atac

Case Study Reduction of Premature Storm Flows





Axius Water companies

CASE STUDY

Hampshire — Pump Station to Reduce Premature Storm Flows

ATAC Solutions were asked to investigate reducing premature storm flows from WTW in Hampshire and provided with a proposed design by a Water Company.

The WTW sits in an area of outstanding natural beauty and in a SSSI, discharging into the a river – the project driver was to prevent premature storming. The existing site only had a small amount of flow balancing so effluent pumped to the site from the terminal pump station during storm events could easily exceed the balancing capacity and overflow into the storm tanks.

Working closely with the client's engineers, ATAC proposed installing a new pump station with enough volume to provide suitable balancing and thus prevent premature overflow to the storm tanks.

The site access was very restricted and location made for a challenging build process but through careful and thorough management we were able to excavate and create the pump station.

The excavation of the area started in early June 2024.

The new Pump Station was designed to include a new MCERT flow meter to accurately measure flows being discharged by the station and provide feedback for pass forward pump speeds; therefore enabling the pumps to maintain maximum balancing volume within the Pump Station.

Part of the project also involved supplying a new MCERT flow meter on the rising main to enable flow measurement of flow to treatment, this flow meter was incorporated into the Pump Station Discharge pipework.

The new Pump Station went online mid September 2024 (before the end of September regulation date) and this has dramatically reduced premature storming.









atac