

# PROJECT SHEET

ABERDEEN HARBOUR ENTRANCE IMPROVEMENTS  
ABERDEEN, SCOTLAND, UNITED KINGDOM

## BOSKALIS WESTMINSTER: SKILLS, RESOURCES, EXPERIENCE

Boskalis provides clients with tailored, project-specific solutions for above dredge related offshore services, as illustrated by the following project summary.

## PROJECT DESCRIPTION

Boskalis Westminster were the main contractor for Aberdeen Harbour Board undertaking capital dredging works to deepen and widen the approaches to Aberdeen Harbour involving the removal of approximately 400,000m<sup>3</sup> of clays, silts, sands and rock to tolerances of -0.3m vertical and +10m horizontally with a final bar sweep.

The works were bid using a two stage tender process, the first stage included a price, programme and quality submission, after which Boskalis Westminster were selected as the preferred contractor to develop the scheme and negotiate the final award sum.

The project was carried out using the trailing suction hopper dredger Crestway, to remove the soft material from the outer approaches, with the backhoe dredger Nordic Giant and split barges removing the remaining clays and rock. Trial trenches were dug with the Nordic Giant to assess the strength of the rock and, from these trials, it was deemed possible to excavate the rock without pre-treatment. Strengthening modifications were made to a 9.5m<sup>3</sup> rock bucket and, by careful positioning of the dredger over high waters in relation to the rock bedding planes, the Nordic was able to pull the hard material. This innovative approach led to the works being complete two months ahead of schedule, hence allowing the client to accommodate larger vessels earlier than anticipated.

The Nordic Giant and Crestway proved to be ideal vessels for this contract in conjunction with the F48, which was used as both the survey and plough vessel. Due to the volume of rock dredged, we experienced heavy wear on the buckets and the boom of the Nordic Giant, but by careful management of the process, ensuring the appropriate bucket changes were made to suit conditions, this proved to be a much more efficient method than drilling and blasting.

A good relationship was quickly established with the harbour authorities which allowed any planned changes or process alterations to be accepted without delay. All activities were discussed at meetings attended by representatives from port operations, harbour planners, Aberdeen Harbour

## FEATURES

Project Name	Aberdeen Harbour Entrance Improvement Works
Client	Aberdeen Harbour Board
Contractor	Boskalis Westminster Limited (Previously Westminster Dredging Company)
Location	Aberdeen, Scotland
Execution period	15 July 2012 - 12 September 2012



**A** Manu Pekka Backhoe and Barge working  
**B** Dredging at Aberdeen



Board contract project managers and ourselves.

The port is an environmentally sensitive area and the contract required employment of marine mammal observers and compliance with environmental noise limits set at distances of 150m and 300m from dwellings. The contracted works, plus extra works identified by the client, were completed within two months of the four month contract period.

In the Client Satisfaction Checklist, the Project Manager representing the client stated: 'The adopted competitive dialogue process combined with Boskalis's constructive and positive work attitude and ethics led to the resounding success of a project that could otherwise have been subject to the realisation of potentially significant risks'.