APPLICATION NO: 23/4152M

LOCATION: The Dam Embankment of Poynton Pool Reservoir, Poynton Park, London Road North (B5092), Poynton

REPRESENTATIONS

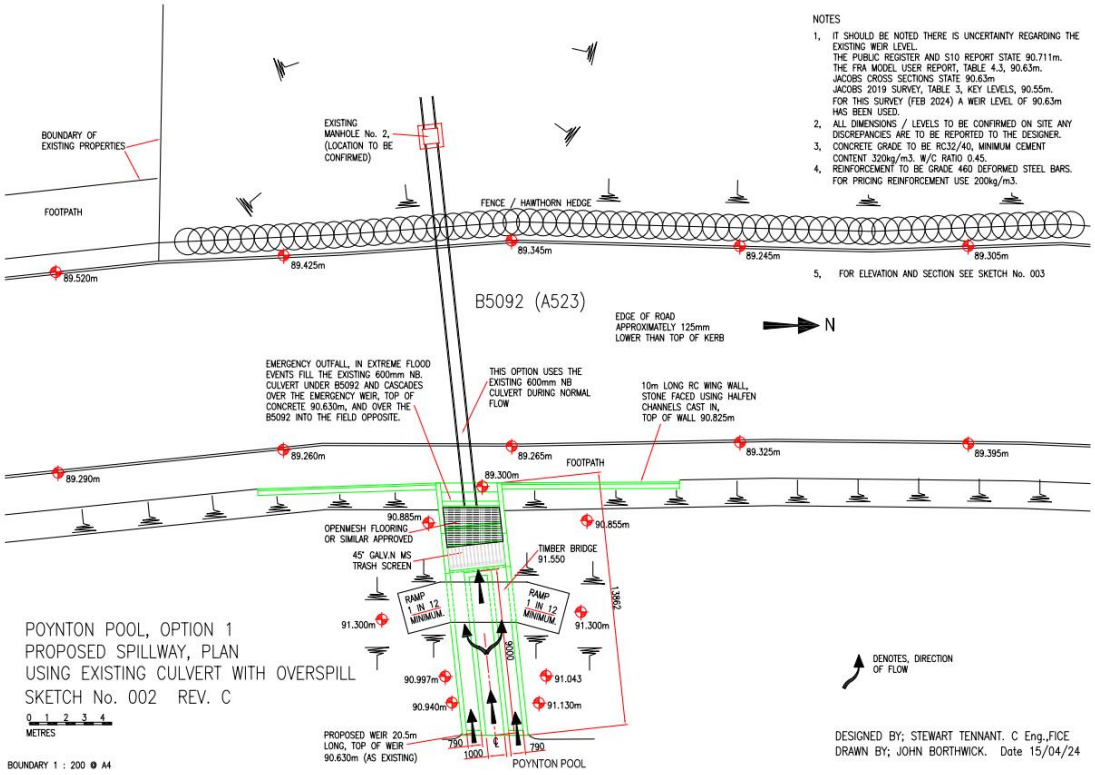
Since the original report two additional letters of representation have been received.

The first of these letters provides two further alternative schemes to the proposed development. The two schemes were drawn up by a chartered engineer and Fellow of both the Institution of Structural Engineers and Civil Engineers with experience of working on dams and statutory reservoirs since around 2010, together with a retired reservoir designer.

