

# New River, Tenniswood Road

**BROWNE**

## KEY PROJECT DETAILS

Client	Thames Water Utilities Ltd
Value	£340k
Project Duration	9 weeks
Location	Tenniswood Road, Enfield
Works	Bank stabilization works



/// Breaking out existing concrete from bankside

J Browne Construction have provided specialist skills and support to maintain this artificial waterway for several years. Works typically result from customer reports of water seepage from the waterway. Typically J Browne are required to employ traditional methods to allow for the removal and replacement of revetment boards and provide a waterproof seal established through the use of puddling clay.

Works at the Tenniswood Road location had originated from historic water seepage issues on New River. Following a preliminary on-site investigation by J Browne the problem, in this instance, the issue was confirmed to be more severe. Significant bank erosion had undermined the riverbank and had damaged the concrete revetment wall and the riverside pathway.

A full design and build package was awarded to J Browne Construction.

As isolation of the New River is not possible, to allow for repairs to take place a temporary works solution to install a cofferdam, providing full access to allow repair to the bank, was put in place. A piling design was developed along with revetment wall detailing to allow construction to proceed. Robert Walpole & Partners delivered both the temporary works design and the permanent works design of the bank stabilisation as Principal Designer, working for J Browne as Principal Contractor, working under the reservoir maintenance framework.

There were various design changes as a result of unforeseen challenges on the Tenniswood Road site. These design changes were communicated through a change control process. A register and document control system were also in place to ensure

that previous designs were archived and new designs cascaded to all parties. Only upon delivery of a fully client approved design, ensuring that all queries were closed out, would construction be permitted to continue.

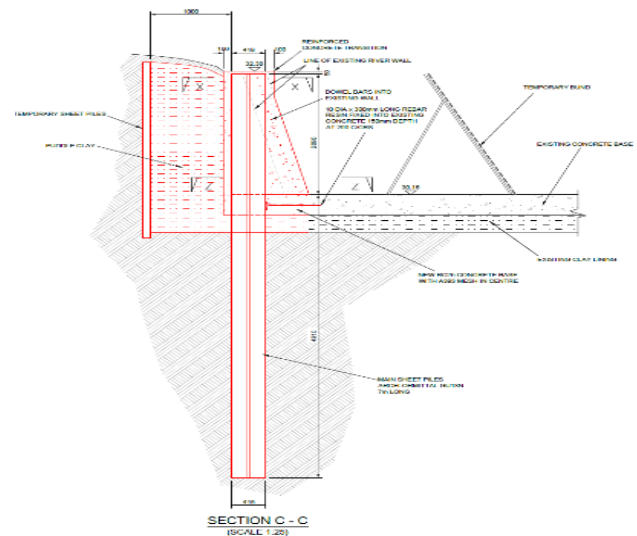


Figure 1 Piling Detail and Temporary Bund to maintain flows

J Browne engaged with local residents from an early stage of the project, as the installation of piles required the use of a 40 Tonne piling rig located close to residential properties. Preconstruction surveys identifying pre-existing damage of nearby properties had to be assessed. Monitors for both vibration and noise were set up and linked back by telemetry. Working parameters were agreed with the client ahead of the works progressing.

Excellent liaison with the local residents ensured the works were completed with minimal inconvenience.