

## CHANNEL LINING



In May 2014, Concrete Canvas® GCCM\* (CC) was used to line a drainage channel to prevent erosion underneath the nearby A66 highway.

During a site inspection, it was found that it would not be possible to stop or divert the water due to weather conditions, so a solution that could be installed in a live water course was paramount. At the top of the channel there was a termination of a culvert which also needed to be accommodated. The works were carried out by A-one+ Integrated Highway Services (Area 14).

An excavator was used to re-profile the channel and culvert before 30 batched rolls of CC8™ were delivered to site. The excavator located the batched rolls at sections of the channel as required before they were unrolled by hand into position. The CC was laid progressively upstream, and pegged at the edges whilst allowing the live water course to flow under the material. Once CC had been installed along the length of the channel, a concrete sandbag headwall was built on top of the last CC layer. This would allow the water from the culvert to flow over the CC as intended. The overlaps were mechanically jointed with screws at 200mm centres, but the joints weren't sealed so as to create natural weep paths allowing water ingress into the channel and preventing the build-up of hydrostatic pressure behind the CC. Post hydration, the channel anchor trenches along the crest were backfilled to secure the CC in place and to provide a neat finish.

\*Geosynthetic Cementitious Composite Mat











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A total of 150m<sup>2</sup> of CC8<sup>™</sup> were installed by 6 people in just 2 days in a live water course, despite torrential rain.

"We were delighted with the results and the job ran smoothly... We found the CC easy to install even in difficult periods of bad weather and with us not being able to stop the flow of water. I would definitely recommend this product and most certainly use it again."

> Paul Wiles. A-one+ Integrated Highway Services (Area 14) works supervisor





