

Newbiggin Bay Coast Protection

Design review of coast protection scheme

Newbiggin-by-the-sea, Northumberland, UK



The breakwater, complete with monument the "Couple".

Client: Wansbeck District Council (now incorporated into Northumberland County Council)

Services provided:

- expert advice
- design review.

The collapse of old mine workings beneath Newbiggin Bay was believed to have been a principal cause of exposure of the coast to serious beach erosion. Though the seafront had been protected by a seawall which had been strengthened and extended over the years, continued loss of beach was exposing the massive structure once again to damage, threatening its integrity.

Detailed appraisal studies carried out by consultants Atkins identified the preferred mitigation option which comprised a 200m long detached breakwater, located 300m out in the bay, together with half a million tonnes of sand to restore the depleted beach.

Prior to scheme finalization, ENBE was appointed to provide expert advice and an independent review of the Atkins design. Apart from the main coast protection components, this review included consideration to the UK's first ever permanent offshore sculpture, known as the "Couple", who stand aloft the new breakwater. One of the biggest beach reclamation projects ever staged in the UK, the breakwater was built and beach nourishment installed by Westminster Dredging, completing the project in 2007 and providing renewed protection and a healthy beach for Newbiggin community.