

How can we make Wimbledon Park Lake safe? Dave Dawson, November 2020

Wimbledon Park Lake is held back by a dam constructed by Lancelot (“Capability”) Brown in 1765. New standards require big works to prevent the dam from failing. In April 2014, LB Merton were required to prepare a Flood Study to determine what work may be needed.

Everyone accepts the need to make the dam safe, but there are options in how to achieve this. The design of the works needs to be not only cost-effective but also to balance the needs and desires of all those who enjoy the lake and its surrounds, a remnant of an 18th century park.

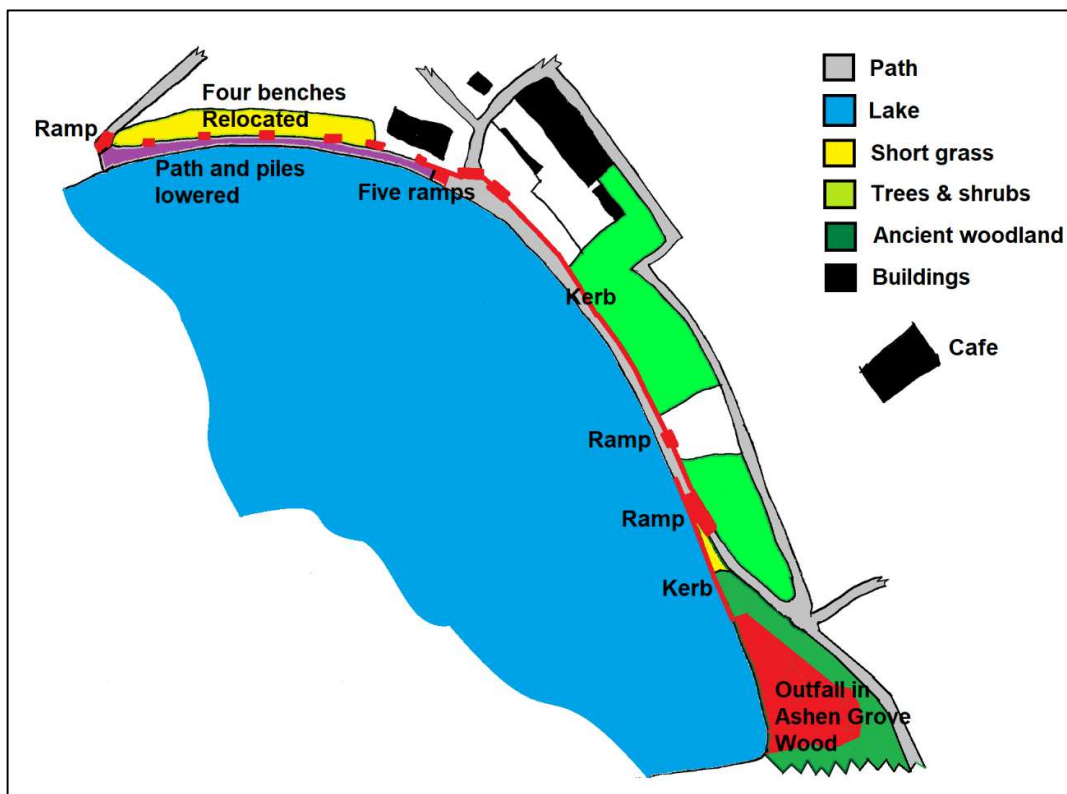
The Flood Study, July 2019

The Flood Study had four options to allow a huge flood to pass by safely without the dam failing. The Friends found deficiencies in its options. Instead, we proposed a Capability Brown Design. However, LB Merton ignored this and chose one of the four options.

In this, the lake was to be lowered by 0.35m. Much of the lakeside path was to be raised by 1.1m and a big new spillway was to be constructed. Although the Friends welcomed returning the lake back to Brown’s original design level we were not happy with the great harm to Brown’s design elsewhere, to public access, to trees and ancient woodland and to protected species.

How much flood water has to pass safely?

On 11th November LB Merton launched a radical new “Outline Design”. This threw out the huge flood that was assumed in the Flood Study and replaced it with a flood fully 50% smaller. **We may ask how we can be assured that the safety requirements can be met when the design assumptions can vary so greatly?**



The proposed “Outline Design”

The Outline Design

Assuming a much smaller flood, still requires a change that was rejected before, the **beheading of the lakeside piles and lowering of the lakeside pathway** between the Watersports building and the Stadium entrance. To make way, **four benches are to be relocated**.

