



River Restoration: Culvers Island weir removals and river naturalisation project.

Background

Chalk streams are an incredibly rare habitat on a global scale, and owing to their international importance, they have been identified by the UK Biodiversity Steering Group as key habitats to preserve and protect. The London Borough of Sutton is privileged enough to have a chalk stream within its boundary and the Wandle Trust is dedicated to preserving and enhancing the river for the benefit of all.

Funding

The European Water Framework Directive (WFD) states that all inland waterbodies should achieve good ecological status/potential. Currently the River Wandle is classed as failing to meet this status and so through the Catchment Restoration Fund the Wandle Trust has secured funding to carry out a number of projects, including this project at Culvers Island, to improve the rivers ecological status.

Issues at Culvers Island

Currently the river at Culvers Island has two weirs on either side of the upstream tip of the island that creates a ponded area behind the weirs. The weirs themselves cause an issue for fish migration by stopping free fish movement up and downstream. As well as the fish migration issues the weirs cause the river to become slow flowing resulting in sediment to drop out of suspension and smother the gravel river bed. This clogs the gravels and destroys fish spawning habitat as well as habitat for invertebrates and plants associated with chalk streams. The water quality is reduced due to the warming effect and loss of oxygen caused by the slow moving shallow water and the silt can reduce water quality further if it becomes anoxic.

Project Area Map



Project plan

The proposed work will remove the weirs and a new narrower, sinuous bank line will be created with bioengineering techniques. Behind this the silt from the channel will be placed and fresh new gravels added to the channel. The island will be graded down to the new bank and planted with native marginal aquatic plant species. A backwater pond area will be created that will be a haven for amphibians, invertebrates and fish fry as well as an area for the community to use for pond dipping. The rehabilitated river will have clean gravels for fish to spawn in and invertebrate species to live in. The faster water will be more oxygenated and plant species such as water crowfoot more likely to take root. The marginal wetland will contain a variety of native species that will be important for insects and birdlife.

Examples of similar weir removal project on Mill Lane near Butter Hill, Carshalton



Before weir removal: shallow, silt covered river bed.



After weir removal: free movement for fish, clean gravels, cleaner water.



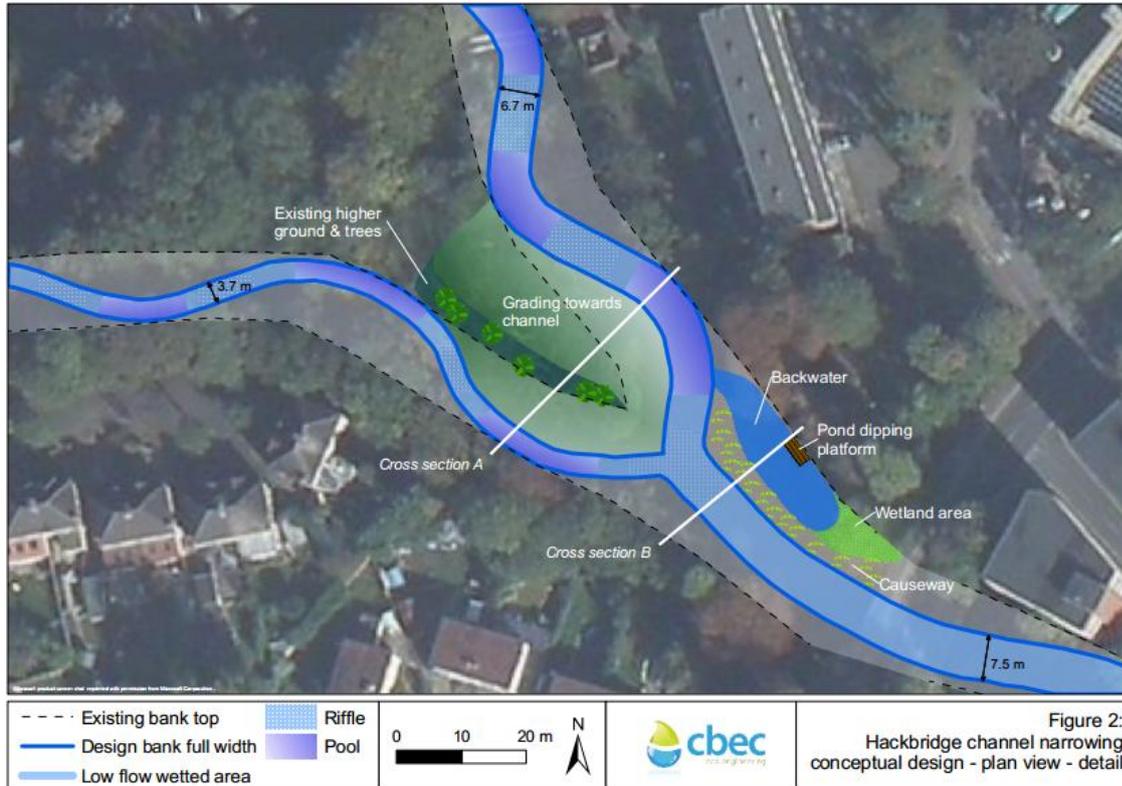
Before weir removal: overwide, silted channel. Pond like.



