

Bentofix in a Bioswale

Pinewood Toronto Studios Expansion

Bentofix CNSL – Polypropylene Coated GCL

Deployed: January 2022

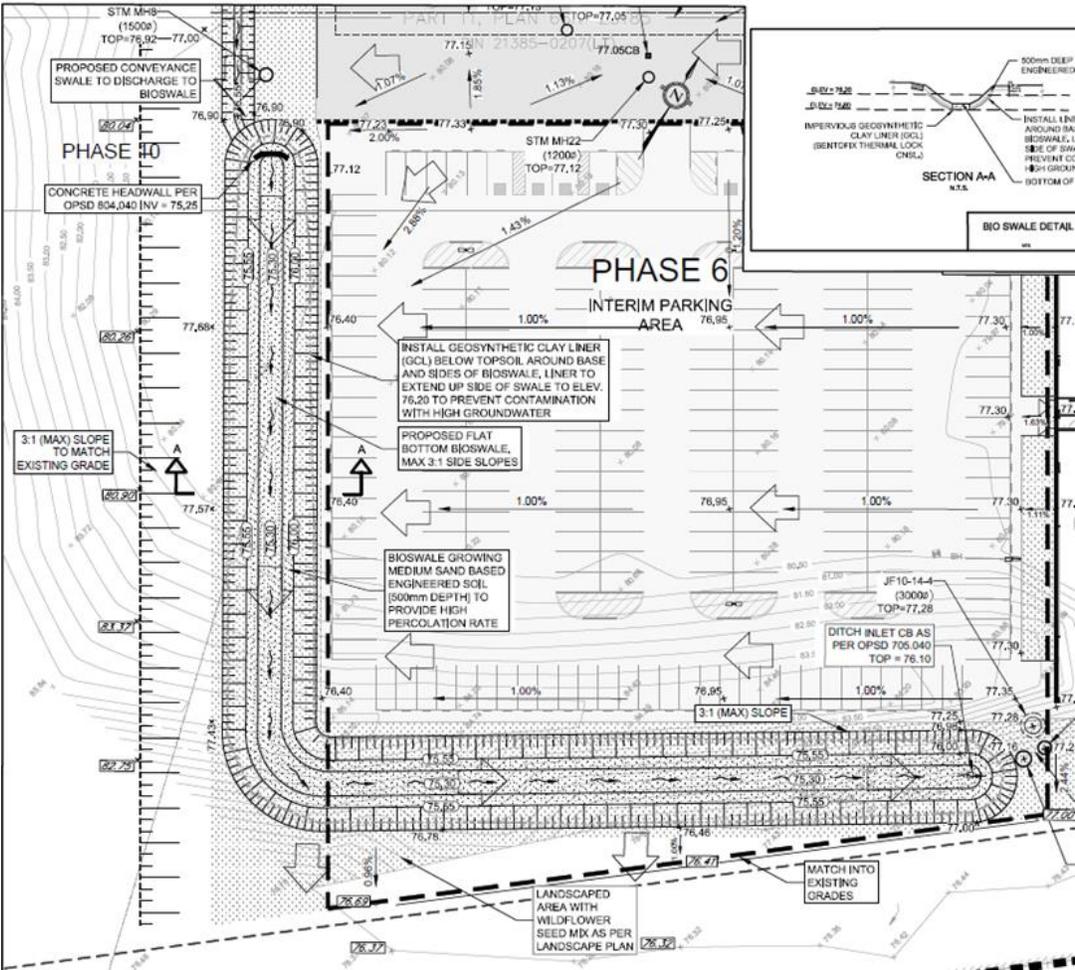
Project review



Contractor: Coco Paving
Engineering firm: RJ Burnside

terrafix[®]
geosynthetics inc.

Bioswales



Bioswales are vegetated, shallow, landscaped depressions designed to capture, treat, and infiltrate stormwater runoff as it moves downstream. They are typically sized to treat the water quality event, also known as the “first flush,” which is the first and often most polluted volume of water resulting from a storm event.

Bioswales are the most effective type of green infrastructure facility in slowing runoff velocity and cleansing water while recharging the underlying groundwater table. They have flexible siting requirements, allowing them to be integrated with medians, cul-de-sacs, bulb outs, and other public space or traffic calming strategies.

Challenge

A liner that can be deployed in the winter.

Bentofix CNSL is made with a dry bentonite sandwiched between two textiles, a nonwoven top fabric and a woven bottom fabric. CNSL also contains a built-in polypropylene rugged coating applied to the bottom woven fabric to provide a root-barrier which was required for this project.

Installation of Bentofix CNSL was done in January where temperatures were hovering between minus 10c and minus 25c during the week of deployment.



“Can we deploy the GCL in stubborn groundwater?”

Yes. Underwater applications of GCLs have been successfully done for decades worldwide and proven to maintain their low permeability lining capabilities. Needle-punched GCLs with high peel strengths must be used for these types of applications.

- Bentofix CNSL is a reinforced GCL where two durable geotextiles are needle-punched together to lock the inside dry bentonite into place. Bentofix CNSL also contains a rugged polypropylene built-in coating integrated into the bottom woven fabric to provide a geomembrane type of liner as well as high peel strength and high puncture resistance liner.

Solution

“We deal with many different types of liners on various projects but we enjoy GCLs since we can deploy it on our own without the need to hire a lining subcontractor”

Coated GCL - CNSL

Coatings in the textile industry are not novel and have been available for decades to add dependable characteristics to the final product to meet physical and environmental demands.

Root Barrier GCL

By adding a built-in coating to the bottom woven fabric, we can add value added properties to an already proven Clay Geosynthetic Barrier.



Terrafix has been providing Bentofix Geosynthetic Clay Liners from their plant in Barrie, Ontario since 1992.

We make over fifty different types of GCLs for various applications.

Not every project is alike. Not every GCL is alike.

Have a unique lining challenge? We have a GCL Solution!