In October 2016, Concrete Canvas® GCCM* (CC) was used to provide both slope protection and weed suppression to an embankment adjacent to an expressway in Hokkaido, Japan.

The original design for the project had specified seeding, but the slope is also situated close to a residential area, and those living closest to the slope claimed that the vegetation would invite bugs such as mosquitoes. Due to the level of complaints from the residents, the client and contractor were forced to change the design specification. Sprayed concrete was considered as an alternative, but the level of rebound associated with its use in this area meant it was ruled out. CC was then chosen due to its speed and ease of install, along with the fact that it is much cleaner to install than many alternatives and would cause less interruption to traffic. The works were carried out by Sumitomo Mitsui Construction Co. Ltd, for East Nippon Expressway Co. Ltd.

In preparation for the installation, all vegetation was removed from the slope, along with any stones and other debris to provide a flat, smooth surface on which to lay the CC material. The CC was delivered to site in batched rolls, and deployed vertically down the slope by hand. The material was overlapped by 100mm, with the edges fixed using galvanised steel pegs at 2m intervals. The material was then sealed at the overlaps using Clearfix adhesive sealant to prevent weed ingress, and jointed using stainless steel screws at 200mm intervals down the length of the slope. Once installation was completed, the CC was hydrated.

1,260m² of CC5™ were installed without the use of any plant, on a sensitive site with restricted access.

*Geosynthetic Cementitious Composite Mat