

Structural Drainage

Bridge Abutment, Deckdrain, Heysham to M6 Link, UK



Case Study

Project Description

The Heysham to M6 Link Road is one of Lancashire's top priority transport projects. The new road completes the long awaited connection from the Heysham and Morecambe peninsula to Junction 34 of the M6. It is a 4.8km dual carriageway with a footpath and cycleway along the entire route.

The new road will provide improved access for residents, businesses and tourists to the Heysham and Morecambe area. It will open up areas for regeneration and reduce congestion currently experienced within the City of Lancaster.

The Challenge

The road alignment was carefully planned and adjusted to minimise earthworks and structure costs. The road crosses the River Lune near the M6, along with numerous roads, a rail line and built up areas resulting in many concrete structures each requiring back of wall drainage. Many of these structures have shaped wing walls, creating a challenge for earthworks contractors to place drainage materials against the wall and compact backfill without damaging the specified painted bituminous waterproof layer. Traditionally rough concrete drainage blocks are used. These heavy items have to be transported from the concrete works, across site to a remote bridge site. Pallets of blocks then have to be lifted over wing walls and each individual block stacked against the waterproof layer without damage. The remaining blocks then hamper the backfill operation. An approved, cost effective alternative was needed which speeded and improved operation but could also demonstrate the required 120 year design life.

Project Information

Client	Lancashire County Council
Contractor	Costain
Consultant	Jacobs
Products	Deckdrain 1200S/ST170 BBA
Quantity	7,000m ² (majority of retaining structures)
Benefits	<ul style="list-style-type: none">• Quick and easy to install in difficult access locations• No handling equipment needed• Easy delivery and site transport• Protects bitumen waterproofing• Exceeds flow of drainage blocks• BBA approved for highways



ABG Deckdrain back of wall drainage

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The Solution

Lancashire County Council approved the use of **ABG Deckdrain 1200S/ST170** as a superior alternative to the drainage blocks (>10x flow) with particular added benefits. **Deckdrain** is delivered in rolls on one vehicle from the factory at a rate equivalent to 100 trucks of drainage blocks. A single roll (>50sqm) can be handled easily by two people and safely attached to the structure ahead of the backfill operation leaving space for proper compaction. The **Deckdrain** protects the waterproofing and even provides an additional waterproof surface.

The ABG Service

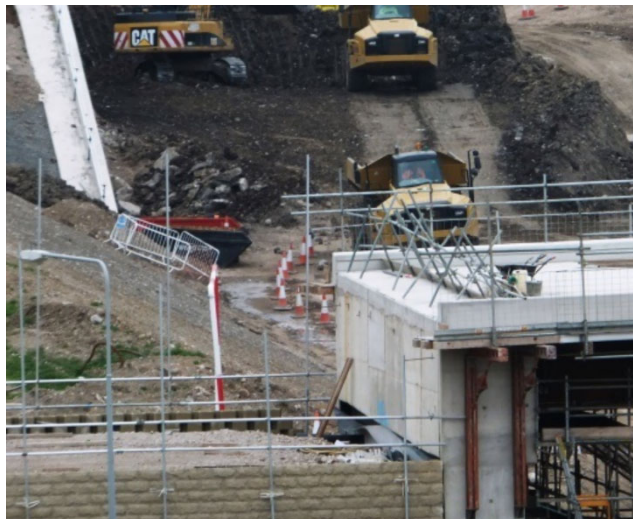
ABG made timed deliveries with target quantities to different locations along the project. The County Council approved the **Deckdrain** which also has BBA Approval for use in Highways applications.



Deckdrain is easily attached to the wall with the lower end wrapped around the perforated drainage pipe.



Deckdrain protects the waterproof layer during backfill operations (drainage blocks damage the layer)



Deckdrain used in tight backfill operating locations

Contact ABG today to discuss your project specific requirements and discover how ABG's past experience and innovative products can help on your project.