspended sediment and silt is remobilised and deposited. A similar project at Blue Anchor had material delivered by barge. The tugboat scour marks took approximately 10 weeks to be replenished with sediment silt and natural shoreline materials.

## **When will the works be carried out?**

Initial groundwork to prepare the working sites at Minehead will begin on the 11th of September. This will include erecting three compounds, one on the beach and one at the eastern end of the public car park. Another compound will be located within the Golf Club member's compound. Works will then commence to remove a section of the stone groyne to allow plant machinery access to the working area of the beach.

The barge will deliver the first load of rock on the 17th / 18th September.

Work is likely to last for 10 weeks, depending on weather and coastal conditions.

Operations may change due factors outside of our control such as weather, tides, and waves.

## What do you need to do?

We encourage residents' co-operation and to work with us to take steps to avoid harm. This includes adhering to the site signage and instructions from KIER staff when near the working sites.

We strongly advise that people continue to prepare and take action to reduce the impact of flooding to their homes and businesses. There are several things you can do to prepare for flooding to keep yourself and your family safe.

Find out if your home is at flood risk and sign up for flood alerts and flood warnings and be ready to act.

Write a personal or community flood plan to help you prepare.

For more information visit [www.gov.uk/flood](http://www.gov.uk/flood) or call Floodline on 0345 988 1188.

You can check river and sea levels in England [www.flood-warning-information.service.gov.uk/river-and-sea-levels](http://www.flood-warning-information.service.gov.uk/river-and-sea-levels)

Visit the Met Office website for local forecasts at [www.metoffice.gov.uk](http://www.metoffice.gov.uk).

If you require any more information, please email:

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