



CASE STUDY:

DRAIN OUTLET & WEED SUPPRESSION

**SOUTHERN CROSS WAY, BRISBANE
SEPTEMBER 2018**

**CLIENT: ROADTEK DEPARTMENT OF
TRANSPORT & MAIN ROADS**

Concrete Canvas

Concrete Canvas is a flexible, concrete impregnated fabric that hardens when hydrated to form a thin, durable, water proof and fire resistant concrete layer. It is the original concrete on a roll.

Concrete Canvas allows concrete construction without the need for plant or mixing equipment. Simply unroll and position Concrete Canvas, and then just add water (any type of water, including sea water).

Concrete Canvas has no impact on the pH of runoff water. Concrete Canvas is widely used as a cheaper alternative to non-structural shotcrete.

Concrete Canvas is used in a variety of civil infrastructure applications, such as ditch lining, slope protection and capping secondary containment bunds.

Geofabrics was approached by Roadtek in Brisbane for some possible solutions regarding a problem at a site on Southern Cross Way, Brisbane. A stormwater drain had the issue of water being unable to drain away from the outlet. This was causing weed and vegetation growth to protrude the rubbish net and rodents to live within the rubbish, while also damaging the net. After many maintenance visits and costs, the site was no longer manageable.

An onsite meeting between a Geofabrics sales engineer and the Roadtek team considered several solutions. Initial options were stone pitching or placing of Reno Mattresses in the area but after review of site location and the difficult access points, getting rock or concrete trucks onto site would be logistically challenging and costly.

Concrete Canvas CC8 was instead suggested by Geofabrics as a permanent and long-term solution with minimal maintenance and very safe and easily managed installation.

Concrete Canvas CC8 has been independently performance tested and can handle flow rates up to 8.6 m/sec. Concrete Canvas has also been tested to assess its resistance to root penetration. The benefit of Concrete Canvas is that due to the cement compound used, it cures to 80% of its compressive strength within 24 hours so is promptly fit for purpose.

> Southern Cross Way Drain Outlet



Rubbish & weed blockage in the net before the project commenced



Concrete Canvas weed suppressant and drain outlet finished project



Concrete Canvas weed suppressant and drain outlet finished project

As the Roadtek maintenance crew had not installed Concrete Canvas before, Geofabrics' staff attended and helped the installation of the Concrete Canvas 8 mm handy rolls on site. The whole project consisted of 30 m² of CC8 and was installed using an excavator and operator with two laborers in half a day. The Concrete Canvas was then hydrated from the back of a ute which had a 2,000 Litre water tank.

The Concrete Canvas was joined using stainless steel screws at 200 mm centres and an 8 mm bead of an adhesive sealant which has also been performance tested for peel and grab with Concrete Canvas.

Roadtek's maintenance manager commented that this solution saved significant time and money as there was no requirement for traffic management, or high mobilization costs for specialist equipment.