



**2025
CANADA & USA
BEST PROJECT
AWARDS WINNERS**

XYPEX[®]

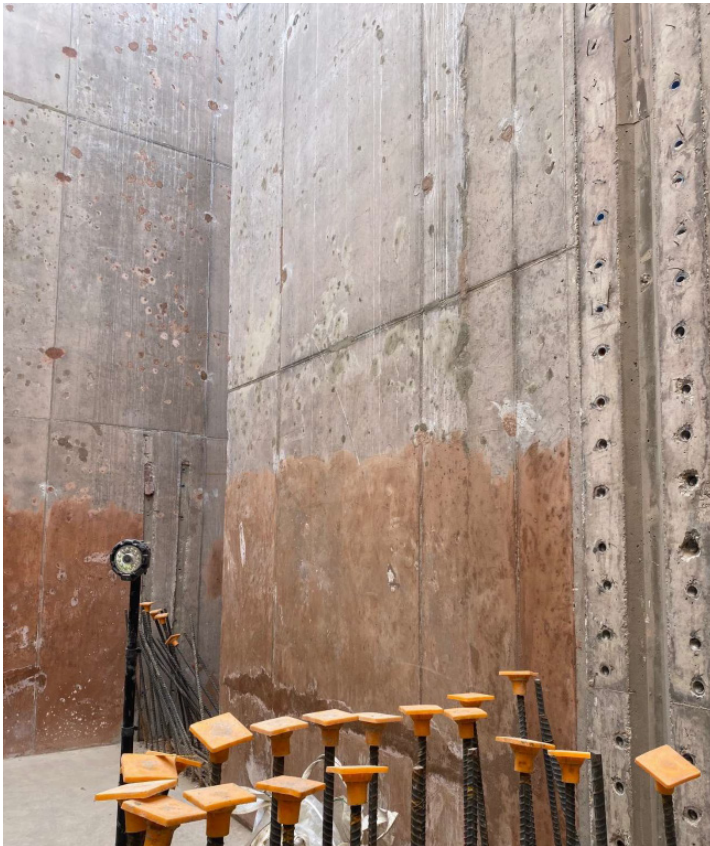


BEST PROJECT GRAND PRIZE



BNR UV Improvements

Wichita, Kansas, USA



The City of Wichita is undertaking upgrades to its wastewater treatment facility to improve biological nutrient removal (BNR) capacity and expand ultraviolet disinfection infrastructure. The project includes construction of new wastewater process basins and supporting treatment structures. Because these structures are exposed to continuous moisture and aggressive wastewater environments, including chemicals and biological by-products common in treatment processes, durable concrete with enhanced resistance to water penetration is required. Xypex crystalline waterproofing technology was specified to improve concrete durability and reduce permeability in the treatment structures.

Xypex Admix C-500 NF crystalline waterproofing admixture has been incorporated into the cast-in-place concrete used for the wastewater process basins and associated structural elements, supplied by Pearson Ready-Mix and placed in phased pours during construction. Added during batching, Xypex Admix reacts with water and the by-products of cement hydration within the concrete. With water acting as the catalyst, the proprietary chemicals form a non-soluble crystalline structure within the interconnected capillary pores and microcracks of the concrete.

This crystalline formation blocks pathways for water penetration and reduces permeability throughout the concrete matrix. In addition to the integral admixture, approximately 650 square feet of Xypex Concentrate has been specified for surface-applied treatment of designated walls and detailing areas. The Xypex crystalline system provides permanent resistance to water penetration and supports long-term durability of the wastewater treatment structures serving the City of Wichita.



BEST WATER TREATMENT PLANT PROJECT



Amarillo Osage Water Treatment Plant

Amarillo, Texas, USA



The City of Amarillo initiated rehabilitation work at the Osage Water Treatment Plant to extend the service life of existing concrete structures within the facility. The scope of work included waterproofing the east settling basin interior walls, internal concrete structures, and floor areas beneath effluent structures. The owner pursued a preventative maintenance approach to improve durability and reduce future rehabilitation needs.

KSA Engineers evaluated options and selected a Xypex crystalline coating system to protect the concrete by promoting internal crystallization. The general contractor MH Civil was provided onsite training by Xypex technical personnel to ensure that the rectification and application conform to Xypex method statements.

Phase 1: crack repairs at multiple locations and Xypex coating application to approximately 20,000 square feet of concrete surfaces. 48 pails of Xypex Admix C-500, 120 pails of Xypex Concentrate at 60 lb. each, and 10 pails of Xypex Patch'n Plug were used during Phase 1. The work was completed successfully with strong performance results. The successful execution of Phase 1 established Xypex coatings as the basis of design for the upcoming Phase 2 work, scheduled for release for bidding in 2026. This project demonstrates Xypex Technical Personnel proficiency in providing onsite training and technical support to enable the contractor to perform specialized waterproofing work, reduce overall project costs, and deliver long term durability for critical water treatment infrastructure.

