Case Study

Project: Geoweb Swale Drain

Date: October 08 Client: Georgiou Group

Location: Forrestdale Business Park, WA



Geoweb®

The new business development park at Forrestdale, located on the corner of Lakes/Ranford Road, Forrestdale (approx.20km south of Perth CBD) required for the discharge of stormwater runoff from the road infrastructure to be captured and redirected to the business park sump.

Traditionally, roadside swales are used but these swales require long term maintenance by the local authority.

The civil consultant Wood and Grieve and the contractor Georgiou Group decided that they were not satisfied with conventional swale lining systems such as rock pitching and erosion control blankets and contacted Geofabrics Australasia to assist in recommending an economical solution.





Geofabrics Australasia suggested a new innovative product called **Geoweb®** cellular confinement system. The swale when constructed was 7.0m wide with a 1 in 3 batter slope.

A 75mm high **Geoweb**® panel was selected for the project because of the size of the infill material.

Two different types of infill material were used within the **Geoweb**® cellular panels - washed river sand for the base and the property side swale batter and pea gravel on the road side swale batter. The pea gravel infill was installed because of the anticipated high discharge velocity from the road stormwater runoff.

The swale was formed and then lined with a **bidim**[®] **A24** geotextile used as a separation layer. Then a 75mm high **Geoweb**[®] panel was pinned within the swale and then infilled with above material.

In total 14 000m² of 75mm **Geoweb**® and **bidim**® **A24** was supplied to the project.

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