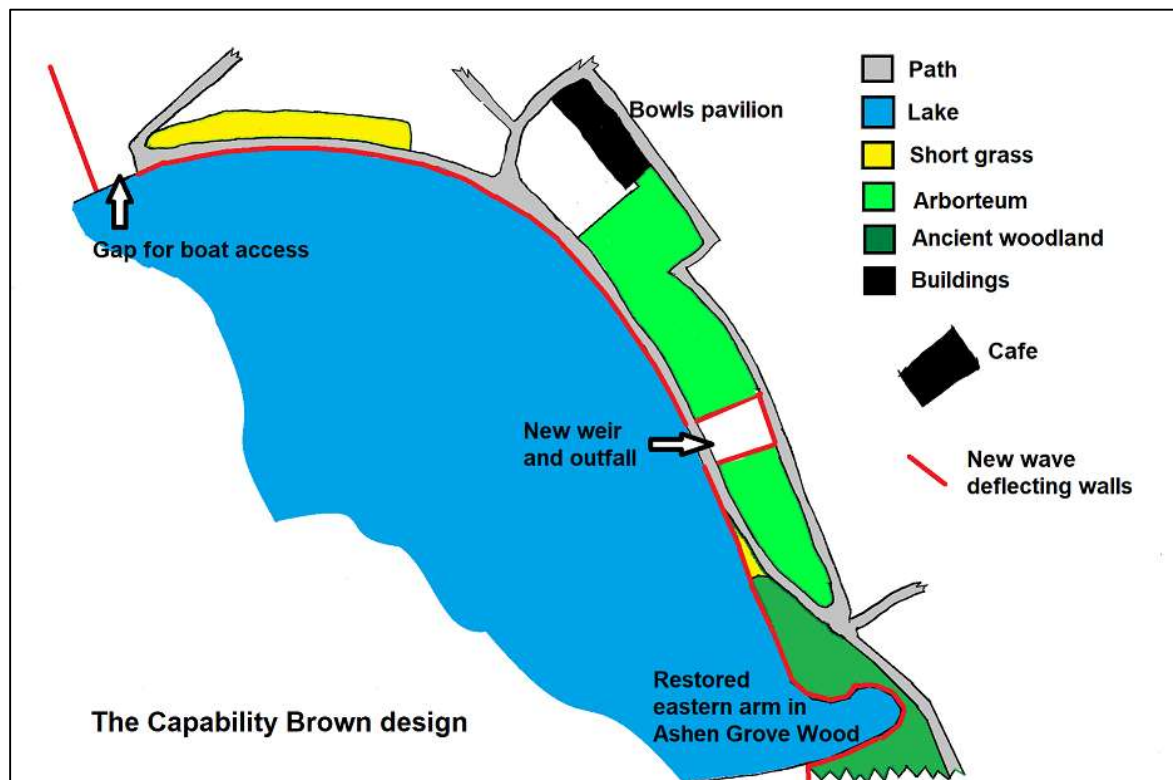
Along most of the rest of the waterside, the path is to slope up to a kerb on the side away from the lake. This kerb is to be much lower than was required in the Flood Study, but it still requires **at least eight ramps to allow people and boats to get to and from the lakeside**.

Where the lakeside path descends towards the children's play area, the kerb is moved to the lakeside.

Although lowering the lake would restore Brown's design and would help greatly with flood storage and with drainage upstream, **the lake is not to be lowered**.

Only one aspect of the Flood Study option remains: **a huge new outfall is to be constructed in the ancient Ashen Grove Wood. This would destroy much of an irreplaceable asset.**

The design is silent on how the flood flows are to pass sensibly and safely through the public park



The *Capability Brown Design*, developed by the Friends, overcomes the difficulties. It restores the lake to its historic level and keeps the precise lines of Brown's 18th century carriage drive, now the lakeside walk. Flooding problems upstream are eased. Access for people and boats is unimpeded. This is achieved by a low wave-deflecting wall along the whole length of the dam. A new, high capacity, Brownian cascade replaces the waterfall. Ancient woodland and trees are kept and the threatened Eel can return safely from the Sargasso Sea. The eastern arm of the lake is restored.

If the new, much lower, flood assumed in the Outline Design is correct, the Capability Brown design becomes even easier to implement. The outfall needs not be so complex and the lakeside wall can be much lower.

This design also makes it much easier to take flood flows through the park, as proposed in Merton's own Masterplan.