

# PROJECT SHEET

CARDIFF TERM MAINTENANCE CONTRACT 2012-2017  
CARDIFF, WALES, UNITED KINGDOM

## BOSKALIS WESTMINSTER: SKILLS, RESOURCES, EXPERIENCE

Our long term contract for the maintenance dredging at Cardiff has been in execution since 2012, however we have been working in the area since 2009 having also executed the previous 3yr contract.

## PROJECT DESCRIPTION

In 1999 the Cardiff Bay Barrage was completed to create an impounded water body as the centre piece for the regeneration of the area. A lock system, which includes three locks and an inner harbour, was incorporated into the scheme to provide marine access to the impounded bay at all states of the tide. The entrance to the locks is located at the mouth of the River Severn and is prone to high rates of siltation. In order to maintain navigable access to the locks, maintenance dredging is required twice a year. The environmental conditions in the Marine Management Organisation licence restrict dredging works to February and August.

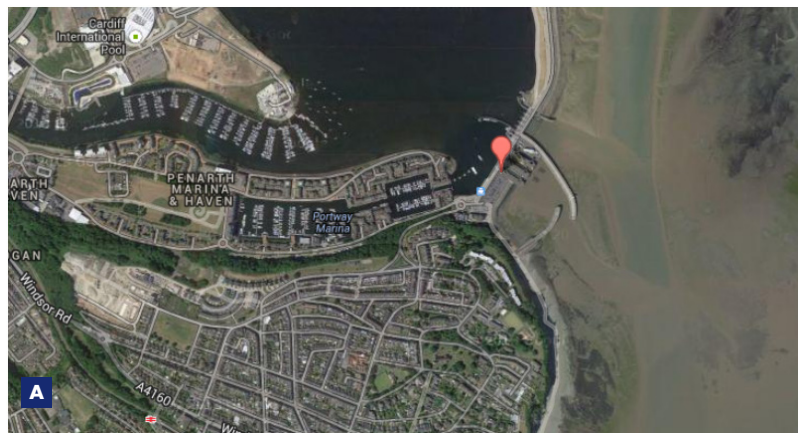
The restricted nature of the inner harbour requires extensive planning and preparatory works, including relocating the channel marker buoys to give sufficient area for the dredgers to manoeuvre. The physical constraints prevent the trailing suction hopper dredger 'Sospan Dau' reaching all areas of the inner harbour, therefore specific areas are initially over-dredged before the 'Kamsar' and plough are utilised to move silt from the tight spots into these reception areas.

The environmental restrictions, and the operational requirements for the work, means the timing of the dredging vessels on site is critical. A close liaison is maintained with both the barrage staff, for co-ordination of day-to-day operations, and with the harbour authority staff for progress and commercial matters. Payment for the works is based on volume removed, established by comparison if in and out surveys.

When the agreed quantity of material has been removed from the system, the dredger will leave site. If required, any outstanding bed levelling is completed by ploughing, followed by a final survey. Once the survey has been agreed with the Client, the plough boat is demobilised and the navigation buoys are returned to their original locations.

## FEATURES

Project Name	Cardiff Term Maintenance Contract 2012-2017
Client	The County Council of the City and County of Cardiff
Contractor	Boskalis Westminster Ltd
Location	Cardiff, Wales
Execution period	2012 - 2017



**A** Location map  
**B** Sospan Dau  
**C** Sospan Dau navigates the barrage entrance

