

Seaton Carew Sea Defence

County Durham 2014



Client	Hartlepool Borough Council
Contractor	Hall Construction
Consultant	Hartlepool Borough Council

Following a Coastal Strategy Study by Hartlepool Borough Council, a section of sea defence wall was required to be replaced and strengthened to afford protection against coastal erosion to homes and businesses along the seafront. The works would also allow the existing promenade to be widened and create a new access point to the beach.

Reinforced Earth Co. Ltd. (RECo) designed a solution which resisted wave impact on the structure and took into account the differential water level across the structure using local tidal conditions.

The wall was constructed so that the majority of the wall was buried beneath the beach level - this would allow for predicted future reduced beach levels to occur and not cause the undermining of the structure.

Following completion of the works, Kieran Bostock, Hartlepool Council's senior engineer, said: "The work has been really successful and we have had no major problems on site and everything has gone as planned."

"It has been done to protect Seaton from coastal erosion and this should provide protection to properties, shops and Northumbria Water's sewerage works for the next 100 years." (Hartlepool Mail, 2014)

The concrete facing panels were manufactured by RECo using glass fibre reinforcing bars to eliminate the risk of corrosion damage to the concrete, and to reduce the thickness of the panels. Both the soil reinforcement and the connection to the concrete panels were fully synthetic.

The concrete facing panels were made with a patterned finish. Reinforced Earth panels can be supplied with many off-the-shelf patterns or bespoke to suit clients' requirements. Reinforced Earth has a global network of resources and experience and has been providing sea defence structures around the world for over 40 years.