

Site Water Management

WINNER

A470 Cwmbach to Newbridge-on-Wye

Client: Welsh Government – Transport Department
Designer: Jacobs Engineering | Contractor: Alun Griffiths (Contractors) Ltd

DESCRIPTION: The Cwmbach to Newbridge-on-Wye scheme is located in rural Powys on the A470, approximately 2km north of Bulth Wells. It consists of the offline improvement of 6km of sharply undulating single carriageway trunk road and removes the constraints to the network caused by a restricted height rail overbridge at Cwmbach and the traffic signal-controlled River Ithon Bridge. During the project's Design Phases (Key Stages 4 and 6), it was appreciated that due to the undulating nature of the site, the presence of clay soils and the sensitivity of the receiving waters, a key impact from the project would be silt contaminated runoff from exposed earthworks areas – so particular emphasis was placed on pollution control planning for the project.



ACHIEVEMENTS: Storage of grey water during winter months for dust suppression during summer months was considered early in the project. Appointment of a dedicated Environmental Response Team with sole responsibility for undertaking environmental mitigation and installing pollution control measures. The use of 'Silt Fence' to control runoff at source and filter and direct it away from sensitive receptors and into further mitigation. Straw bale and geotextile filters were used to treat runoff and water pumped from excavations.

JUDGES' QUOTE: For a modest sized project, the team have demonstrated how some high-level water treatment technology, usually only seen in the water industry, can be applied in the construction industry to achieve high levels of site water management and pollution prevention.



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