

Canada's leader of complete geosynthetic solutions

Mount Albert, ON – United Church, Senior Citizens' Association

## INSTALLATION DATE

October 2010

## PROJECT ENGINEERS

RJ Burnside & Associates

## SITE SERVICING CONTRACTOR

Zuron Construction

## CHALLENGE

A storage system was required to retain 91m<sup>3</sup> of stormwater runoff for a parking lot. Due to space restrictions, a stormwater management pond was not feasible.

## SOLUTION

Triton Stormwater System was installed underneath the parking lot. Since the chambers are lightweight, production rates for installation were very efficient. The Triton design, strength of material and the Main Header Row ensure a greater and longer lasting system than what is available with other stormwater chamber and pipe systems.

## PROJECT OVERVIEW

A total of 73 Triton S-29 chambers were installed in less than a day with overall installation (excavation, stone placement, chamber installation, backfilling) taking less than a week to complete.

Bare chamber storage is 0.82m<sup>3</sup> per chamber. With a minimum 150mm of clean crushed stone above, and below the chambers and 190mm between chambers, the design storage capacity is 1.21m<sup>3</sup> per chamber.

Triton chambers are manufactured from environmentally friendly soy-based resin and are light enough (14.5kg) for one person to carry and install. With a minimum cover of 450mm (not including the pavement layer), the Triton stormwater system is able to withstand heavy traffic loading.



## Storm & Waste Water Systems

- Weholite HDPE Pipe
- Corrugated HDPE Pipe
- Subdrain Pipe and Fittings
- Stormwater Infiltration Systems / Triton™ Stormwater Solutions
- GrassPave<sup>2</sup>
- GravelPave<sup>2</sup>

## Erosion & Sediment Control

- Straw, Coconut and Excelsior Blankets
- Coir Mats and Logs
- Turf Reinforcement Mats
- Terraweb® Cellular Confinement System
- Gabion Baskets and Mats
- Silt Curtains
- Fencing Products
- FLEXICRETE®
- Siltsacks® / Envirobags
- MeterBags
- ScourStop™

## Geotextiles

- Non-woven Geotextiles
- Woven Geotextiles
- High Strength Wovens
- Monofilament Wovens

## Retained Soil Systems

- TerraSlope®
- TerraFort Panel Wall System
- TerraSteep® Geogrid Reinforced Earth Systems

## Geogrids

- Uniaxial / Biaxial
- Base Reinforcement
- Combigrid®
- STRATAGRID®

## Lining Systems

- HDPE Geomembranes
- Thermal Lock Geosynthetic Clay Liner
- Spray Applied Geomembranes

And much, much more....



Excavation of trench



Non-woven fabric at sides of trench and 150mm of clean crushed stone for bedding



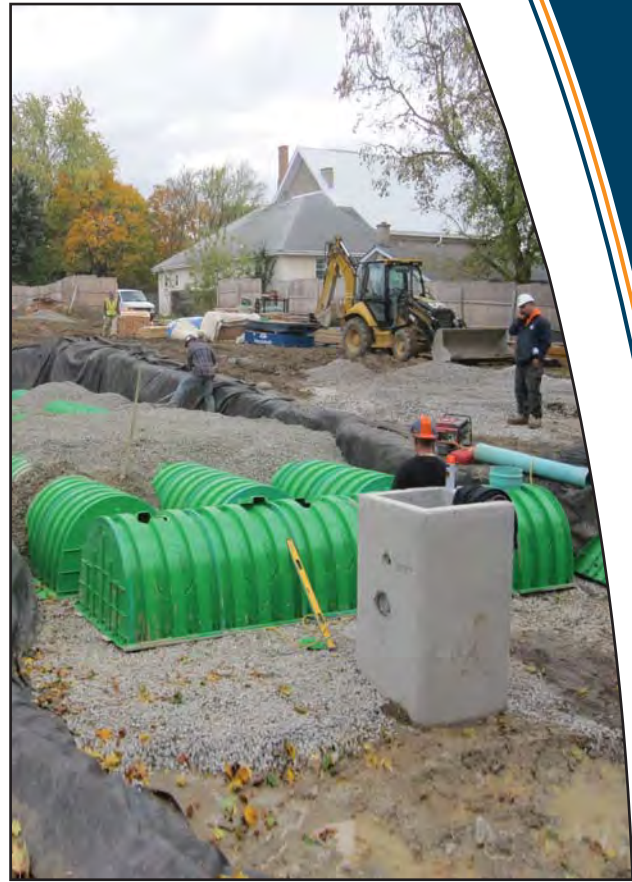
Installing bin and dumpster to adjacent floor at end of header row



Layout of distribution rows (foreground) and header row (background)



300mm inspection ports above the header row

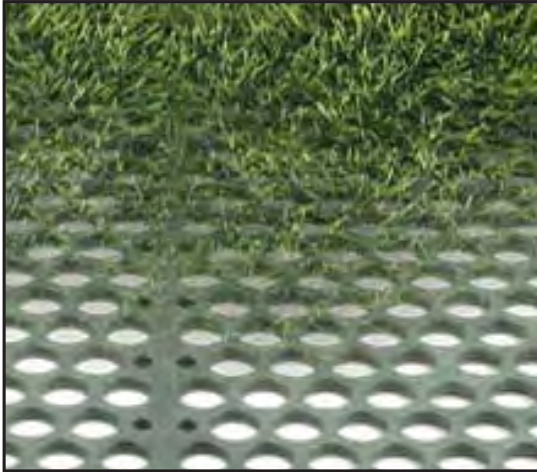


Backfilling with clean angular stone with minimum 150mm above the chambers



Compaction of backfill material

## What's new and exciting at terrafix geosynthetics



**ScourStop** transition mat is a biotechnical replacement for hard armour. It is a mechanically-anchored 4' x 4' x 0.5" semi-rigid, polymer mat designed with voids throughout the structure which enable vegetative growth. Transition mats provide mechanical protection over highly erosive areas; like stormwater pipe outfalls, curb outfalls, over-flow structures, and shorelines. Transition mats provide better protection against much higher shear stresses and velocities than vegetation alone or rock rip rap.

## Lunch and Learn



**Terrafix** offers a project specific approach to solving your erosion & sediment and stormwater management solutions.

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If you are interested in an office Lunch & Learn, please contact our office at (416)674-0363, ext. 241.

## Additional Information?

For stormwater and erosion control challenges, please call J.J. Breede, P.Eng. at 416-674-0363, ext. 241 or e-mail at [jjbreede@terrafixgeo.com](mailto:jjbreede@terrafixgeo.com)

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