I oppose HPK 0607 on safety grounds. The CRT has not provided a full system safety plan as indicated below. The Dam and System is in a unrepaired neglected dangerous state. Graham Aldred, Disley 11/02/2022.

Safety First at Toddbrook Reservoir.

Below is an Extract from "Repairing Toddbrook Reservoir" by Graham Aldred 15 Sept 2021.Circulated widely as stated.

"It is hoped that this document will be seen as a careful and positive contribution to the future safety of the Community of Whaley Bridge and its little School. Those in control must acknowledge that there is no way that a new reservoir would ever be approved in 2021 for this location if the old reservoir had not previously existed. Yet here we are trying to do just that but without any rigorous time tried official safety procedures and committed Govt. oversight. It is not just a case of major modifications to an old reservoir, it is a case of major modifications to an old reservoir now in the wrong place.

Toddbrook needs more than just a few repairs, it must have a whole system assessment, each subsystem must be updated and then managed and operated differently than in the last 50 years. It is an important recreational and healthy asset but it is potentially very dangerous as all reservoirs are. This document is my attempt to emphasise this paradox and to urge the WB Community, WB Town Council, the HP Borough Council, Local MPs, Ministers and Owners to take an urgent proactive interest in all the operations required to modify, repair and make safe the Toddbrook *System*. To ignore my recommendations could lead to a future catastrophe as Prof Balmforth bluntly emphasises on page 86 of his critical review (Part B):-

"The Environment Agency estimates that over 2.4m people in England are at risk from 2095 large raised reservoirs, most of which are currently designated as high risk. They present one of the largest threats to human life and property of any infrastructure sector in the UK.
The failure of a dam can lead to a sudden and large release of water which would be difficult for the population affected to envisage. The Toddbrook Reservoir incident in 2019 could have ended in disaster. Had the dam breached, and had this occurred at night and without warning, there would likely have been a significant loss of life."

I ,*Graham,* will add that if the dam had breached during school hours then there could have been a disaster far more catastrophic than the tragedy at the Aberfan school when, in 1966, 144 people died, 116 of whom were little children. The Safety of Toddbrook will be the legacy of all those in local and elected office who have the responsibility to ensure that the dam and every subsystem must meet the critical safety standards outlined here."
See whole document on www.lymewood.co.uk ref GA4 (Right click on link for drop down menu) or type link into your Browser (Google)

Damning assessment of the Auxiliary Spillway. by Dr. Hughes March 2020. *See whole Docs AH1 and GA4 on my website* "Fundamentally the original design does not follow recognised best practice and is seriously flawed; it has features within it or that have not been provided which have led to the failure which occurred on 1st August 2019. **It is likely that flows took place under the slab almost from day one, when the water level in the reservoir was high enough. In my opinion the original design was flawed and so the situation was an incident/ accident waiting to happen** – it was just a question of how, when and to what degree, unless some intervention was taken in the meantime."

Table 1: Safety Assessment &Technical Approval is required for the following integrated Plans and Procedures before any physical work commences. *Extract from Doc (Sept 2021).see GA5 on my website. Table been updated.*

TITLE OR PURPOSE	PLAN STATUS
DAM: Removal of all 1970's concrete and temporary bags. Assessment and repair of damaged structure. Major work sequence errors in overflow plans. 1) Overflow constructed before dam repaired, 2) Max TWL as original. Installation of modern monitors reqd. Decision on reservoir level. Public Access across the Dam. Estimation of the safe future life of this Dam. **Fundamental Safety Issue**	No formal plan. Some structural studies done. Work sequence errors from Overflow plan. No specific safety plan
NEW DESIGN RESERVOIR OVERFLOW SYSTEM. Option chosen and description produced, not very accessible due to inappropriate doc design by CRT. Decision on reservoir level required (TWL).**Fundamental Safety Issue**	Planning application into HPBC. Invalid max TWL defined prior to all Dam repairs.
DISCHARGE VALVES & CANAL FEED CULVERTS. Valves to be modernised, safer, moved ex dam, upstream hydraulic operation. Plus emergency discharge large dia. pipes into spillway. No 1 canal discharge culvert to be repaired. Deliberately blocked in 1990 reason then not given. **Critical Safety Issue**	These engineering upgrade intentions seem to be committed. But no coherent single doc.
THE ABSTRACTION WEIR. (side not head) Proposal to repair and operate this weir as the primary Fill Weir. The Operation and Emergency procedures must be described in the **Toddbrook Safety Plan.(non existant** !)	Intentions Unknown, not discussed. Not part of any plan
HEAD WEIR, GATE CONTROLS. BYPASS & FEED CHANNEL. Sluice gate proposal Dec 2019, apparently abandoned. **Critical Safety Issue**	Intentions Unknown, not discussed. Not part of any plan
VEHICLULAR ACCESS TO THE HEAD WEIR. **Critical Safety Issue**. Ref Aug 2019 emergency. Incredibly not on current plan with HPBC.	Critical Importance re 2019 but not recognised or planned.
REDESIGNED OVERFLOW CONVERGENCE WITH THE RIVER GOYT. **Critical Safety Issue.** Ref. Aug 2019 emergency video evidence	No redesign but Invalidates Flood Risk Assessment
PROTECTION FOR THE FERNILEE/ERRWOOD RESERVOIR DELIVERY PIPE. **Very Critical Safety Issue**.	No Plan. Not recognised as a very serious safety issue
INSTALLATION OF RAIN GAUGES IN TODDBROOK WATERSHED. Essential for flood management. **Critical Safety Issue**	No plans. Not considered necessary
1)NORMAL OPERATIONAL MAINTENANCE AND INSPECTION PROCEDURES. **Critical Safety Issue** 2)OPERATIONAL PROCEDURES PRIOR TO AND DURING FLOODS. These procedures must be written to utilise all the new and repaired system facilities in the list above. They should be submitted as part of the Safety Plan for Toddbrook.(**non existent)**	No recognition of this requirement despite Prof Balmforth's two excellent reports on deficiencies in Resr. Management.

All these safety issues are discussed in detail in GA5 on my website. Reservoir Safety Plan as a single topic has not been produced by the CRT. This table was updated after phone meeting (7 Dec 2021) with Mr Martin Hewitt, the Govt. appointed Qualified Civil Engineer (QCE).His remit appears limited to Overflow current plan , most of above excluded. **Further updates added Jan 2022.**