## EIA Quality Mark Case Study

**East Rhyl Coastal Defence Scheme**

<table>
<thead>
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<th>Key Issues:</th>
<th>Purpose of the project:</th>
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<td>Rhyl has historically been protected from coastal flooding by a range of coastal defence structures constructed in the 1950s. The existing coastal defences in the east of the town are no longer performing as intended, and in recent years wave overtopping flooding has caused significant damage and disruption to residential properties. During severe storm events in 2013 wave overtopping of the seawall caused flooding of 130 residential properties and led to 400 people being evacuated from their homes, with some having to be rescued by boat.</td>
<td>The new defences will provide protection to 472 properties over the next sixty years, for up to a 1 in 200-year Standard of Protection taking into account future impacts of climate change. The proposals are a resilience response to the effects of climate change but could also be extended or modified at a later date to adapt to the effects of climate change.</td>
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| Description of the project:                                                                 |
| JBA undertook the detailed design of the £20m coastal defence scheme to improve the coastal defences at East Rhyl. Detailed designs were prepared for a 600m by 30m rock armour revetment, designed to absorb wave energy during storm events under future climate change scenarios. The existing sea wall would also be replaced with a larger structure and the Promenade raised approximately 1m to maintain views of the sea from the Wales Coast Path. Three sets of stepped access would also be provided through the rock armour to maintain access to the beach. This is the first project in Wales to be progressed to full business case under the FCRMP and is one of the largest coastal defence schemes in Wales in recent years. |
**EIA Learning Outcomes**

**Lessons learnt:**

Given the proximity of the Liverpool Bay Special Protection Area, and the potential for indirect impacts on the Dee Estuary SPA, SAC, Ramsar and the Gronant Dunes and Talacre Warren SSSI, multidisciplinary EIA coordination was essential to ensure that the detailed design proposals avoided likely significant effects. In particular addressing concern for potential hydromorphological impacts on the UK’s largest breeding population of little tern at Gronant formed a key consideration of the EIA and Habitats Regulation Assessment. JBA fully engaged with the statutory consultees, and encouraged a coordinated approach to determination of EIA, HRA and Water Framework Directive Assessment through the Planning and Marine Licence applications.

**Lessons learnt continued:**

Much of the foreshore was identified as containing peat deposits and tree remains associated with an ancient submerged forest of national archaeological significance. Prehistoric human footprints have also been recorded on the site. Given the significance of these archaeological features and high potential for further other unknown features to be present, JBA collaborated closely with the Clwyd-Powys Archaeological Trust and researchers from Lampeter University. Detailed archaeological investigations and recording are planned prior to construction as recommended in a Curatorial Brief.

The EIA also identified that closest residential properties to the development proposals would be subject to unavoidable combined effects during construction, principally visual impacts, noise impacts during both the day time and night time, light spill/glare impacts from site compound at night, and impacts from increases in construction related traffic in and around Rhyl. It was recognised that the residential receptors most affected are those that will also receive the most benefit in terms of flood defence. Whilst this does not diminish the importance of minimising impacts, the coastal defence benefit was borne in mind when determining the acceptability of impacts. Community engagement has therefore been a key factor to the success of the project.

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