



Overflow Reduction – Infrastructure Control



2024

ABOUT THIS PROJECT:

Market Segment:
Wastewater Collection
and Treatment

General Contractor:
Groupe Allen

Products Used:
Xypex Admix C-500 NF

Location:
Donnacona, Québec,
Canada

Owner:
City of Donnacona

Engineer:
Stantec

The City of Donnacona undertook the overflow reduction and infrastructure control project to improve the performance and durability of its wastewater treatment facilities. The project included concrete works associated with the wastewater treatment plant as part of broader efforts to reduce system overflows and improve operational reliability.

Construction was carried out under winter conditions and within defined schedule and budget constraints. The project required a waterproofing solution that could be integrated directly into the concrete while minimizing installation steps and reducing on site labour associated with conventional waterproofing systems.

To address these conditions, Xypex Admix C-500 NF crystalline waterproofing admixture was specified for the concrete used in the wastewater treatment plant structures.

Added during batching, the crystalline admixture reacts with moisture and cement hydration by products within the concrete to form insoluble crystals that block capillary pores and microcracks, reducing permeability throughout the concrete matrix.

Using Xypex Admix C-500 NF eliminated the need for external membrane systems, simplified construction sequence, and reduced long term maintenance requirements. The integral waterproofing approach supports enhanced durability and reliable performance of the municipal wastewater treatment infrastructure serving the City of Donnacona.



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12 décembre 2024 8 h 04 a.m.