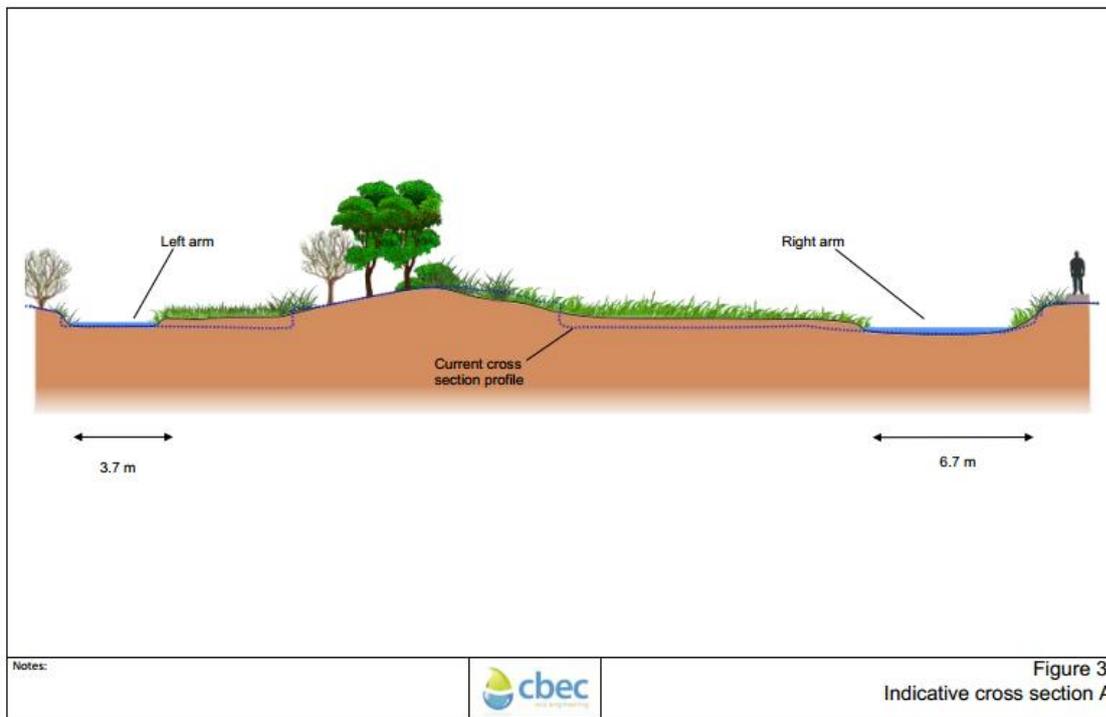
After weir removal: Narrowed river, clean gravels, planted marginal wetlands

