

Project Profile



Project Title	Wigan WwTW Storm Tanks
Client	Volker Stevin/United Utilities
Project Value	£5m
Contract Conditions	UU CD100
Duration	8 months
GHA Livigunn Services	Civil, Structural and Geotechnical Engineering

Description

The purpose of the project is to reduce the number of storm overflow events to the nearby River Douglas and increase the storm storage capacity from 45,000 m³ to 110,000 m³ by the construction of three new 133m x 62m x 4m tanks with a combined storage capacity of 65,000m³.

Anti flotation was a major consideration; a simple but flexible solution was adopted a varying depth concrete blanket tied to the structure that required no special sub-contractors and enabled construction to proceed rapidly.

The total length of the walls on the project is 1.2km, Optimising the design was paramount and required considerable attention to detail. The external walls were 5.0m high and 390mm thick. The thickness was kept to a minimum to reduce the requirements for thermal reinforcement. The overall reinforcement density was only 65kg/ m². The walls are reinforced with special mesh prefabricated into U-shaped cages, the development of these unique details required extensive liaison with the entire supply chain.

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