

# Aquamaintain LTD



## Case Study

### Pymmes Brook, De-Culverting Oak Hill Park, Barnett

#### Background

Oak Hill Park Local Nature Reserve is managed by London Wildlife Trust and is located in the London Borough of Barnett.

A tributary of the Pymmes Brook flowed through the Reserve as a culvert which ran beneath the woodland & amenity grassland in the park, before entering the main river further down the site.



#### Scope of the Project

The aim of the project was to 'daylight' the tributary and create a wetland habitat throughout Oak Hill Park. Benefiting wildlife and reducing historic flooding of the open space

The beginning of the culvert in the woods was to be blocked and the existing structure removed. The stream was then to be diverted into a newly dug channel throughout Oak Hill Park, before being connected back into the main channel of the Pymmes Brook at the bottom of the park.

An additional wetland scrape adjacent to the newly dug channel would also be constructed so that the new stream can overtop into the wetland at times of high flow.

All this was to be achieved in a busy North London Park with an emphasis on health and safety and minimal disruption to public access.

“A partnership project between London Wildlife Trust, The Environment Agency and the London Borough of Barnett”



## Solution

In the woodland area, an existing overflow streambed was used to form the start of the new channel.

Where it exited the woodland a 180m meandering channel was excavated through the grassland within the park, reconnecting the watercourse to the Pymmes Brook.

The Culvert was then blocked at the upstream end and the manhole structure was removed to eradicate all evidence of the once underground watercourse.

Woody material was used from tree clearance works to create logjam step weirs that overcame the sites gradient.

Gravels were introduced along the length of the newly dug channel providing pool and riffle habitat that would also reduce erosion of the streambed.

Alongside the new channel a large wetland scrape was constructed to accommodate additional high flows and provide additional habitat within the parkland.

The newly created stream and wetland were then planted with a mixture of native aquatic marginal plant species.

Finally several footbridges and a 10T vehicle crossing were built that allowed easy access for the public and maintenance staff to the other side of the park.



### For More Information...

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