

Lincolnshire seawall residual life study

Stage 1 – data review

Stage 2 – technical analysis

Stage 3 – more detailed technical investigations

Lincolnshire, UK



Coastal frontage at Trusthorpe, June 2018

Client: Team Van Oord (TVO)

Services provided:

- review of available data for relevance
- production of data sheets
- assistance with compilation of data sheets in a GIS based collaborative online storage tool
- scope definition for residual life and standard of protection assessments
- wave overtopping assessments
- geotechnical stability analysis
- residual life assessments

The existing 37km of coastal defences between Saltfleet and Gibraltar Point on the Lincolnshire coast protect a vast low-lying inland area from coastal flooding. Zone A and C of the coastal defences are natural dune systems whilst zone B, which is over 220 km in length, predominantly relies upon the continuing existence of hard defences. The EA is concerned that there is a lack of knowledge regarding the risk of seawall failure and hence the defences' residual life, and the level of protection provided.

The first stage involved a review of available data to identify data sources and information of use to the residual life study. Defence data sheets were created to present information concerning each identifiable defence section. In stage 2, technical assessments were undertaken to estimate a residual life for each defence. In Stage 3 ENBE is undertaking further studies to fill in data gaps identified in stage 2 and working with Jacobs to link defence residual life to flooding consequence.