



SOLENO

Mastering Storm Water

THE MOST
POWERFUL

APPROACH FOR STORM WATER MANAGEMENT



THE ONLY SOLUTION WAS
POLYETHYLENE (HDPE)

Culvert replacement on the Rouge river at Laframboise Blvd. in Saint-Hyacinthe

READ MORE



THE CONTEXT

The project carried out in Saint-Hyacinthe on Laframboise Blvd. consisted in the replacement of pipe lines due to the increase in the intensity of storm events. The pipes had to be increased in diameter. According to Mr. Fernand Mathieu, President of Bertrand Mathieu Ltd, the project was complex because the pipe to be replaced was close to two houses. Furthermore, power lines, a gas line and other utility lines passing near the site restricted the choice of equipment that could be used.

THE SOLUTION

HDPE was considered the best solution for the culvert replacement. The water stream was changed in order to facilitate its flow during intense rain events. The first elbow allowed the connection of the new pipe 2100 mm (82 in) in diameter, the new 2400 mm (95 in) culvert, an existing storm water pipe 1500 mm (60 in) in diameter made of corrugated and galvanized steel pipes (CSP) and an existing pipe to be evaluated on site. The second elbow allowed the return of the 2400 mm (95 in) pipe in the existing river bed, while connecting the piped storm sewer that ran along the road.

THE BENEFITS

As Laframboise Blvd. is a major artery in Saint-Hyacinthe, construction time had to be as short as possible. The work was carried out in 12 days. Unlike concrete structures that have to be cast in place, HDPE structures could be manufactured, which has reduced construction time. In addition, unlike traditional concrete manholes, HDPE manholes require no oversizing, which allowed the reduction by half of the manhole diameter, in spite of existing larger diameter pipes. This solution has resulted in substantial savings in acquisition, excavation and installation, other key benefits of using HDPE.



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