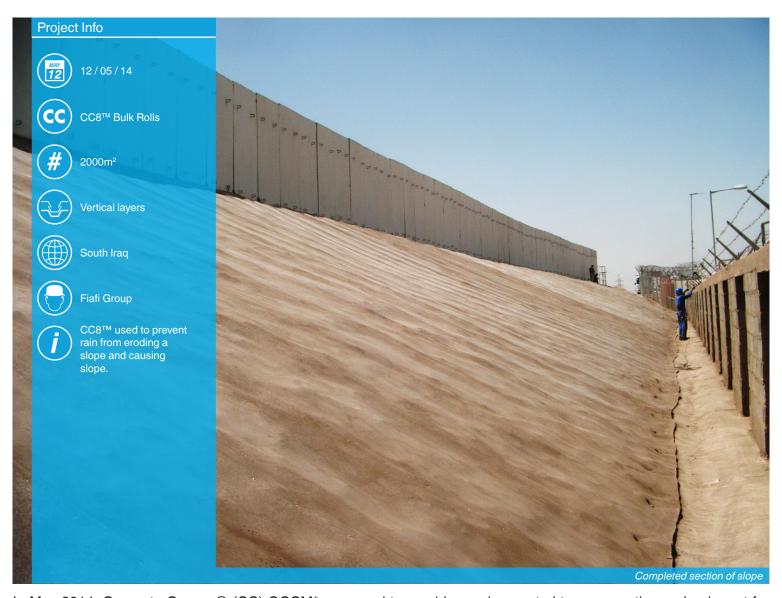


SLOPE PROTECTION



In May 2014, Concrete Canvas® (CC) GCCM* was used to provide erosion control to a supporting embankment for a bridge at a water injection oil and gas site in south Iraq. The erosion was the result of environmental weathering, predominantly rainfall, causing surface slip which threatened to destabilise the bank. A low cost and rapid solution was required; a concrete slab was considered but it would have been more expensive and time consuming.

Installation was carried out by Fiafi Group. Prior to the installation of 8mm thick CC (CC8™), loose rock was removed and the surface levelled using a granular type 1a sub base, that was compacted and watered. Bulk rolls of CC were delivered to site and lifted using a mechanical digger, before being unrolled and cut to length using a utility knife. A drainage ditch was created at the toe of the slope, before the lengths of CC were positioned at the crest by the installation team and unrolled down its length. Each layer was overlapped by 100mm, pegged down and fixed to the existing wall using masonry screws. The CC was then hydrated along the overlap, sealed with CT1 sealant and screwed at 50mm intervals. The rest of the CC was then hydrated using a bowser and hose with a sprinkler attached.

2000m² of CC8™ were installed by 8 people (including supervisors) in just 2 days, instead of the 7 it would have taken with conventional methods. Furthermore it was installed in 40° C heat and 95% humidity, so the speed of install reduced the risk of dehydration and sunburn for the installers. The site was also difficult to access with plant equipment so cutting CC to length and transporting it by hand was logistically much easier.

*Geosynthetic Cementitious Composite Mat











SLOPE PROTECTION













