



# Vaughan City Hall Stormwater Management

<b>OWNER</b>	City of Vaughan
<b>CONTRACTORS</b>	King Cross Contracting Limited
<b>ENGINEERS</b>	McIntosh Perry and Hatch
<b>LOCATION</b>	Vaughan, ON

Expansion of the Vaughan City Hall western parking lot required additional stormwater storage. With land values at a premium, the city looked towards an underground storage solution. Armtec was contacted to present an alternative chamber product than that originally specified in the design. HydroStor was presented as the most cost-effective option able to meet the site performance requirements.



## TECHNICAL DETAILS

**HS180 HydroStor  
Stormwater Chambers:**  
90 Chambers, 18 End Caps,  
535m<sup>3</sup> Volume

## The Challenge

One of the challenges of urban development is managing increased stormwater runoff generated by paved surfaces and its potential to cause flooding, increase erosion, and decrease water quality. The City of Vaughan selected underground stormwater storage chambers to mitigate this problem. The project scope specified a volume of 535m<sup>3</sup>, a deep burial depth of 3m, and a Total Suspended Solids (TSS) removal target set out by the Ministry of Environment, Conservation and Parks (MECP).

## The Solution

Armtec was asked to provide an alternative option to the stormwater chamber unit originally specified. The HydroStor HS180 was proposed as an equivalent product but first had to be approved by MECP and the consultants Hatch and McIntosh Perry. Armtec worked with Hatch, McIntosh Perry and MECP to demonstrate equivalency not only in structural integrity and achievable volume, but also in end of pipe water quality treatment capabilities. MECP reviewed the technical documentation supplied by Armtec and determined that the HS180 was equivalent in its function. It also offered slightly more storage volume per unit with less weight allowing for easier handling.

The system was designed using the HydroStor HS180. It included 90 chambers in total plus a sediment isolation row. In order to achieve the 3m deep burial requirement while maintaining structural integrity, the thickness of the stone foundation was increased from 225mm to 275mm. The HydroStor HS180 delivered cost savings for the owner and contractor. A quick lead time ensured the project was completed on schedule.



Find out how **HydroStor Stormwater Chambers** can be used on your next project!

**Contact us today.**



Armtec is a leading national manufacturer of a comprehensive range of infrastructure products and engineered construction solutions for customers in a diverse cross-section of industries. With operations coast to coast, we are a trusted partner for transportation, public works, forestry, oil and gas, and mining operations throughout the country and abroad. Since 1908 our commitment to quality, customer service and innovation has set the benchmark in the Canadian drainage and bridge landscape.

Call **1-800-565-1152** or visit [armtec.com](http://armtec.com)