Project Overview Map

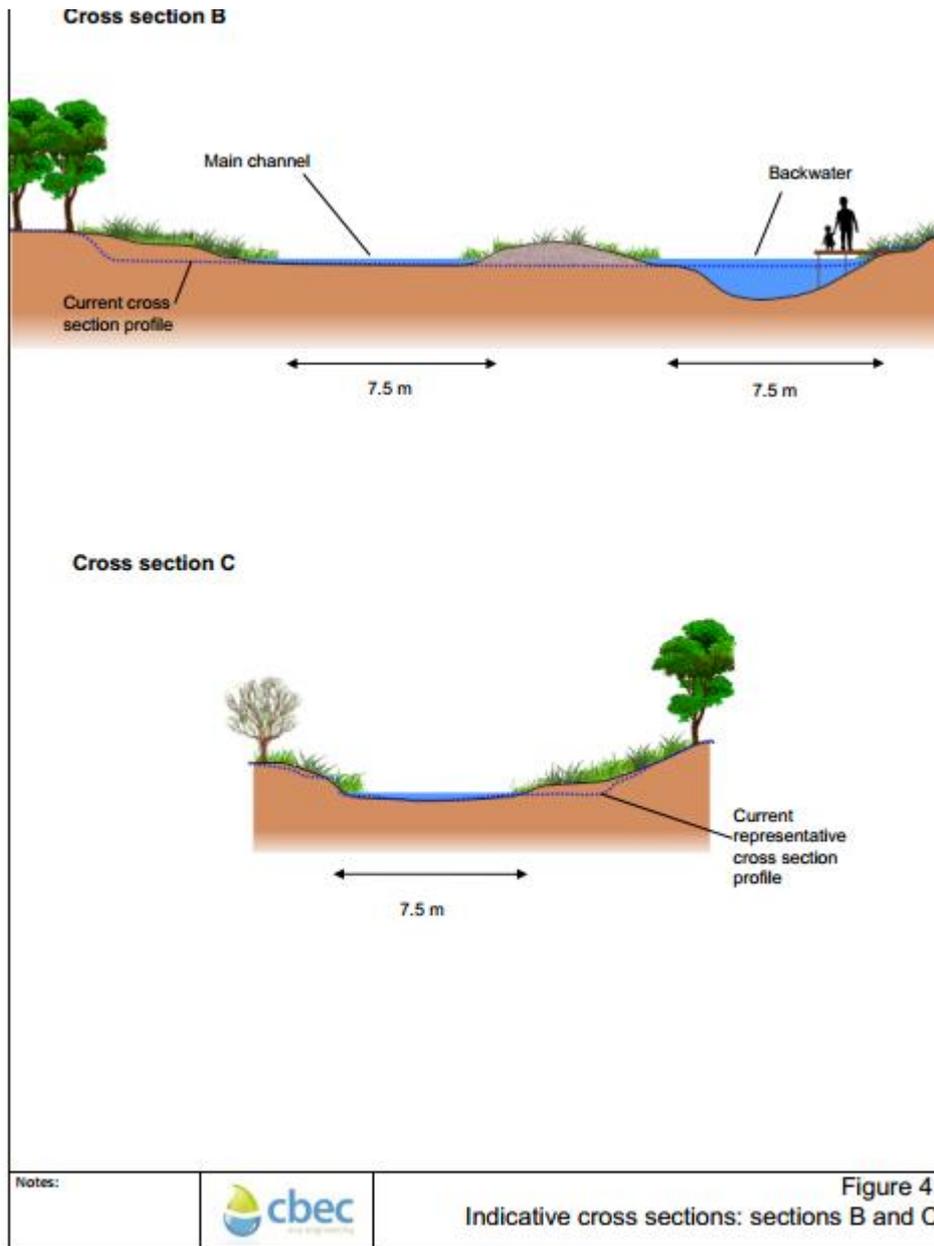
Concept drawing of how the river will look post project.



Cross Section A



Cross Sections B and C



Timings

The work will start early August 2014 and continue for up to one month.

Parking restrictions and footpath closures

From 4th—31st August there will be a number of temporary restrictions on the footpaths and parking areas in Corbett Close to allow the work to be safely carried out. The restrictions are necessary to provide public safety while allowing safe river access for machinery, delivery of materials and setting up of a site compound.

The Wandle Trust apologise for any inconvenience that may result due to the river works and temporary closures. We have planned the works to minimise disruption but still ensure public safety.