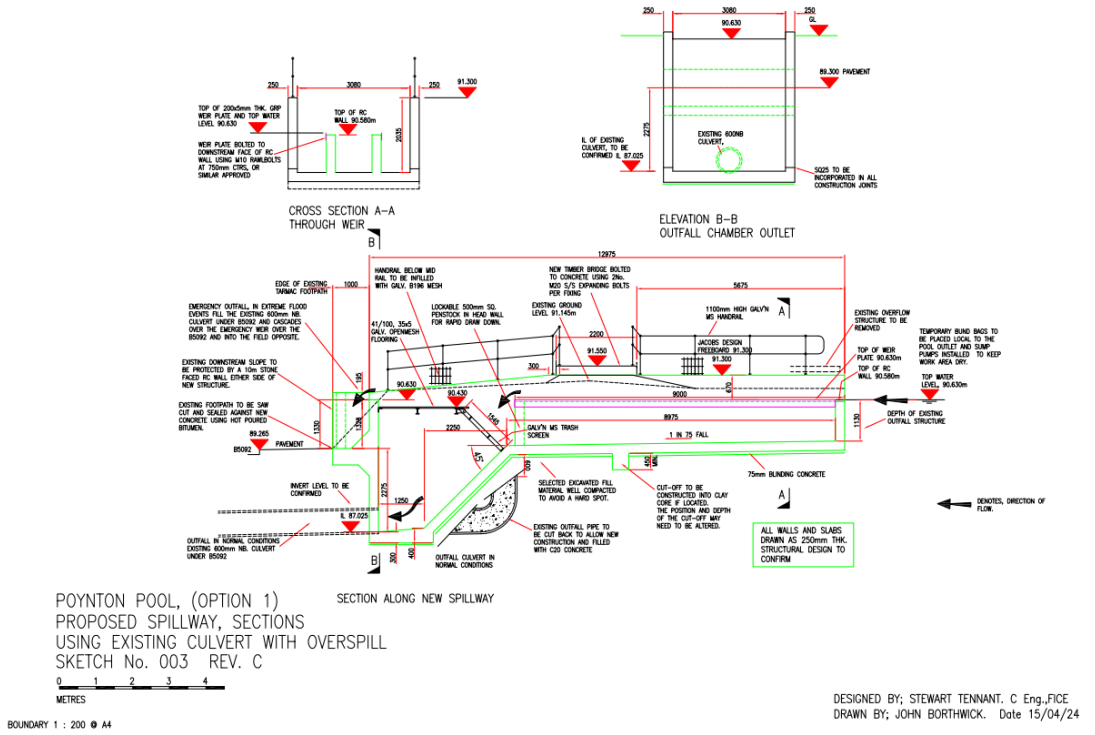
The proposed solution is a conventional reinforced concrete spillway built on the line of the existing overflow structure and culvert. It is a double-sided weir and has been designed to pass the design floods calculated by CEC's technical advisors. There are two options. In Option 1C, the emergency outfall is onto the B5092 as with the application proposal. Option 2C proposes two 1200mm diameter pipes beneath the B5092 to accommodate normal flow and extreme flood events.

It is stated that the required minor increase in freeboard can be achieved by the careful addition of more earth of the same composition as the existing embankment, to be re-vegetated naturally, without any significant impacts on trees.

