

JML CONTRACTS

BUILDING & CIVIL ENGINEERING SERVICES



Gabions: Cobden Bridge, Southampton

PROJECT:
COBDEN BRIDGE,
SOUTHAMPTON

CLIENT:
MCCARTHY & STONE

MAIN CONTRACTOR:
AVON CONSTRUCTION

CONSULTANTS:
BALLANTINE ARNOLD LTD

DESIGN & INSTALL:
JML CONTRACTS LTD

Project overview

The UK's leading retirement housebuilder, McCarthy & Stone, purchased this site at Cobden Bridge, Southampton with a view to constructing fifty-one apartments, with associated landscaped grounds, on the banks of the River Itchen. To facilitate this, the engineers needed a gabion retaining wall to reclaim the land and protect it from the scouring effects of tide.





Southampton Gabions: Cobden Bridge,

Challenges

Working at height over water carries inherent danger and this is our number one consideration on this type of project. Where risk remains, a method statement and safe process of work is established to manage it to an acceptable level. This will include plans for working at height, working over water, specialist edge protection and emergency rescue procedures. The river was tidal and therefore alongside workers' safety, operations had to be co-ordinated with both the river tide tables and the local authority to ensure adherence to any planning restrictions.

Services delivered

Pile caps were driven into the riverbed to form a foundation for the retaining wall and this was then tied into the existing arch and abutments of Cobden Bridge. The wall itself is built from BBA approved PVC coated baskets and extends to 4.3m in height. Alongside the supply and installation of the retaining wall, we incorporated a fencepost sleeve system to the top tier of baskets. In addition to the new gabions, an element of remedial works was necessary to repair older baskets which had been installed by others and exposed at low tide. Built-in specialist pipe outfalls were incorporated through the walls, with flap valves to prevent tidal up-fill. Finally, careful backfilling and compaction was undertaken to the rear of the wall with 6F2 granular material.