This will involve:

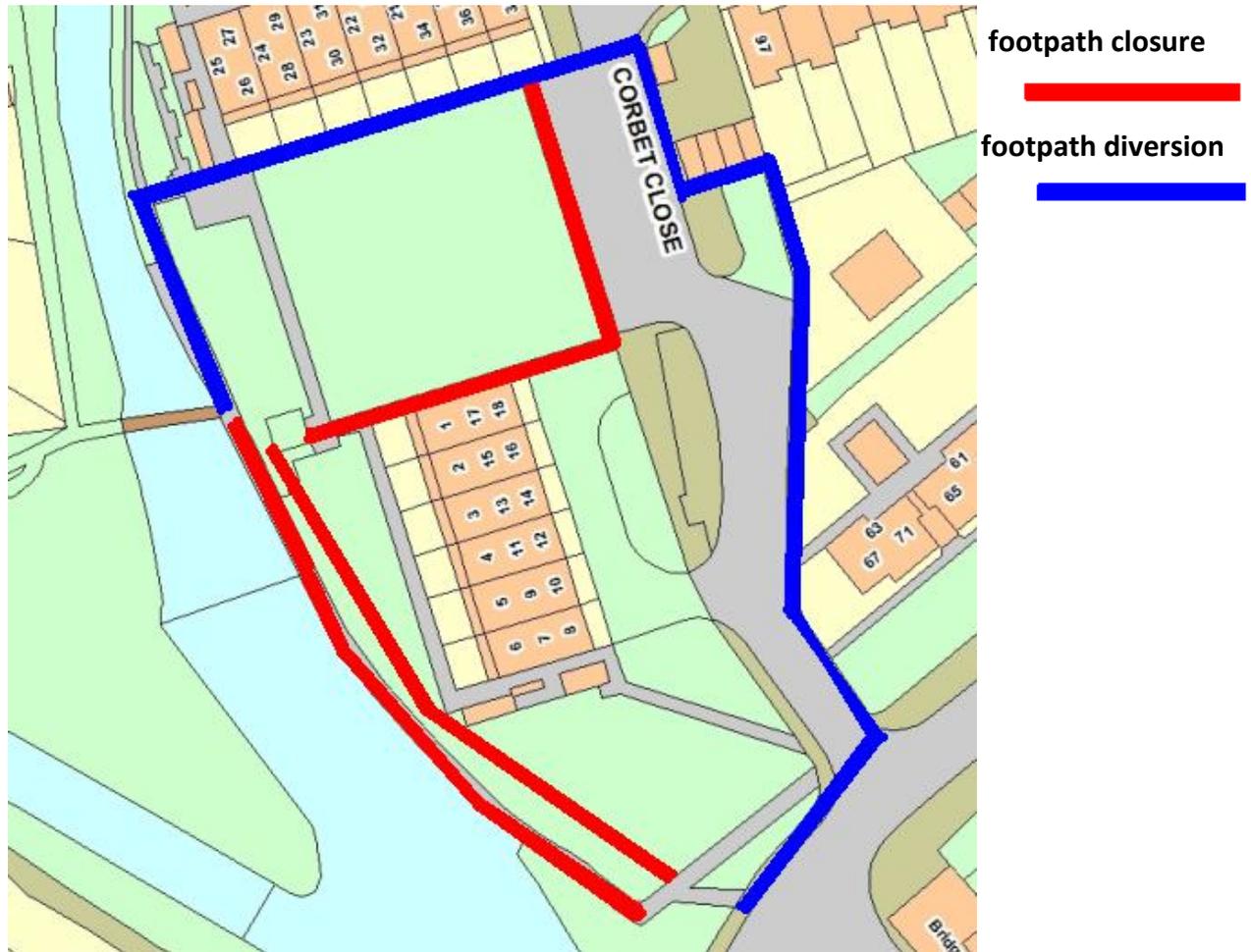
- Suspension of parking outside of the garages behind 1-18 Corbet Close (Area A) You will still be able to access the garages but not park in the area.
- Suspension of parking in the parking bays next to the green (Area B)
- Closure and diversion of the footpaths along the river between the road and the footbridge (see map)

Parking restrictions



No parking

Footpath closures



Contact Details

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