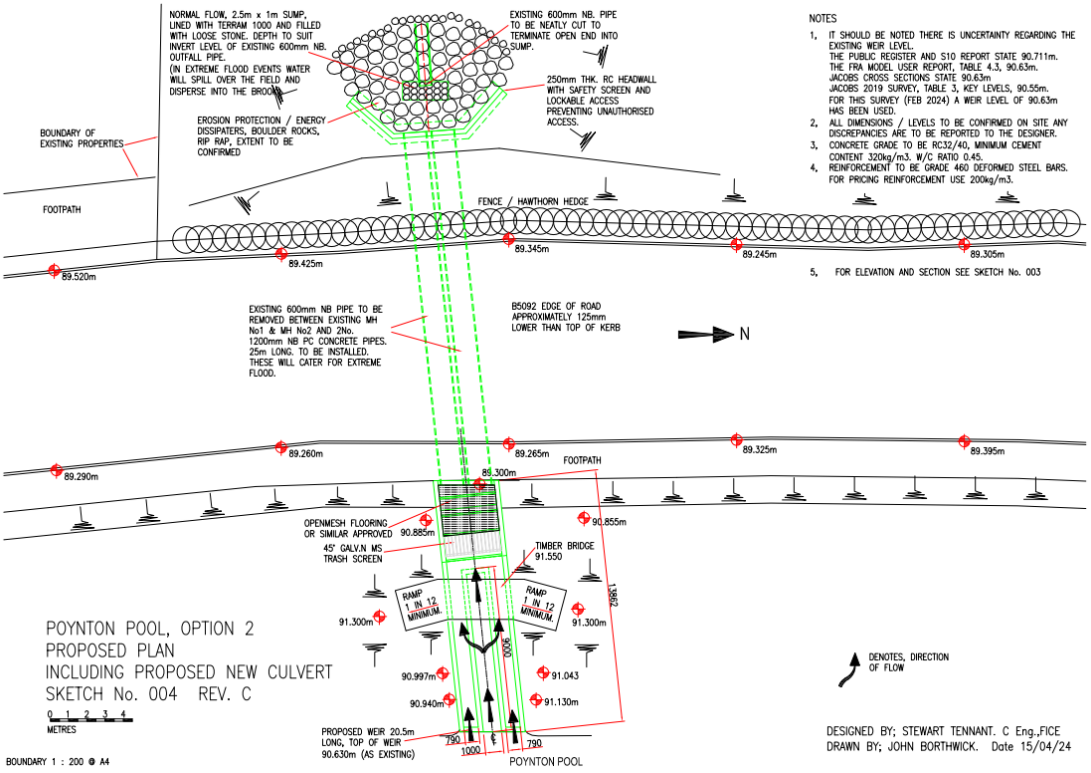
Option 1C Plan



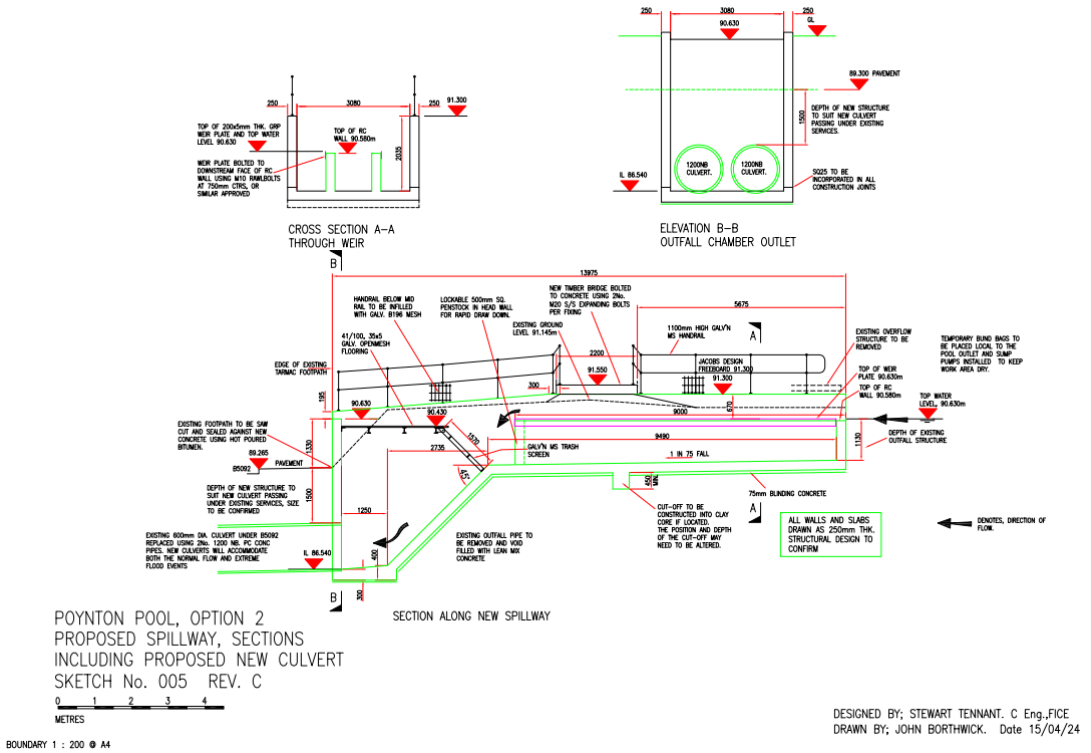
Option 1C Section



Option 2C Plan



Option 2C Section



The advantages of these options are stated to be:

