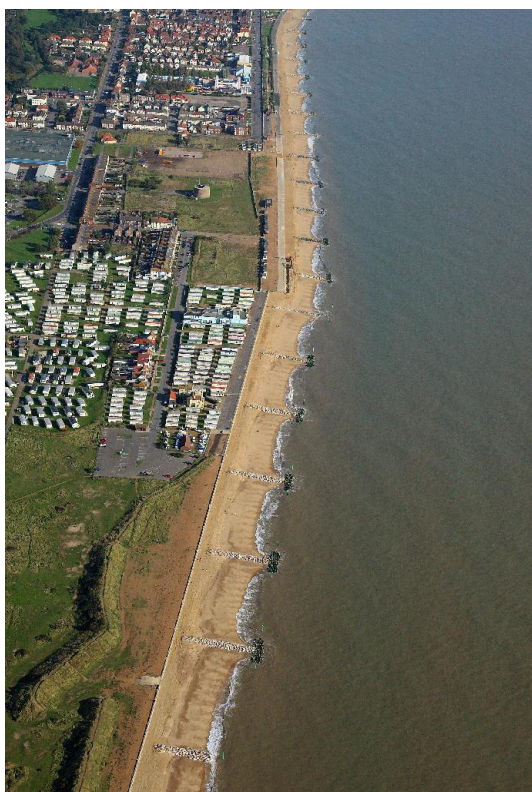


Felixstowe South Coastal Defences

Expert review of detailed design

Felixstowe, Suffolk, UK



The completed scheme (2008)

Client: Black & Veatch Ltd (for the Environment Agency, working in partnership with Suffolk Coastal District Council)

Services provided:

Expert advice and review of the following tasks:

- coastal modelling
- assessment of wave extremes
- joint probability assessment
- beach plan shape modelling and layout of groyne field
- rock sizing
- underlayer design
- beach design.

The old timber/ concrete groynes along the 5km stretch of Felixstowe South beach had failed and rapid beach loss had resulted. The seawall, which is part of the coastal flood defence system to over 1,400 properties and the Port of Felixstowe was at risk of failure. ENBE Ltd was appointed as part of the Black & Veatch (B&V) team to design a coastal defence scheme. ENBE's role was to provide expert coastal science and engineering advice to the B&V team and to review the detailed design.

The optimised scheme consisted of 21 rock groynes (18 of which had a 'T-head' at the seaward end) and 150,000m³ of beach recharge. The scheme was constructed in 2008 and its performance to date has been as expected.

"ENBE has provided invaluable input to the project, giving us, the end user and other stakeholders confidence in the proposed scheme design – having a third party review our work has ensured nothing is overlooked and the scheme is well thought through. "

Black & Veatch Project Manager