

Project Info



11 / 03 / 2014



CC5™ Bulk Rolls



900sqm



Transverse and Longitudinal Layers



Brignoles, Var department, Provence-Alpes-Cote-d'Azur region, France



Eiffage Travaux Publics



CC5™ used to line a ditch at the top of a road embankment



Completed basin and ditch

In March 2014, Concrete Canvas® GCCM* (CC) was used to line a ditch and basin at the top of a road embankment in Brignoles, France, to prevent rainwater infiltrating the slope and causing slip. The close proximity of the crest of the steep embankment ruled out conventional concreting methods. A geomembrane on top of an anti-puncture geotextile was considered, however CC was chosen due to its cost effectiveness and ease of installation.

Installation was carried out by Eiffage Travaux Publics for the City of Brignoles. Prior to the installation of 5mm thick CC (CC5™), the bucket of a mechanical digger was used to grade the ditch and smooth the inverts as much as possible. Bulk rolls of CC5™ were delivered to site and suspended from the mechanical digger using a spreader beam. The CC5™ was cut to length using regular hand tools which avoided any wastage. It was then positioned in transverse layers along the inverts of the basin and across the ditch, with 3 longitudinal layers along the base of the basin. A 100mm overlap was created between each adjacent CC layer before ground pegs were used to fix the CC5™ to the substrate, and the overlapped joints were screwed at 200mm centres. Hydration was completed using a water truck and hose. The edges of the CC5™ at the crest of the ditch and basin were buried to create a clean finish.

900sqm of CC5™ were installed by a team of 3 in just 2 weeks. The drape characteristics of the CC5™ meant that a natural looking finish was created and necessary infrastructure, such as pipe work, was easily accommodated.

*Geosynthetic Cementitious Composite Mat





A section of the ditch



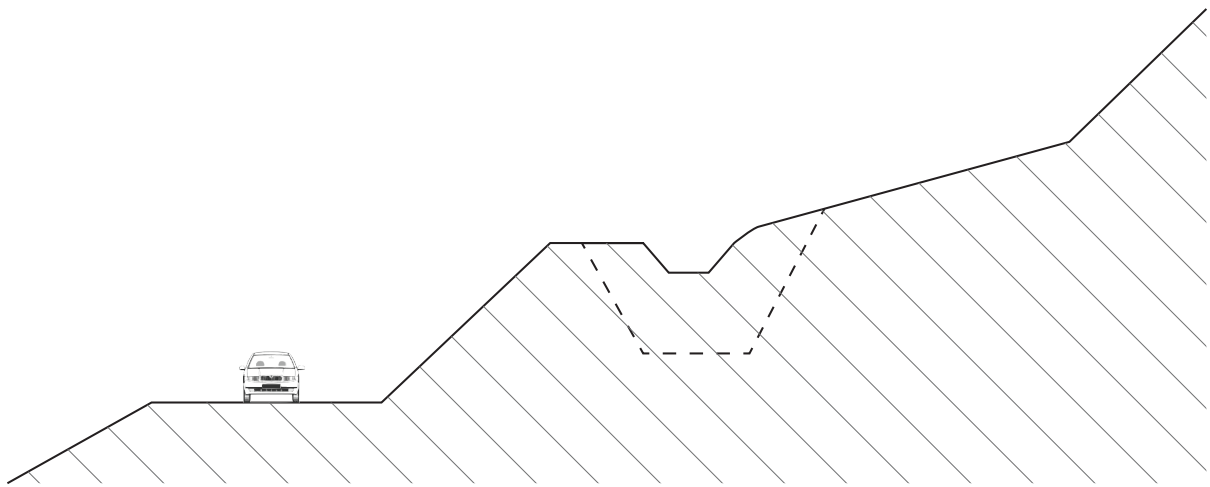
Transverse and longitudinal layup



The join between the ditch and basin



Integration with existing infrastructure



Sketched section showing the location of the ditch (and dashed line basin) relative to the road