

Project: Point Peron GCS Groyne
Date: May 2012
Client: City of Rockingham
Location: Point Peron, Rockingham, WA



ELCOROCK® Geotextile Sand Containers

The ElcoROCK geotextile sand container (GSC) has been used to construct a groyne at Point Peron, Rockingham WA to address the coastal erosion issues that have been occurring.

The City of Rockingham contracted M.P Rogers and associates to design a solution for the problem. MP Rogers proposed a design specifying the use of 2.5m³ ElcoROCK containers to construct a GSC groyne to control the erosion and sand movement at this location. The project design consisted of approximately 200 no. 2.5m³ double sided vandal deterrent bags and 200 no. 2.5m³ double sided vandal deterrent bags with scour flaps. The groyne design also included the use of a unique bulbous head to help in the retention of beach sand.

ElcoROCK GSC's were specified because the system is environmentally friendly, cost effective and they offer an amenity benefit over traditional rock structures in public beach locations.

A site inspection of the area was held prior to the tender submission date, where representatives from the City of Rockingham, M.P Rogers and Geofabrics along with potential tenderers attended to discuss the project and familiarise themselves with the site conditions. Sand renourishment of the area also formed a significant part of the tender.

Neo Infrastructure won the tender for the project and Construction commenced in May 2013 whilst conditions were still favourable before winter. Geofabrics supplied all ElcoROCK product and two filling frames required for filling the bags. Representatives from Geofabrics also made a site visit during construction to assist with any filling or installation advice.

Construction by Neo progressed rapidly. The project lasted a little over 6 weeks from call for tender to completion. The groyne started performing immediately after placing with sand being prevented from being washed down the beach. The City of Rockingham is very pleased with the project and the performance of the ElcoROCK system.



How ELCOROCK® works.

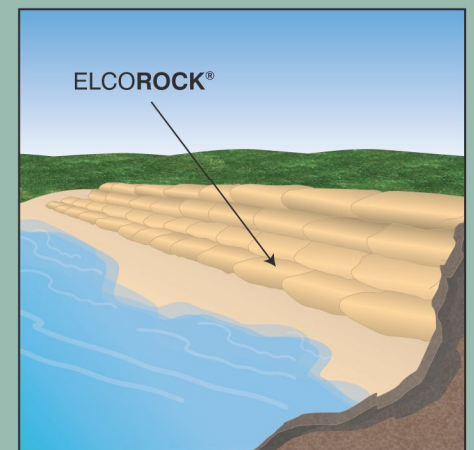
The ELCOROCK® shoreline protection system consists of sand-filled geotextile containers which form a stabilising, defensive barrier in coastal areas. The system provides enhanced public amenity, allowing greater public access at reduced risk for the asset owner.

A world-leader in geosynthetic erosion protection, the ELCOROCK® system effectively combats erosive forces in coastal regions and inland waterways. The robust containers are manufactured in Australia using a nonwoven geotextile with enhanced filtration and extreme UV resistance.

After 20 years of use in the harsh Australian environment, the system's resilience and strength has been proven many times over. ELCOROCK® structures have withstood UV damage, coastal abrasion, vandalism and even Category 5 cyclones. The system is supported by extensive R&D and world class design modelling.

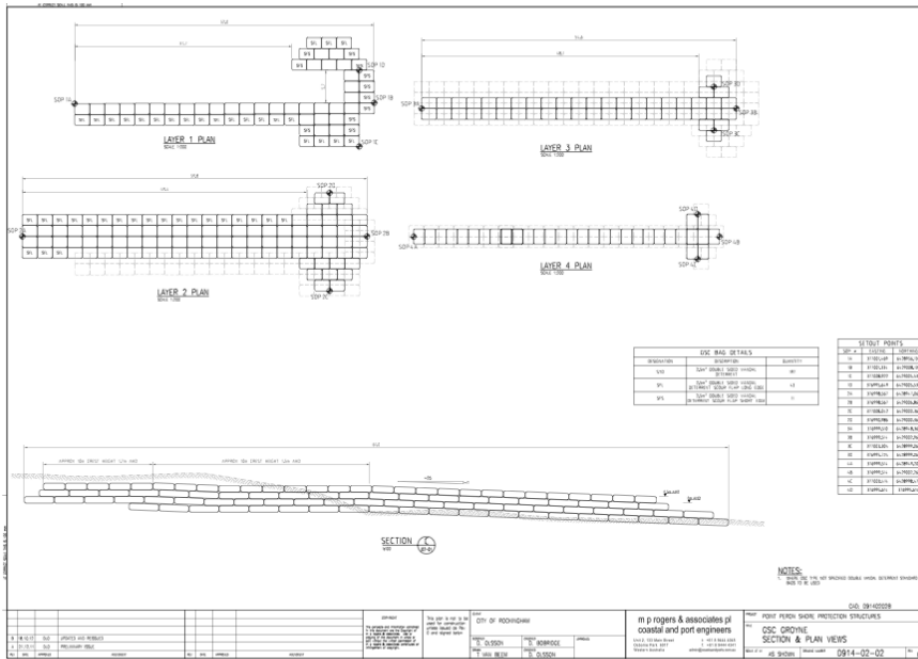
ELCOROCK® structures provide a cost-effective alternative to traditional coastal structures made from concrete, rock armour, steel and timber. The system also enhances the environment by providing a stable base for marine growth.

Geofabrics supports the ELCOROCK® system with ongoing R&D, installation systems and design support.



ELCOROCK® Application

Design drawings:



Finished groyne:



Quality - Support - Expertise

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