

SOPHIA CREEK

Creekbank Stabilization

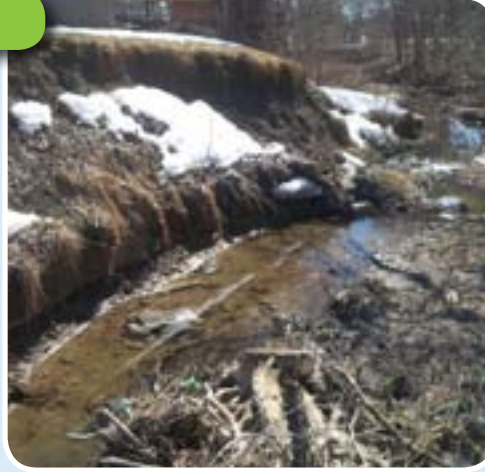
Barrie, Ontario; 2015



Vegetated Environmental Solutions

PROBLEM

Erosion: Replace gabion baskets around the existing culvert and repair an approximately 25 m long section of the creek bank along its south side, which has been eroded by multiple 100-year storm events. This section of the creek had approximately 2m high bare slopes, which were undercut by water flow erosion.



PROJECT BACKGROUND

Envirolok™, provides stability and the ability to expedite construction to restore vegetative cover lost to erosion near creekbank and culvert.

Installation Method: Working with the City of Barrie maintenance crews and Technical Support provided by Envirolok™, bags were hand laid with minimal heavy equipment required.

Desired Results: Full Vegetative Cover with a mix of perennial native grasses and wildflowers.

Advanced Construction

Incorporated: Geogrid Tie Backs.

Vegetation Approach: The project was hydroseeded immediately following construction with a Bonded Fibre Matrix containing native seed and perennial rye cover crop.

Size of Project: 115m² constructed in 3 days.

During construction (Envirolok™ was half constructed), Sophia Creek experienced an unprecedented 1:100 year storm event, which accelerated erosion at the site and caused the culvert itself to dislodge into the plunge pool. Envirolok™ was left standing much to the surprise of City of Barrie Public Works officials and The Lake Simcoe Conservation Authority.



WWW.ENVIROLOK.COM

Permanent Erosion Control

Envirolok's patented system provides immediate stabilization, erosion control, and a permanent vegetated solution. Envirolok is adaptable to water or dry land sites.

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SOLUTION

Envirolok™ Results: Excellent results with full vegetated cover achieved within 3 months of construction.

Envirolok supplies a permanent vegetated solution to persistent erosion of creekbank and stormwater. Envirolok easily conforms to the natural contours of a slope compared to other systems. Envirolok also provides structural support that when combined with native vegetation allows the establishment of habitat along sensitive areas.

PROJECT PARTNERS

Engineer: Bruce Polan, Senior Geotechnical Engineer, GHD – Waterloo, Ontario

Contractor: City of Barrie Maintenance Crew

Bag Filler: Marco Clay Products Inc. Blandford-Blenheim, Ontario

Owner/Client – City of Barrie

Approving Authority – Lake Simcoe Region Conservation Authority



Go to ENVIROLOK.COM for more information, specifications, standard detail drawings, photos, and installation guides.

NOTE: Do not burn native vegetation growing on the Envirolok system. The bag fabric is flammable.

NOTE: Advice from an engineer is recommended when building walls more than 4' in height, or when site conditions include unusual erosion or weak soil conditions.

DISTRIBUTOR

Sold & Distributed by
Envirolok™ Canada – Jay Morgan

 **Envirolok**®

Vegetated Environmental Solutions

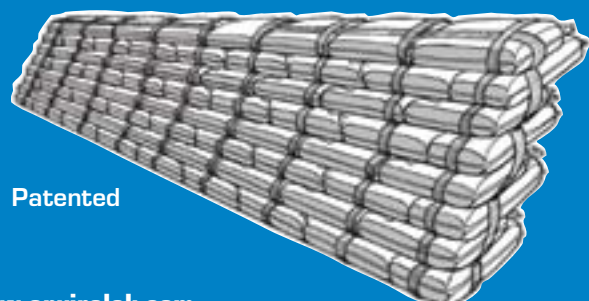
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