

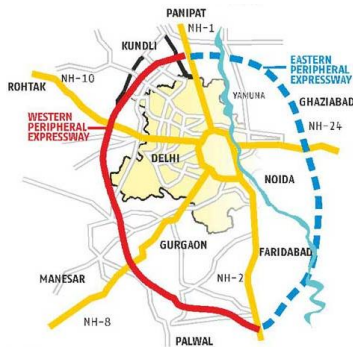
Structural Drainage

Retaining Wall Drainage, Deckdrain,
Eastern Peripheral Expressway, Delhi, India



Project Description

The 135km long upgraded Eastern Peripheral Expressway completes the ring road around Delhi passing through 3 districts and will especially relieve traffic congestion in the Faridabad-Ghaziabad area. The project includes road widening to six lanes, flyovers, rail over-bridges, pedestrian and vehicular underpasses.



The Challenge

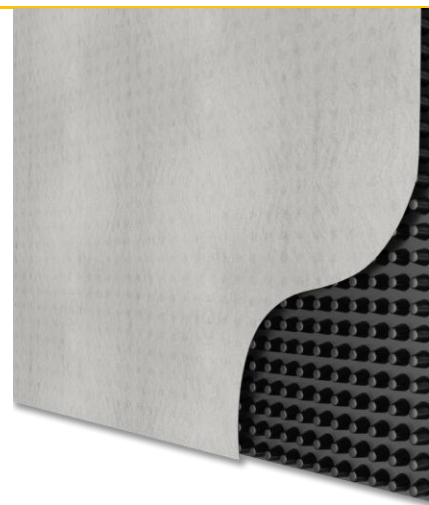
Providing a suitable drainage system for the many structures on the road subject to monsoon rain, especially earth retaining structures, is of paramount importance. Water must be drained away rapidly from the back of the retaining structures to avoid additional water pressure and earth pressures due to a reduction in shear strength of the soil.

Traditionally, a 600mm gravel layer or porous concrete blocks are placed behind the earth retaining structures. The disadvantages are:

- It is difficult to select and supply the correct filter grading to match fill material without clogging
- placing of stone or blocks is time consuming and damages the back of wall waterproofing layer
- the cramped areas behind an abutment leaves little room for manoeuvre with delivery or placement of both blocks or stone.

Project Information

Client	National Highway Authority of India
Contractor	Ashoka Buildcon Limited
Consultant	URS Scott Wilson Pvt Ltd / AECOM- CEG JV
Products	Deckdrain
Quantity	50,000m ²
Benefits	<ul style="list-style-type: none">• Easy to install• Cost effective Vs traditional drainage media• Improved program time



ABG Deckdrain for vertical wall drainage

Structural Drainage

Retaining Wall Drainage, Deckdrain,
Eastern Peripheral Expressway, Delhi, India



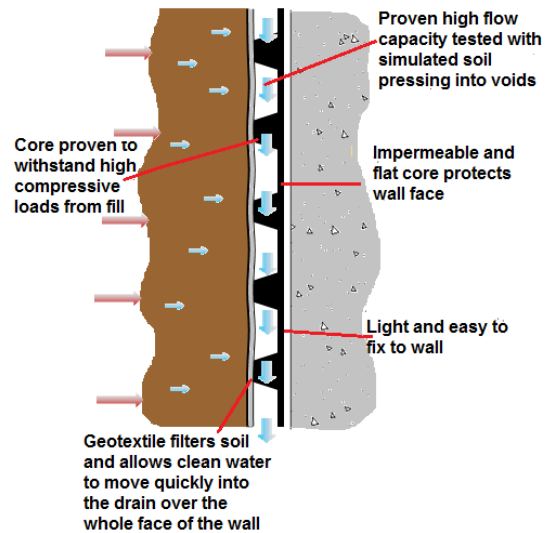
The Solution

ASHOKA Buildcon obtained approval from URS Scott Wilson to install a **ABG Deckdrain** drainage geocomposite to avoid all of the difficulties and risks in using a drainage filter stone or blocks. **ABG Deckdrain** met the specified flow requirements at all working temperatures, protected the structure from damage and provided a secondary waterproofing layer to the wall. Easy to install in tight working conditions, the **ABG Deckdrain** is simply cut, jointed, wrapped around corners and over the base drainage pipe.

ABG manufactures the only BBA approved wall drainage geocomposite for use by Highways Authorities.

The ABG Service

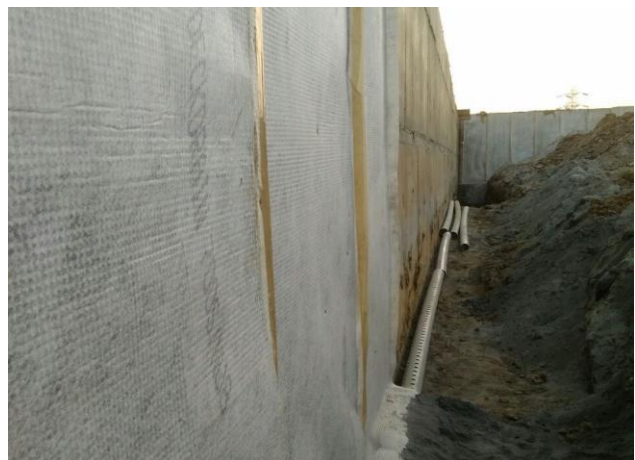
ABG offered assistance with cost comparisons, detailed design calculations, drawings and installation advice.



Deckdrain allows infiltration water to move easily from the fill soils through into the core.



ABG Deckdrain secured and wrapped around the perforated drainage pipe at the lower end



Deckdrain is easily attached to the wall and jointed with tape in readiness for backfilling

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