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# PROJECT: NORTH PIER REFACING WORKS BUCKIE HARBOUR

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**VALUE:** £470,000  
**ROLE:** MAIN CONTRACTOR  
**START DATE:** AUGUST 2018  
**COMPLETION:** AUGUST 2019

**CLIENT:** MORAY COUNCIL  
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- Installation of a new sheet piled wall
  - Replacement of RC deck
  - Provision of RC coping
  - Innovative temporary works
  - Aggressive tidal environment
  - Phased approach
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Buckie Harbour is located on the North East Coast of Scotland, and is heavily relied upon by the commercial fishing industry. In addition to numerous commercial vessels, this operational harbour includes a number of active warehouse facilities. The Northern Pier, located at the outer most point of the harbour, was deemed to be in poor condition, due in part to the aggressive sea state and extreme weather conditions on this section of coast line. Moray Council commissioned Arch Henderson to undertake a full condition survey of the pier, following which a series of detailed repairs were outlined, namely the construction of a new sheet piled wall to the inner face of the Northern Pier. The contract was awarded to Southbay following a competitive tender process.

Following initial site mobilisation works, a Crawler Crane was positioned on top of the pier. Accessing the pier wall using a man riding basket, and a specialist dive team when working within the inter tidal zone, a total of 135no. dowels were drilled and fixed in position into the bedrock. When installing the sheet piles, a traditional piling gate approximately 23m long was fabricated onsite directly adjacent to the location of the new wall. Using a vibratory hammer, the sheet piles were driven to refusal in sections, which once in position, were supported using temporary brackets before being welded together. Seabed material was then airlifted from behind the lower section of the piles in readiness for concrete infill which consisted of 3no. pours. Following construction of the new section of pier wall, the existing deck was then overlaid with a new concrete deck, complete with new coping. Further works included the installation of new steel access ladders and restraint chains.

Given the location of the works, the site team encountered extreme weather conditions which required a proactive approach to planning in order to achieve the agreed completion date. Due to these conditions, the works were completed in two distinct phases to mitigate the worst winter months. An excellent working relationship was maintained with all stakeholders, with a bespoke traffic management plan produced to ensure minimal disruption to an operational ship yard and a series of warehouse buildings. The project was successfully delivered with no reported incidents.



The project was subject to extreme weather conditions on an exposed section of Scotland's coastline.

