

## REDEVELOPMENT OF FORMER CN WORKSHOPS IN POINTE-SAINT-CHARLES

High-density polyethylene, a chemically inert solution for contaminated soils.

As part of the new commercial complex at 1830, Le Ber St. in Pointe-Saint-Charles, contractor Pavage Dion of Boisbriand had to build a complete storm sewer system under a 300-space parking lot that would comply with the municipal requirements for storm water management. The benefits of this economical system, with its simple and fast installation, convinced Mr. Stéphane Haeseveld, project manager at Pavage Dion, to once again trust Soleno's polyethylene products.

## THE CONTEXT

The redevelopment of the old CN workshops is divided into three distinct development projects. The northern part of the site will be used by the Agence métropolitaine de transport (AMT), the southern part will be converted for residential purposes and will include 1069 housing units, and finally the central part (the one under study) is slated for industrial and commercial uses, mostly using existing buildings. Owing to soil contamination from the maintenance of rolling stock on this site by Canadian National Railways for more than 70 years, the lot had to be decontaminated to a suitable degree, but still remains corrosive.

## THE SOLUTION

Mr. Haeseveld therefore opted for Solflo Max HDPE pipes, known for their durability, light weight and savings resulting from their speedy on-site installation. The contractor has installed over 2300 m (7546 ft) of Solflo pipes and Solflo Max ranging from 150 mm (6 in) to 750 mm (30 in) in diameter, ten catch basins of 600 mm (24 in) in diameter and about ten manholes with smooth exterior walls, ranging from 900 mm (36 in) to 1500 mm (60 in) in diameter.

## **THE BENEFITS**

Chemically inert, HDPE does not react with the contamination in the soil on site and has a lifespan which is already far longer than regular concrete. HDPE is resistant to corrosion, abrasion, de-icing salts and vibration, ensuring the sustainability of infrastructure. Under current conditions, the use of concrete for this project would have greatly reduced its lifespan.

Using a complete storm sewer system made of high-density polyethylene (HDPE), a lightweight material which is efficient and sustainable, allows Pavage Dion to ensure the sustainability of the network, and a perfect system seal. Unlike a conventional concrete manhole, an HDPE manhole does not require any oversizing, which allows for a reduction of the manhole diameter. This results in substantial savings at acquisition, excavation and installation. The HDPE manhole with smooth exterior wall adapts perfectly to all types of pipes. Its welded HDPE design allows the assembly of the required inlets and outlets at the factory, making it easier to insert the new pipes on site.









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