Risk ID No	Risk Detail	Initial probability	Initial impact	Initial score	Mitigating measures	Resultant probabilit	Resultant impact	Resultant score	Actions required
ER001	Lowering the water level for a prolonged period, including spring/summer, could impact aquatic life in the reservoir and down stream	Very Likely	Significant	High	In line with guidance from Environment Agency (EA), level to be lowered during December and January when aquatic activity is naturally low (outside spawning season). Lowering to be carried out gradually using side sluice channel. Process to be undetaken in conjunction with local angling society respresentatives. Gradual nature will reduce potential scour downstream. Use of deep draw off valve to be kept to an absolute minimum to reduce escape of silt. Visual monitoring of fish stocks (and other species) by local angling societies during works to determine if any distress is evident (eg from reduced oxygen levels). If noted, further EA advice to be sought on how to manage the situation.	Possible	Significant	Medium-High	Liaise with angling societies to address concerns and instigate water lowering activity in December 2022. Should use of the deep draw valve be deemed necessary, sand bags will be utililised along the wier to prevent silt escapng from the stilling pond into the river Dove. The canal feeder pipe from the stilling basin will be regularly checked for blockages and rodded/jetted as necessary. Key contact telephone numbers to be exchanged to support ongoing monitoring of conditions and early warning notification to the EA if required. A visual inspection of the river Dove immediately downstream of the reservoir will be undertaken to identify presence of redds.
ER002	Silt loss into River Dove causing scour of river bed and loss of spawning habitat	Possible	Moderate	Medium	Use of side sluice channel minimises silt outflow. Deep draw off valve to only be used should water level not be lowered sufficiently using side sluice. Silt outflows into stilling basin in first instance so silt should settle to base of that pond rather than flow into the river. Sand bags to be placed along weir at outfall point to ensure initial silt outlet is fully contained in stilling basin. Haybales to be inserted into river mouth to catch residual silt outfall. Local knowledge of the nearby River Dove indicates the habitat is not suitable for trout which would be spawning at the time of lowering.	Unlikely	Moderate	Low-Medium	A visual inspection of the river Dove immediately downstream of the reservoir will be undertaken to identify presence of redds. If required, installation of sandbags and hay bales to capture overflowing silt. Ongoing monitoring of the habitat in conjunction with the local angling societies.
ER003	Enabling works to create site access routes could impact birds and small mammals (inc. bats)	Possible	Significant	Medium	Ecology and arboriculture surveys carried out. Recommendations provided to minimise impact. Works to be completed in Feb to avoid nesting season. Removal of vegetation to be kept to an absolute minimum to enable movement of equipment and materials. Any lost hedgerows to be replanted once works completed. Project will result in an overall biodiversiy net gain. Ecolological Watching Brief prior to the laying of any track matting to ensure no species such as GCNs are present and then track matting laid to ensure no animals can get under it. The track matting will be regualrly monitored	Unlikely	Significant	Medium	Use ecology and arboriculture survey findings to identify suitable access routes to minimise impact. Confirm with above that proposed routes are in fact suitable before commencing works. Once replanting takes place, in the event of dry weather, manual watering of new plants to take place for a minimum of three months. Replacement hedges, trees, grasses and plants to be selected from species identified as suited to the local environment and to ensure invasive species are not introduced.
ER004	Haul road within reservoir perimeter could create an environment for unwanted predators (eg cormorants) to attack fish	Possible	Moderate	Medium	Site will be too active during construction to encourage such birds to settle. Haul road material to be removed once works completed.	Unlikely	Moderate	Low-Medium	Maintain communications with the local angling society to ensure any concerns can be addressed.
ER005	Lowering of portions of upper wall on south bank could create additional spillways in the event of a probable maximum flood event	Unlikely	Severe	Medium-High	Plans shared with all reservoirs panel inspecting engineer (ARPIE) for comment and direction. Contractors to revise planned approach to ensure any lowered sections are still higher than the other spillways. Works being undertaken in spring/summer so likelihood of significant, prolonged rainfall is lower than autumn/winter working. Weather conditions to be monitored and pre-emptive action to be taken to maintain low water level as far as possible, while considering mitigations included in ER001. Equipment and materials to be on hand to act swiftly to reinstate lowered banking should a flood event occur. Reinstatement of bank following works will cmply with highways regulations design standards and be approved by the ARPIE.	Very Unlikely	Severe	Medium	Contractors to produce a method statement with contingency plans and a drawing to illustrate the backfilling activity will meet with relevant standards specifications. ARPIE to assess and agree with statement prior to works taking place.

ER006	Sections of the site fall under SSSI status so additional measure may be needed to reduce impact here	Very Likely	Moderate	Medium-High	Assent has been received from Natural England to carry out works in these areas during the planned time period assuming reasonable steps are taken, consistent with the proper exercise of the authority's functions, to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest. In agreement with the local angling society, works will cease before the main tree line begins so there will be no disturbance to their roots.	Possible	Moderate	Medium	Ensure contractors are aware of boundary of the works and do not encroach into tree line. Maintain a watching brief on the area during site set up and throughout the duration of the works to identify any potential issues. Where noted, NE and EA to be contacted for advice. Hedges, grasses and plants to be reinstated once works are completed.
