

## Project Info



01 / 08 / 2014



CC8™ Bulk Rolls



145sqm



Longitudinal layers



Karapiro Gully Viaduct,  
Waikato Expressway,  
Cambridge, New Zealand



Groundfix in conjunction  
with HEB Construction  
and NZ Transport Agency



CC8™ used to  
protect and stabilise  
a highway bridge  
batter.



Completed installation

In August 2014, Concrete Canvas® GCCM\* (CC) was used to protect and stabilise a batter underneath the Karapiro Gully Viaduct, Waikato Expressway, Cambridge, New Zealand. The bridge at 200 metres long and 40 metres high required vegetation to be cleared during construction resulting in the batter needing stabilising. Sprayed concrete was considered, but as the site is located in a gully, the limited plant access would have resulted in a much lengthier install. Furthermore the rebound associated with sprayed concrete would have created additional problems.

Installation was carried out by Groundfix in conjunction with HEB Construction for NZ Transport Agency. On the parts of the batter that could be vegetated, a geotextile was laid and hydroseeded. 8mm thick CC (CC8™) was used in conjunction with 12m engineering anchors on the rest of the slope to provide protection and stabilisation. Bulk rolls of CC8™ were delivered to site and dispensed using a digger and a spreader beam, before being cut to length using a disc cutter. Ensuring a 100mm overlap between layers, these lengths were lifted into place by a crane. As the CC8™ was lowered down the slope the soil nails were pushed through and capped, before the overlaps were screwed at 200mm intervals with 25mm screws. Where the CC8™ met the geotextile, the geotextile was lifted up and the CC8™ secured underneath it. The CC was hydrated using a 1000L bowser suspended from the crane and a hose.

**145sqm of CC8™ were installed by 3 people over 6 hours in damp conditions on a near vertical batter.** The site was difficult to access and CC did not require any additional equipment to be brought to site, resulting in large time and cost savings.

\*Geosynthetic Cementitious Composite Mat







Site pre-installation



CC8™ dispensed and cut to length



Engineering anchors pushed through the matting



The joints being screwed



Installation under the geotextile



The finished installation