1. Just one remnant of a partially felled tree will need to be removed.
2. It is anticipated that no further mature trees will be affected by the works with the associated risk of root die back seepage and potentially terminal decline.
3. The emergency drawdown is provided by a simple penstock (sluice) in the base of the weir i.e. no need to mobilise emergency equipment at short notice.
4. It has a 100-year design life with minimal inspection and maintenance required.
5. It is a conventional reservoir overflow solution.
6. The scheme is easy to construct with access direct from London Road North.
7. It incorporates a new Environment Agency compliant trash screen which can be cleaned and directly accessed from the highway.
8. The historic embankment will remain intact.
9. The 480m concrete kerb will not be required.
10. This proposal will not require a costly carbon offset mitigation scheme.
11. The landscape management plan will not be required.

The second letter provides a copy of an email from the editor of Dams & Reservoirs, the official journal of the British Dam Society, which makes the following points:

- The Reservoirs Act 1975 makes no mention of grass or trees, or indeed any other physical condition of a dam.
- The onus for safety is on a qualified civil engineer (the Inspecting Engineer) to identify any aspects that could put the dam or reservoir at risk.
- Floods and Reservoir Safety – 4th Edition (ICE) is not a legal document – it simply gives guidance to reservoir engineers. This document does indicate that trees on the downstream face of dam can cause changes in the flow pattern if the dam overtops, causing turbulence and erosion, but that is simply a reminder to reservoir engineers to consider the potential effects. It certainly does not say that trees must be removed or that the only growth accepted is grass.
- The many dams with trees growing on their embankments are typically at privately-owned reservoirs on estates, and I am not at liberty to release the names of these. However, during my 30 years as a Supervising Engineer I was appointed to a number of these, all of which were subject to Inspecting Engineers' reports at least once every ten years. As these were often by different Inspecting Engineers from year-to-year quite a number of engineers saw these trees, but not one of them felt that – on these particular dams – they posed a risk to the dam's safety.

KEY ISSUES

Alternatives

The two schemes put forward as alternatives have been passed onto the applicant. Any comments received from the applicant will be reported to Members as a verbal update at the meeting.

Ecology

As noted in the original report, there is evidence to suggest the presence of Otter activity at Poynton Pool. The nature conservation officer advises that the pool is likely to provide an occasional or a reasonably regular foraging resource for this protected/priority species. He maintains that the proposed development is not reasonably likely to result in such a disturbance of this species to result in a significant adverse impact or amount to an offence under the Habitat Regulations.

Landscape

The landscape officer has commented on the application identifying the harm that will result from the proposal. He notes that the proposed tree removal and 40m spillway wildflower gaps will look sterile and controlled, then after the 40m clearways, suddenly wild nature. The proposals may look green on plan, but he considers these to be obviously too clean and controlled, adjacent to the raggedy wooded strip. The tree removal will create a very noticeable and visible gap from both the park and road. He refers to the landscape sections of the Environmental Assessment report being very high level, offering little in the way of detail at a smaller scale. The mitigation offers nothing for the people of Poynton regarding more access and landscape amenity. The landscape officer objects to the application.

CONCLUSION

A response from the applicant is awaited regarding the two further alternatives put forward by interested parties. The additional ecology and landscape comments, and the comments from the editor of Dams & Reservoirs, are all acknowledged, but do not affect the overall conclusions in the original report.