## MAINTAIN REPAIR REFURBISH BUILD

**PROJECT** SLOW SAND FILTER REFURBISHMENT



Stonbury has recently completed the installation of a new floor and sandbar set during an ongoing project to increase the lifespan of a slow sand filter.

The refurbishment, initiated in November last year, has included modified features to increase the length of time between routine maintenance works and therefore extend the asset's overall lifespan. This filter bed is 1 of 32 to be refurbished during a multi-million-pound rolling contract.

In this project, Stonbury removed the redundant porous concrete floor and replaced it with 67,000 new porous concrete blocks, offering greater cost-effectiveness, ease of installation and reduced embodied and lifecycle carbon compared with traditional poured concrete. The new block floor will allow for patch repairs to increase the longevity of the asset. The site team then installed new sandbars 600mm higher than the previous ones to enable a greater depth of sand and processing capacity. This involved re-building the concrete weir wall and replacing supporting components. The change will increase the skim life of the bed from around 80 days to 120 and significantly improve the lifespan of the sand bed.

Additionally, the refurbishment included wall and under-floor cleaning with high pressure water jetting, concrete repairs to the outer rim and the installation of a new ramp. To demonstrate thorough debris removal, Stonbury conducts a pre- and post-work CCTV camera survey on every asset.

With the bed successfully refurbished, the team is preparing to commence work on another filter bed in the near future.