

Plateau Potable Water Reservoir Vaudreuil-Dorion





Market Segment: Wastewater Collection & Treatment

Charex

General Contractor:

Products Used: Xypex Admix C-500

Location:Vaudreuil-Dorion,
Ouebec, Canada

Engineer: EXP Ready-Mix Provider:

Unibéton

The construction of a new potable water reservoir aimed to enhance water storage infrastructure with an emphasis on durability and reliability. A key challenge was ensuring that the reservoir's watertightness and long-term durability would protect the potable water supply from contamination and leakage while withstanding constant water pressure and environmental stresses.

To overcome this, the engineers selected Xypex Admix C-500, a crystalline waterproofing admixture, which was integrated directly into the concrete mix and is NSF 61 approved for potable water use. This innovative product works from within the concrete, reacting with moisture to form a crystalline structure that seals pores and micro-cracks.





By using Xypex Admix C-500, the reservoir achieved integral waterproofing without relying on external membranes or coatings, simplifying construction while providing a barrier against water ingress. The use of Xypex Admix C-500 also enhanced the concrete's resistance to chemical attacks and significantly reduced future maintenance costs.

The integration of Xypex Admix C-500 not only addressed the project's technical challenges but also contributed to sustainability by extending the reservoir's service life and reducing maintenance over time.