ER007	Prolonged dry weather following completion of works will mean the reservoir takes longer to refill than should there be heavy rainfall	Possible	Minor	Low-Medium	Works are planned for completion late August/early September. This is moving into the autumn period which tends to involve increased rainfall. The reservoir is 'fed' by two main tributaries and also run off from neighbouring higher land so any rainfall within the catchment area will naturally flow into the reservoir, even if rainfall doesn't occur directly overhead.	Unlikely	Minor	Low-Medium	Ensure efforts are taken to begin raising water level as soon as practicably possible upon completion of works.
ER008	Temporary culverts will be in use across a stream running parallel to the south bank to enable plant and material access to the water's edge. This could impact flow in the stream and further downstream	Unlikely	Minor	Low-Medium	The installation of culverts is expected to actually improve flow through this stretch. In line with instructions from the All Reservoirs Panel Engineer, appointed under the Reservoirs Act 1975, the culverts will be removed and the natural stream flow reinstated upon completion of the works.	Very Unlikely	Minor	Low	Maintain a watching brief of the culverts throughout the project and address any blockages as necessary.
ER009	Birds which ordinarly nest around the edges of the reservoir will be unable to do so. This could impact the success of the breeding season.	Possible	Moderate	Medium	The site has access to floating beds which can be deployed into the water to create nesting space. There will still be some areas of undisturbed banking toward the north-east of the reservoir and there are banks around the stilling basins downstream from the main spillways on which birds can nest.	Unlikely	Moderate	Low-Medium	Work with the site team to ensure floating beds are deployed at the earliest practical opportunity. Consider whether additional beds could be made/procured and deployed. This would support future years' nesting activity too.
ER010	Himalayan balsam is known to be present along the banks of the mill stream. This is an INNS so must be managed to prevent further spread across and beyond the site	Very likely	Minor	Medium	Best practice on undertaking enabling works which would disturb the balsam are being carried out outside its flowering and seeding period. Plant, equipment and personnel hygiene measures will be in place to minimise risk of spread.	Unlikely	Minor	Low-Medium	Contractors to produce and adhere to a method statement which addresses site hygiene and INNS containment matters.
ER012	Working in and around trees and hedges	Likely	Significant	Medium-High	Site visit 10th Nov confirmed mill goit crossings with minimal tree loss (4/5 No.). Hedges removed for field access will be replaced on completion	Low	Low	Low	Replanting to take place once works are completed and, if event of dry weather, manual watering and monitoring of new plants to be undertaken for three months.
ER013	Working in close proximity to farm animals and livestock	Unlikely	Negligible	Low	Meeting held with farm manager - stock proof fencing will be erected to their requirements	Low	Negibile	Low	In conjunction with the farm manager, a method statement will be developed to mitigate risks to both humans and livestock. Emergency contact details will be shared across all parties in the event of an incident.
ER014	Working on the banks of a watercourse or other water body	Very Likely	Significant	High	Methods discussed between BMBC and contractors. BMBC have informed the relevant bodies about the work and the recommendatrions of those bodies will be taken into account	Very Likely	Moderate	Medium-High	EA, NE, anglers, heritage, ARPIE, ecologist and arboriculturalist advice has been taken into account in developing the designs and methods of work. Ongoing dialogue will be maintained with all parties as necessary thorughout the project to ensure statutory requirements are met.
ER015	Storage, handling and use of fuels, oils and chemicals	Very Likely	Moderate	Medium-High	BB policy and procedures will be in place - e.g. bunds, 110% bund capacity, environmental hydraulic oil, electric machinery where possible, plant "nappies"	Possible	Moderate	Medium	Method statement to include preventative measures and clean up actions in the unlikely event of an incident.
ER016	Generation, storage, handling and transfer of waste materials	Very Likely	Moderate	Medium-High	BB will comply with the relevant current leglisation to ensure wastes are managed effectively to minimise impact on the environment.	Likely	Minor	Medium-Low	Method statement to include containment measures and clean up actions in the unlikely event of an incident.
ER017	Working close to private residents	Very Unlikely	Negligible	Low	Contractors are obliged under the contract framework to liaise with stakeholders, to tell them what the intentions are, and adapt to their needs where possible. Works will take place within normal business hours wherever possible.	Very Unlikely	Negilible	Low	Communications plan to be compiled to manage stakeholder queries and requests.

ER018	Lowering the water level for a prolonged period, including spring/summer, could impact grazing cattle in a down stream field as their stream is fed by the reservoir	Possible	Moderate	Medium	The field stream is fed via the stilling basin at the bottom of the spillway. Unless in extreme drought, the basin will contain sufficient water to flow into the stream. However, should it be necessary, a water bowser can be installed in the field as a drinking point for the cattle.	Very Unlikely	Moderate	Low-Medium	Watching brief to be maintained on the situation with actions implemented as necessary to ensure livestock have water.
ER019	Reducing the water level can encourage algal blooms which may impact oxygen levels in the reservoir	Unlikely	Moderate	Low-Medium	Water level to be lowered for minimum time necessary to undertake the works and abide by EA guidance on spawning. If necessary, specialists could be employed to treat algal blooms. Given the large expanse of the reservoir, even at reduced water levels, the EA have indicated this issue is unlikely to arise.	Very unlikely	Moderate	Low-Medium	Watching brief to be maintained on the situation with actions implemented as necessary to ensure excessive blooms are treated.