PROJECT STEEL BAFFLE CURTAIN SOLUTION

















A new stainless steel and Flagon curtain baffle wall solution was delivered by Stonbury's specialist in-house team.

Following the recruitment of its own specialist team to install Flagon baffle curtains, Stonbury provided a full refurbishment to the 6.1 megalitre contact tank as a complete solution for its client. Stonbury was enlisted to inspect and scope the work in an urgent time frame and delivered the programme in just over four weeks by mobilising skilled teams to work around the clock.

Several features of the tank required encapsulating and re-waterproofing due to degradation and the presence of outdated non-Reg 31 products. The tank's previous concrete baffle walls were eroding and absorbing water into the concrete block, posing a major water quality risk.

The task required careful planning as the sole entrance was a one-metre-squared hatch. Stainless steel for the baffle curtain was therefore supplied in one-metre strips and welded within the tank. A working platform was installed to enable safe and swift working, especially when removing waste materials from the tank.

The team completed a pre-clean followed by refurbishments, which included repairs to redundant pipework, encapsulating joints, re-waterproofing the floor and rendering an external wall.

Twenty concrete block baffle walls were demolished block by block, lowered carefully into skip sacks to avoid damaging the new overbanding and lifted out through the hatch using a gantry and mechanical winch. After demolition, Flagon curtains were installed along the 18 columns of plynths. The two sections nearest the inlet pipe were backed with the newly fabricated stainless-steel curtains to buffer the pressure from fast-flowing water.

The system has provided a robust solution which is safe and resistant to corrosion. The embodied carbon has been significantly reduced when compared with a concrete replacement, sustainably preserving water quality for years to come.