

CASE STUDY

Geosynthetic Clay Layer

Project: Lake Hayes GCL Pond
Date: August-October 2007
Client: Bridget Wolters
Location: Arrowtown



ELCOSEAL

Landscape Architect Bridget Wolters was contracted to design a feature pond for a property overlooking Lake Hayes in the Queenstown Lakes District. The timber board walk through the pond, linking the house to an entertainment area, presented a construction issue. Timber poles support the board walk and the question asked was “how do you line a pond and seal around the timber supports without compromising a synthetic liner?”

ELCOSEAL X1000, a Geosynthetic Clay Liner (GCL), was chosen as an ideal solution for this challenging site. **ELCOSEAL** GCL's are needle punched reinforced composites combining two durable geotextile outer layers with a uniform core of premium quality sodium bentonite clay to form a hydraulic barrier. Installed as per manufacturers instructions, **ELCOSEAL** GCL provides the equivalent hydraulic protection of 1 metre of compacted clay.

The pond area was first excavated and shaped followed by laying of the **ELCOSEAL** GCL which was then covered with local gravel to give the pond a natural look. The timber board walk was then bedded into the concrete footing that sits directly on the **ELCOSEAL** GCL, meaning the liner was not compromised with penetration of the timber poles.

A local contractor, Graham Morgan, was trained in the installation of **ELCOSEAL** GCL thereby removing the added expense of bringing in outside contractors with specialist welding equipment. He found the product easy to work requiring no specialist equipment for joining.

ELCOSEAL GCL met all the criteria being a product that was easy to install and providing the liquid containment needs for the site, while producing a stunning result.



Initial Excavation



Natural Finish



Picturebook result

The information contained herein is general in nature. In particular the content herein does not take account of specific conditions that may be present at your site. Site conditions may alter the performance and longevity of the product. Actual dimensions and performance may vary. This document should not be used for construction purposes and in all cases we recommend that advice be obtained from a suitably qualified consulting engineer or industry specialist before proceeding with installation. © Copyright held by Geofabrics New Zealand Ltd. All rights are reserved and no part of this publication may be copied without prior permission.

QUALITY - SUPPORT - EXPERTISE

GEOFABRICS.CO.NZ

