

Elite Precast Concrete **case study**

Retainer-Rock® helps support £10m upgrade at Dronfield Wastewater Treatment Works...

For more information or technical advice, contact 01952 588885.

As part of Yorkshire Water's commitment to improve river water quality they have invested £10m to carry out improvements at the Dronfield Wastewater Treatment Works. The improvements, carried out by Tilbury Douglas, will allow Yorkshire Water to reduce the amount of phosphorus being returned to the environment from the treatment works and improve the water quality in the River Drone.



CPC Civils delivered the main civils package and works included site enabling, placement of precast concrete structures, pipeline connections, drainage and a new backwash pump station.

Multiple precast retaining walls were also required and by utilising Elite Precast's Retainer-Rock® walling system the walls provided low-maintenance earth retention, durability and had an attractive finished face.



continued overleaf...

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Why Retainer-Rock® walling was selected

The Retainer-Rock® walling system by Elite Precast Concrete, is an engineered, interlocking concrete block walling solution that offers a natural stone appearance, fast dry-laid installation, and modular flexibility for straight or curved walls.

Retainer-Rock® provides the mass and interlocks, which is necessary for gravity retaining walls. It can be used with a tie-rod jointing system for higher or more constrained walls, making it a suitable choice where site access, speed of installation and long-term durability are priorities.



Speed of build

Dry-laid modular blocks reduced on-site labour and programme time compared to cast-in-situ options, helping CPC meet the tight handover/commissioning deadlines.

Low maintenance & durability

Solid concrete blocks provide a long service life and reduced lifecycle costs – important for wastewater sites with access/maintenance constraints.

Aesthetic and community acceptance

The cobblestone-textured finish blended with the setting beside the River Drone and met stakeholder expectations for a tidy, robust finish.

Environmental / carbon considerations

Using precast units and a lean installation reduced on-site waste and helped the client's carbon objectives compared with more plant-intensive alternatives.

The civils package – including the Retainer-Rock® retaining walls and multiple precast units – was delivered safely, on time and within budget. The scheme was commissioned in December 2024 and met the regulatory deadline for Yorkshire Water. CPC's successful delivery led to follow-on work with the main contractor into AMP8.



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