



## Bridge abutment structural drainage using ABG Deckdrain geocomposite as an alternative to porous concrete blocks.

The Port Talbot Peripheral Distributor Road (PDR) was developed to assist in the industrial and commercial development of the south western area of Port Talbot, to free the flow of traffic from the busy section of the M4 motorway between Junctions 38 at Margam and Junction 41 at Baglan and to provide environmental improvements, by way of reduced traffic noise and pollution, to the populated residential areas between these junctions.



Deckdrain wrapped around perforated carrier pipe.

Project Information	
Project	Port Talbot Peripheral Distributor Road - Structural Drainage of Bridge Abutments
Products	Deckdrain
Contractor	Costain
Client	Neath Port Talbot District Council
Consultants	Neath Port Talbot District Council
Benefits	<ul style="list-style-type: none"> <li>• Time saving</li> <li>• Simplified site logistics</li> </ul>

Stage 2 of the PDR, known as Harbour Way, links Port Talbot Industrial Estate with the M4 Motorway at Junction 38 and forms a key link for the development of the area. The routing of the road requires construction of a number of bridge structures where it crosses existing roads and the main Swansea to London rail line.

The bridge abutment design included cast in-situ concrete facing panels with a porous concrete block wall constructed behind for structural drainage. This caused Costain, the main contractor, to have concerns in a number of areas including the volume of materials required to be stored on site, the vehicle movements in delivering those materials and the speed of installation which was particularly important as a large part of the construction is within the boundaries of the train line and subject to Network Rail working regulations.

## Bridge Abutment Drainage

The solution was to use ABG Deckdrain geocomposite drainage system as a replacement for the concrete blocks in the original design. Deckdrain's high performance drainage characteristics meant that equivalent drainage performance could be offered with a fraction of the material handling requirements and associated problems.

Deckdrain was delivered to site in large rolls and was quickly, easily and safely installed without the need for specialist plant or trained operatives. These factors combined with the cost savings on both materials and handling made Deckdrain Costain's material of choice behind all the structures on Harbour Way.

Contact ABG to explore how Deckdrain could help your client achieve a sustainable, cost-effective and carbon neutral solution.



*Deckdrain against liquid applied structural waterproofing*



*Deckdrain positioned against RC concrete wall with backfill material being compacted.*

# Case Study



ABG are a market leading developer and manufacturer of high performance geosynthetic systems for use in a wide range of civil, highway, environmental and building projects. Established for 25 years and based in the UK ABG pride themselves of delivering outstanding customer service with innovative solutions.

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