

A **NEW** Stormwater Detention System For Boulevard Hymus

OWNER ENGINEER CONTRACTOR LOCATION City of Pointe-Claire City of Pointe-Claire Roxboro Excavation Inc. Pointe-Claire, QC

CULTEC[®] Recharger and Contactor chambers are used for infiltration, detention and/or retention of stormwater underground. The system is comprised of thermoplastic arch-shaped chambers surrounded by clear crushed stone. Water enters the system through a separator row and then flows through the stone and into a chamber row prior to exiting. The CULTEC stormwater system is sized based on the volume of stormwater, which is stored in the voids created by the chamber and the voids in the clear stone surrounding.

The new stormwater chambers would run along Montreal west's Boulevard Hymus, between Avenue Manfred and Avenue Delmar, adding two stormwater detention systems to reduce the stress on the existing stormwater infrastructure. Responsible for managing the stormwater network for the area, the City of Pointe-Claire assessed various LID technologies to find one that could best manage the specific watershed needs.



Located beneath the City's bicycle path, the chambers were installed between the road and the backyards of neighbouring homes. The tight space along the roadway had many interfering structures such as Hydro poles, trees, and a drainage ditch on either side. Armtec provided specific drawings to address the complex footprint and accommodate both the existing and proposed structures.



TECHNICAL DETAILS

- 1400 m³ CULTEC Stormwater Chamber System
- 1550 m³ CULTEC Stormwater Chamber System

A pre-construction meeting with Roxboro Excavation, was held in advance of the installation to ensure the contractor's crew had all of the necessary details. This helped to avoid any down time during that actual install, saving time for both the contractor and the City and limited traffic interruptions for the surrounding community.

Due to the high water table and ground water pressure that would be acting on the geo-membrane, a decision was made to pour a structural slab of concrete under the chamber to help with the pressure distribution and would ultimately hold the membrane in place.

With the completion of this detention system, the upgrade will reduce flooding and stress on the stormwater network for this Pointe-Claire neighbourhood.

Find out how CULTEC[®] can be used on your next project. Contact us today!



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