

Case Study - Westminster Bridge Scour Protection

Client: Mowlem Marine
Duration: 15 weeks
Location: River Thames, London



Background

Certain structures on the river suffer from 'scour' due to heavy river and tidal flows that can undermine and affect the integrity of the bridge piers. Westminster Bridge was identified as needing underwater scour protection works. Mowlem Marine had to install additional support to the bridge foundations.

Scope of Works

WM Plant Hire had to remove the build up of silt, parts of the affected structure and excavate the existing river bed for scour protection measures to be constructed. The tidal depths would at times reach 18m and the tidal flows had to be considered.

Solution

Working from a motorised 'spud leg' pontoon, their Caterpillar 24m long reach excavator was positioned for the precision dredging operations. Measurements were entered into the on board computer for monitoring the underwater dig profile. Excavated material was loaded into barges that were 'rafted' to the numerous floating platforms.

The use of WM Plant Hire's specialist plant was key to the success of the project, working in some challenging conditions. The long reach excavator avoided the need for a much larger dredging vessel and proved to be the right tool for the job.