

## MCLAREN REEDBEDS

Before the main works could commence, Land & Water Services (LAWS) carried out vegetation clearance including spraying of self-set Elder and removal of small tress and phragmites which were disposed of at a nearby composting area.

### Phase 1

LAWS were first engaged to investigate the reed bed located at McLaren to see if the overall function could be improved. Site investigations revealed that the terram lining at the rear of the gabion revetment walls had become clogged with fine particles, over time this was preventing the water from flowing through the gravels causing the water to flow across the top of the reed bed and negating any filtration.

A 2m excavation trench was cleared at the rear of the gabion baskets which revealed a different construction to that discovered when completing the investigations with the terram being incorrectly placed inside the baskets. The client was informed, and LAWS removed a 4-meter section in the upstream and downstream gabion structure and reinstalled correctly allowing the water to flow through the section.

This change gave rise to the opportunity to price a restoration of the reedbed itself.

### Phase 2

LAWS engaged with a design partner and a new system was drawn up to improve the efficiency of the reedbed, based on the original concept avoiding a full redesign of the bed.

The reedbed was drained down, dewatered and over pumping carried out, reeds and emergent growth in the open channels at the upstream and downstream ends were also cleared with the arisings staying on site. Both gabion basket walls were removed and then fully replaced with clean stone, whilst removing any terram to allow for the water to flow freely from one end to the other.

Within the pond the reeds and shingle were removed from the margins back to the original planting shelf with all arisings being removed from site under 2 separate waste streams, dirty root mass shingle and clean aggregate from lower down on the reed bed. All material was then removed down to the liner.

Finally, we replaced the dirty shingle that had been removed from the reed bed and replanted the areas, leaving them with a functioning reedbed.

Find us on the internet at

[www.land-water.co.uk](http://www.land-water.co.uk)

Contact us on 0844 225 1958



### Project Particulars

Client: SPIE

October - December 2022



PROJECT

VALUE: £342,493.00