

**SCHEME**

**Porthcawl, South Wales**

**CLIENT**

**Welsh Water Capital Alliance**

**CONSULTANT**

**Hyder Consulting**

**CONTRACTOR**

**David Lewis Civil Engineering under the Alliance in South West Wales, a strategic partnership between Welsh Water and Morrison Construction**

**PIPE APPLICATION**

**200m of 3000mm diameter WEHOLITE HDPE Class 2 kN/m<sup>2</sup> installed as combined storm overflow 1300m<sup>3</sup> capacity**

## Sewerage upgrade means cleaner South Wales' beaches



Holidaymakers and water sports enthusiasts visiting South Wales will benefit from a £5.8 million sewerage network upgrade at the resort town of Porthcawl.

The scheme has seen the creation of a combined storm overflow (CSO) incorporating approximately 200m of 3m diameter WEHOLITE pipe.

The enhanced network will upgrade the quality of bathing water in the area to a standard necessary to apply for a European Blue Flag Award.

The use of lightweight WEHOLITE structured wall plastic pipe was dictated by the extremely restricted nature of the site and its close proximity to holiday and residential homes. In the event, its use proved to be a quicker, cost-effective and environmentally friendly solution for the client, Welsh Water Capital Alliance.

The U shaped attenuation tank comprised of two parallel legs, each 92m long 3m diameter, WEHOLITE HDPE pipe joined at one end by a U shaped fabrication in the same material. The two legs were laid with a split fall, so that the inlet end is 2m higher than the outlet end.

The tank was installed in a 9m wide, 4m deep excavation in a narrow 12m wide strip of land bounded on one side by the back garden of private houses, and on the other by the Trecco Bay caravan site. Access was via a narrow 3m wide lane between two houses.

Most of the 3m diameter WEHOLITE pipes were delivered in 7m lengths, and according to Steve Jones, Morrison Construction's works manager, the use of WEHOLITE meant that the number of deliveries to site was cut by more than two thirds. The impact of lorry movements on the local residents played a part in the decision not to specify concrete pipe or box culverts.

As there was no on-site storage, pipes had to be delivered to site as they were required in a 'just in time' operation. "The site was very tight and WEHOLITE proved to be the ideal solution," said Morrison's Steve Jones.

The project was programmed so that the excavation was backfilled as pipe laying progressed with sheet piled 'boxes' leap-frogging their way down the 92m length of the new tank, thus minimising overall impact on the local environment.

## THE ESSENTIAL SOLUTION FOR PIPE USERS NATIONWIDE

**CONTACT ASSET International Ltd:**

Head office: Stephenson Street, Newport, South Wales, NP19 4XH

Tel: 01633 271906 - Fax: 01633 290519 - E-mail: sales@assetint.co.uk - Web site: www.weholite.com

Scottish office: 1 McMillan Road, Netherton Industrial Estate, Wishaw, Lanarkshire, ML2 0LA

Tel: 01698 355838 - Fax: 01698 356184