

Case Study

FORT CUMBERLAND WATER TREATMENT WORKS, PORTSMOUTH

Client: Southern Water

Main Contractor: Clancy Docwra

Anchor Installer: [Commercial Marine & Piling](#)

PROJECT SPECIFICATION

A cofferdam was constructed to allow installation of water tanks. The size of the tanks precluded the use of props running across the excavation, and it was uneconomic to have the sheet piles work in cantilever.

SOLUTION

Site investigation data showed the existence of a layer of medium dense sand and gravel 4m below ground level. By driving anchors at 30° below the horizontal, this layer was intercepted and a working load of 100kN per anchor point was achieved. Special brackets were manufactured on site to ensure the load plate remained in position under load.

Anchor System: B06TC spheroidal graphite cast iron anchor c/w 10m of 16mm Ø galvanised steel wire tendon, 300mm x 300mm galvanised steel load plate & 16mm galvanised steel wedge grip.

Quantity: 20

Anchor Design Life: 5 yrs

Soil Type: Sand/gravel

