

## Project Profile - Utilities



### PROJECT

Clifton Marsh Wastewater Treatment Works, Preston

### SUMMARY

Concrete repairs to columns, beams, walls and tank floors

### PRODUCTS

**Steel Reinforcement Protector 841**  
**Monomix**  
**Fastfill**

### CLIENT

United Utilities

### CONTRACTOR

Jacobs / Nomenca Limited /  
VolkerLaser Limited

### BACKGROUND ►

As part of a £114 million sewer improvement scheme for United Utilities, 3.5km of tunnelling was created 30m beneath Preston city centre. A complex network of interceptor sewers, stormwater storage tunnels, rising mains and 13 access shafts was created to upgrade the city's aged sewer system and stop wastewater flowing into the River Ribble during heavy storms.

The new network intercepts flows and diverts them 10km westward to Preston's main treatment works known as Clifton Marsh Wastewater Treatment Works. The project forms part of United Utilities' scheme to improve the quality of the Fylde Coast bathing waters and protect designated shellfish beds in the Ribble Estuary. In order to accommodate the additional load, it was necessary to upgrade a number of structures at Clifton Marsh Wastewater Treatment Works.

### THE SOLUTION ►

Repairs to concrete elements including columns, beams, tank floors and the internal and external walls of tanks were necessary to ensure structural integrity. Flexcrete products were chosen for this high profile project as the company could offer a complete repair and protection system well proven in wastewater applications and with CE Mark approval to EN 1504 standards for concrete repair. Prior to the application of Flexcrete's repair mortars, **Steel Reinforcement Protector 841** was applied to exposed re-bars to provide an anti-corrosion barrier. **Monomix**, an advanced polymer modified repair mortar, was chosen for concrete repairs due to its ease of use, high build properties and long-running track record of use in United Utilities projects, whilst **Fastfill**, a rapid setting repair mortar, was specified for repairs to floor areas in locations which could not be taken out of service for long periods.



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