

Reservoir Safety and Refurbishment Works at Severn Trent Water's Howden, Derwent and Linacre Reservoirs

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SYNOPSIS.

Severn Trent Water (STW) initiated a contract for essential reservoir safety and refurbishment works following a routine 10 year inspection, under Section 10(2) of the Reservoirs Act 1975. The required works were varied and included, valve refurbishment, additional valves, spillway repairs and general maintenance work.

At Howden and Derwent Reservoirs there was concern that operation of 9no. 30 inch diameter Blakeborough scour valves was causing cavitation damage and some valves could not be operated through their full travel. It was recommended that further investigations were carried out 'in the interests of safety'.

At the Linacre Reservoirs (Upper, Middle and Lower) the works to be carried out, some 'in the interests of safety' and others for refurbishment, included repairs to spillway walls and floors, restoration of a drainage facility, installation of a scour guard valve and re-lining of the Lower Reservoir draw-off scour pipeline.

This paper reviews the works involved from the early feasibility investigations through to the construction works. The construction period was August 2005 to March 2006.