



SOLENO

Mastering Storm Water

1ST
DEVELOPER
OF SUSTAINABLE SOLUTIONS
FOR MASTERING STORM WATER



A 3500 CUBIC METERS RETENTION BASIN CONSTRUCTION PROJECT FOR THE NEW AMAZON WAREHOUSE, MANAGED BY DEVELOPER BROCCOLINI AND CARRIED OUT BY ROXBORO EXCAVATION INC.

The construction of a gigantic Amazon distribution center by Broccolini and Roxboro Excavation Inc. in the industrial center of the city of Lachine, created a problem with the storm sewer system. A simple conveyance solution to drain water from this large area of newly impermeable land surface was deemed insufficient, given the enormous volume of water that would be generated, especially during heavy downpours. A large volume storage solution was therefore envisioned. Soleno's involvement in the project allowed for the creation of a set of retention basins, designed from its Solflo Max non-perforated pipes with integrated bell gaskets, to solve the situation.

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THE CONTEXT

3500 CUBIC METERS RETENTION BASINS IN LACHINE

As part of this land development project for the Amazon warehouse, Montreal-based Roxboro Excavation Inc. called upon Soleno's services and products to create a set of 3 retention basins totalling 3500 cubic meters. A large retention capacity was necessary to limit the impact of the new installations on the municipal network. Well aware that pre-project planning and communication would be key factors in ensuring the success of this large-scale project with its very short delivery times, Soleno immediately assigned a resource person to take charge of the construction logistics.

THE SOLUTION

LIGHTWEIGHT HDPE PIPES, INTEGRATED BELLS AND EFFICIENT DELIVERY

Soleno's unperforated Solflo Max HDPE pipes were the perfect choice for the three retention basins. These pipes offer vast possibilities in terms of size and volume, with available lengths of 6 to 9 metres and diameters of 100 mm (4 in.) to 1500 mm (60 in.). In this particular case, 6 metre long pipes with a diameter of 1200 mm (48 in.) were chosen in order to optimize production, transportation and installation. In fact, more than 500 sections of pipe were delivered by means of a hundred truck shipments in the space of 4 weeks. The lightness of the HDPE pipes, despite their considerable size, and their great strength, combined with the use of bells with integrated gaskets, a patented product exclusive to Soleno, resulted in a rapid and efficient installation ensuring the necessary watertightness for a rainwater system of unflinching strength.



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THE BENEFITS

EASE OF INSTALLATION, ADAPTABILITY AND INVISIBILITY

With pipes tailored to the specifics of the contract and bells with integrated gaskets to connect them together in a watertight manner, Soleno enabled Roxboro Excavation Inc. to build a high-capacity retention basin system on time and on budget. Virtually invisible from the surface, this massive underground facility provides exceptional stormwater control, while leaving the area above it available for maximum use. Soleno's HDPE pipes and bells with integrated gaskets ensure long-term watertightness and durability.



The realization of this project was made possible thanks to: the contractor [Broccolini](#), the [Roxboro Excavation Inc.](#) enterprise and [Amazon](#).

For more information and to learn more about our services and products, please visit soleno.com. Other case studies are also available.

