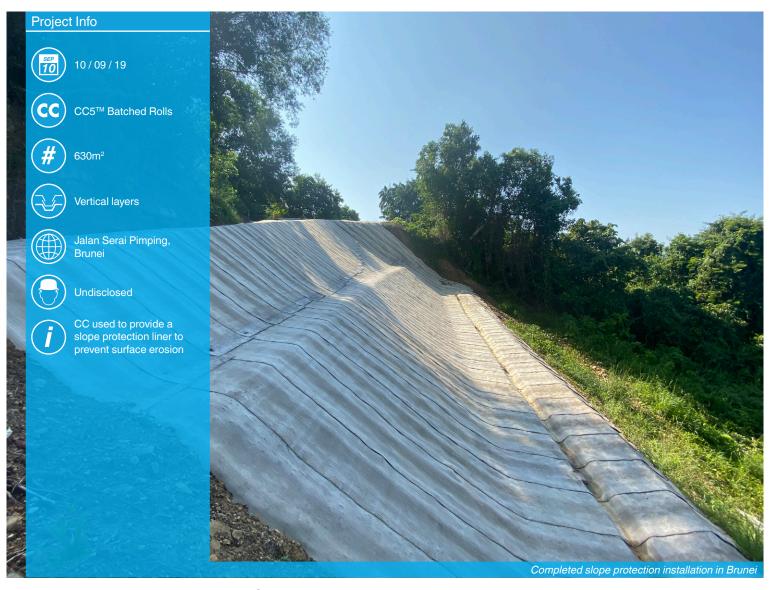


SLOPE PROTECTION



In September 2019, Concrete Canvas® (CC) GCCM* was specified as a slope protection solution for a site in Jalan Serai Pimping, an area of Serasa, Brunei.

The slope in question was prone to erosion caused by weathering and rain water, and required a protective liner to prevent further damage. The slope measured 8.5m in height and around 50m wide.

Conventional concrete methods were considered, including shotcrete, but these would have been too complex to install due to the remote site location and steep nature of the slope. CC was ultimately due to its ease and speed of use and ability to be installed on remote sites without the need for specialist equipment.

The works were carried out for the Public Works Department of Brunei.

*Geosynthetic Cementitious Composite Mat











SLOPE PROTECTION









SLOPE PROTECTION



Prior to installation, the slope face was prepared by removing any vegetation and grading the substrate. Batched rolls of CC5™ were specified for this project, as these portable rolls can be transported by hand on site by two or three people. The CC batched rolls and ancillaries were delivered to site up a steep and narrow track road.

The material was unwrapped and the leading edges secured in an anchor trench at the top of the slope using ground pegs, before being unrolled vertically down the slope face. The first length, which ran from the crest anchor trench to half way down the slope face where a step detail had been created. A second length of CC was laid so the leading edge overlapped the trailing edge of the first. The underlap material was hydrated and the lengths were then joined by sealing and screwing along those short edge overlaps to reduce permeability of the joint.

Subsequent lengths of CC were then created and laid so as to overlap the last by 100mm, with the overlaps again hydrated, sealed and screwed. Once the installation was completed, the CC was hydrated hose and water transported to site.

A total of 630m² of CC5™ were installed over the course of seven days, with a team of six working on the project. The installation was deemed a success, and the client was impressed with the performance of CC happy with the results of the installation.





