## Living life on the edge

A garden collapse following a devastating cliff slide was turned into a creation of beauty by Devon-based structural engineers

hocked homeowners awoke to find their entire garden collapsed into the foaming sea following heavy and unprecedented rains, together with a storm and high-tide the night before, causing significant coastal cliff slippage to their stunning house nestled on a South Devon cliff.

StructureHaus Limited was appointed to undertake full design and planning to reinstate and enhance the lost terraced garden. A firm of consulting civil and structural engineers, surveyors and designers with offices in Exeter, Basingstoke and London, they have extensive experience in undertaking specialist 'cliffside' remediations, improvements and developments.

The engineers worked closely with local contractor KJ Construction and Exeter-based Red Rock Geoscience, the geotechnical consultant. A robust engineering solution was adopted to stabilise the slope and create an elegant and enhanced terrace and cantilevered solution to reinstate lost land.

Conceived harmoniously with an architectural solution offering a journey through the garden, the new design offered different spaces for the owners to enjoy the spectacular sea views and safer

David Phillips, managing director of StructureHaus explains: "Red Rock introduced us to the client as they deal with geotechnical aspects rather than structural design and



architecture - we also prepared and administered the contract to deliver the project.

"Having worked closely and efficiently with them for many years, we knew we work well as a team. A collaborative approach on projects like this is essential to ensure the correct remedial solution is adopted, and the risks are well understood by all parties including planners, the client, design team and contractor."

He adds: "South Hams planners were very helpful in recognising the risk to the house after the cliff collapse and granted an initial permission. We prepared for stabilising the slope and safeguarding the residence, assisting the contractor in his construction methodology and temporary works designs.

"It was a very challenging environment, however we had previous experience with a similar project in Branscombe. Financially these projects can be difficult to pin down as it is not like building houses in a field! As such making the client aware is very important in order to implement suitable contingencies for financial risk items.

"After the initial stabilising works were granted permission, the final design was prepared and submitted for approval."

Developing terracing into the new design formed a journey through the garden which created different spaces and aspects for the owners to fully appreciate their fabulous sea views. A simple pallet of natural materials was used with local stone facing to piled retaining walls and the timber decking mellows in time, particularly with the seaside weather conditions.

At the end of the garden is a bar where they can enjoy a relaxing drink whilst enjoying the vista, together with a covered bench hidden under the cantilevered dining deck. The balustrading with stainless steel rigging wire appears transparent, however is strong enough to safeguard the owner's young grandchildren and pets from falling through!

David concludes: "Our clients were so grateful to get their garden back and benefit from a stunning new design with many additional features. He sums up: "We don't just make good; we make it better."

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**ABOVE:** Homeowners



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