

Project Info



03 / 02 / 15



CC5™ Bulk Rolls and Batched Rolls



270m²



Transverse and Vertical layers



Cerro Prieto, Baja California, Mexico



Undisclosed



CC5™ was used to remediate existing concrete channels and to protect slopes on the same site.



G&G
Soluciones con tecnología de punta

CFE

Comisión Federal de Electricidad



Completed channel installation

In February 2015, Concrete Canvas® GCCM* (CC) was used to remediate a series of existing concrete channels, and protect adjacent slopes, at a Geothermal plan in Baja California, Mexico in a project known as the Cerro Prieto Project.

The channels were damaged and the client was keen for them to be repaired in order to extend their useful lives rather than having them demolished entirely. The channels in question lead thermal water from the power generation process of the Geothermal plant, owned by the Federal Electricity Commission (CFE). Slopes adjacent to these channels were also in need of protection to avoid erosion. However, it was paramount that the works carried out on the slopes wouldn't hinder the activity at the plant. These requirements led to the specification of CC. Support was provided by CC's local partner.

The CC was delivered to site in both bulk and batched rolls of CC5™; the batched rolls were provided to allow for easy transportation to limited access areas where required. Prior to installation, the channels and slopes were cleared of any vegetation and debris, and the CC then cut to required length.

The CC was laid in the channels transversely, with layers overlapping by 100mm. Holes were then drilled in the overlaps and then fixed using screws. Once the CC was laid and fixed in the channel, the material was hydrated and the edges buried in pre-dug anchor trenches.

*Geosynthetic Cementitious Composite Mat





Channel prior to ground work and installation



The channel was cleared of debris and water prior to installation



The CC was laid transversely across the channel



Layers were overlapped by 100mm



Hydration was given via hose



The completed installation



CC was delivered to site in bulk rolls



The CC was cut to required length and laid across the crest of the slope



The CC was fixed to the substrate using ground pegs



The edges of the CC were captured in anchor trenches

For the slopes, the CC was first fixed at the crest using ground pegs, and laid vertically down the slopes, again with layers overlapping by 100mm. The CC was fixed using screws at intervals of 250 to 300mm and then hydrated.

In total, 270m² of CC5™ was installed in 2 days, demonstrating the speed and ease at which CC can be installed. The client was very happy with the outcome of the project, and, due to the 50-year lifespan of CC, can expect the channels to be in good working order for many years to come.