

Case Study

Geofabrics

Project: Geoweb Swale Drain
 Date: October 08
 Client: Georgiou Group
 Location: Forrestdale Business Park, WA



Geoweb® & bidim®

The New Perth to Bunbury Highway (NPBH) is a 70.0 km dual carriageway extension linking the Kwinana Freeway to the Old Coast Road at Lake Clifton.

In the Shire of Waroona at the Tylers Pit Cutting section of the NPBH, the median and side swale drains required erosion protection from the excessive road stormwater runoff.

Project civil consultants GHD calculated that the runoff velocity within the swale drains could reach 1.5 m/s so they required a suitable product that would perform under these conditions and in so doing reduce Main Roads WA overall drainage maintenance costs.

A Geofabrics representative proposed a number of erosion control products that would fulfil the product requirements stipulated by the consultant.



After consultation it was agreed that the innovative **Geoweb®** cellular confinement system would be an ideal solution for erosion protection of the swale drain and also provide soil stabilisation for the infill material.

Onsite construction consisted of a prepared sub base with a **bidim® A19** geotextile acting as a separation/ filtration layer laid beneath the 75mm high **Geoweb®**.

The **Geoweb®** perforated panels were pinned into the existing ground at 1.0 m centres and then filled with a topsoil/mulch. The topsoil/mulch mix was then seeded and vegetated using small ground covering

The root system of the plants will establish through the **Geoweb®** perforated panels providing greater soil stability for the swale.

In total 6700m² of **bidim® A19** and 75mm high **Geoweb®** was used on this section of the project.

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MELBOURNE
 (03) 8586 9111
 Fax: (03) 8586 9186

SYDNEY
 (02) 9821 3277
 Fax: (02) 9821 3670

BRISBANE
 (07) 3279 1588
 Fax: (07) 3279 1589

PERTH
 (08) 9309 4388
 Fax: (08) 9309 4389

ADELAIDE
 (08) 8177 2055
 Fax: (08) 8177 2044

NEWCASTLE
 (02) 4950 5845
 Fax: (02) 4950 5895

HOBART
 (03) 6273 0511
 Fax: (03) 6273 0686

TOWNSVILLE
 (07) 4774 8222
 Fax: (07) 4774 8655

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 (07) 4155 9968
 Fax: (07) 4155 9968

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 (08) 8984 1600
 Fax: (08) 8984 1614

GOLD COAST
 (07) 5563 2131
 Fax: (07) 5563 3727