

Fluxton Sewage Treatment Works Upgrade  
Pell Frischmann  
South West Water  
Over £3m reeng  
£5m

Both Ottery St. Mary and Fluxton Sewage Treatment Works (STWs) were overloaded, with substantial catchment growth forecasted within the 2031 design horizon, which would exacerbate the problem at both sites. Since Ottery St. Mary STW had no room for expansion, a strategic intervention was promoted to close Ottery St Mary STW and transfer all sewage for more efficient treatment at Fluxton STW.

Due to the tighter Total Phosphorus permitting restrictions due in 2020, a holistic scheme was sanctioned for Fluxton STW that could be delivered more economically. A new Activated Sludge Plant (ASP) treatment process was promoted as a more robust, reliable process solution whilst reducing operational risks.

The proposed project benefitted from several creative approaches:

1. Consolidation of the two existing sewage treatment works to one new process stream at Fluxton would be more efficient, eliminating any potential odour issues at Ottery St Mary.
2. The existing site is located within a flood plain (Flood Zone 3). Therefore, the new works was designed to provide flood resilience to the site by raising the development platform to the 1 in 100-year flood level.
3. Due to limited available space on site, the proposed ASP was compacted into a small rectangular footprint, ensuring that the works could be expanded at a future date.
4. Potential noise nuisance was completely mitigated by re-submitting the planning application and moving the blowers to a preferential location.
5. The existing sludge beds were broken up and 90% of the material was reused as base material for the formation of the new structures.

In addition to safe delivery on time and within budget, the scheme achieved wider sustainable benefits exceeding expectations in protecting the environment, improving on existing best practice and underpinning the collaborative delivery reputation of H5O.