



WESTERN HARBOUR PUMP STATION NO. 3

This project involved the provision of a wastewater pumping station with an adjacent emergency storage tank complete with chemical dosing. The new facility was constructed on made ground and formed a part of the new infrastructure required for the predominantly residential development at Wester Harbour on the Forth estuary, in the north of Edinburgh.

The 3m diam. pumping station was constructed as a 7m deep caisson. As the works was constructed within an infilled harbour, flotation of both the completed shaft and during construction had to be considered. The additional weight of the jacking collar was sufficient during construction operations and the permanent shaft was 'oversunk' to accommodate a 3m concrete plug.

The Emergency Storage Tank was required to provide adequate storage during a plant failure so as to prevent in spills to the Forth estuary. The 13mx7m x 4m deep tank was of in-situ reinforced concrete construction, complete with tipping bucket arrangement for automatic cleaning to prevent odour problems. The ground conditions and high water table lead to the tank being constructed within a piled cofferdam,

The contract was administered by Sir Robert McAlpine Ltd under the NEC 2nd edition, Option C, Cost Reimbursable Conditions of Contract, with close cooperation between the site team and client's agent ensuring that the project progressed smoothly and was delivered on time, within budget.



CLIENT

Forth Ports Authority

ENGINEER / PROJECT MANAGER

Sir Robert McAlpine

CONTRACT VALUE

£ 432,000

DURATION OF WORKS

14 weeks