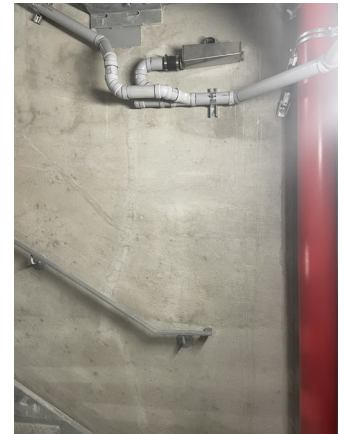


BEST REHABILITATION PROJECT



STM Centre de Transport Bellechasse

Montreal, Quebec, Canada



The Société de transport de Montréal undertook rehabilitation work at the Centre de transport Bellechasse as part of ongoing upgrades to critical transit infrastructure. The project included the repair and waterproofing of a stairwell structure associated with parking and operational facilities serving the transit network. The existing concrete structure experienced water ingress and cracking within the stairwell walls and surrounding concrete elements. Approximately 1,200 m² of concrete surface required treatment, along with the repair of approximately 333 linear meters of cracks. The rehabilitation required a solution capable of sealing active cracks and providing long term waterproofing within a heavily used transportation facility.

To address these conditions, a Xypex crystalline waterproofing system was specified for stairwell rehabilitation. Crack repairs and localized defects were treated using Xypex Patch'n Plug and Xypex Megamix II, while the concrete surfaces were treated with Xypex Concentrate to provide crystalline waterproofing within the concrete matrix. When applied to the concrete surface, the crystalline technology reacts with moisture and cementitious by products within the concrete to form insoluble crystals that block capillary pores and microcracks. This reaction reduces permeability and protects the structure against ongoing water ingress. The Xypex system provided a durable repair and waterproofing solution that addressed both active cracking and long-term moisture exposure. The selected approach supports reduced maintenance requirements and improved durability of the transit infrastructure serving Montréal.

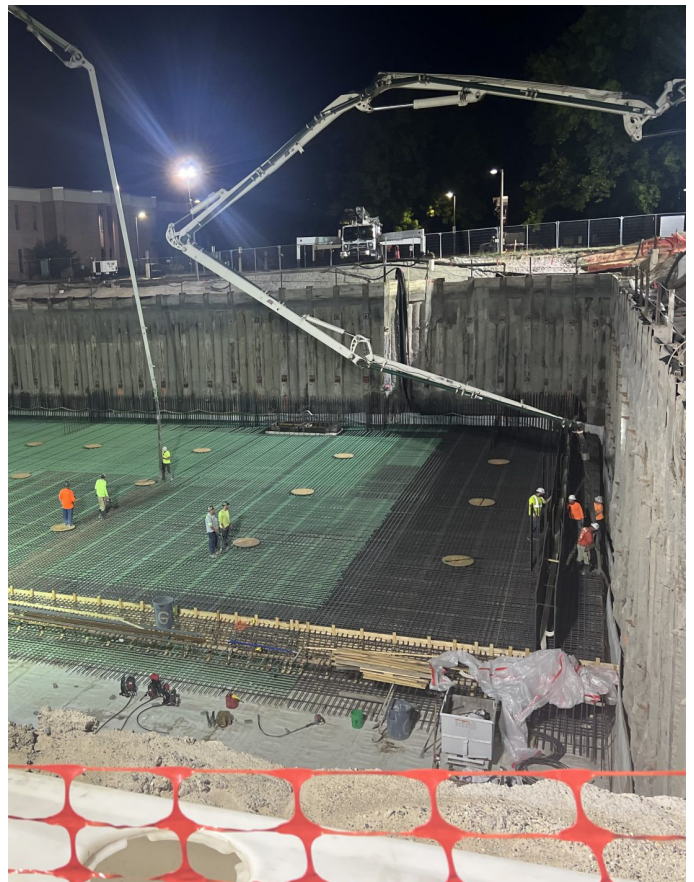


BEST INNOVATIVE PROJECT



Southwest Regional Chilled Water Plant

East Lansing, Michigan, USA



Michigan State University constructed the Southwest Regional Chilled Water Plant to expand campus cooling capacity and support long-term infrastructure planning under the University's Vision 2050 integrated facilities and land use plan. The facility is designed to deliver efficient and reliable cooling to approximately 1.9 million square feet of west central campus buildings, including the Engineering and Digital Innovation Center and two residence halls. The plant was initially designed to provide 3,800 tons of cooling capacity, with infrastructure in place to support future expansion. The system incorporates a combination of electric and steam turbine chillers housed within a large mechanical space located four stories below grade. Due to the elevated groundwater table at the site, the below grade concrete structures are subject to sustained hydrostatic pressure.

To address these conditions, Xypex Admix C-500 NF crystalline waterproofing admixture was incorporated into the concrete used for the mat slab and below grade walls. Approximately 1,100 bags of Xypex Admix C-500 NF were added during batching. More than 5,000 cubic yards of concrete containing Xypex admixture were placed during a continuous overnight pour lasting approximately 14 hours, supplied by two ready mix plants to maintain placement continuity. The integral crystalline system provides permanent waterproofing and enhances durability, reducing permeability and protecting the structure against groundwater intrusion. Based on the performance and benefits demonstrated on this project, Michigan State University has specified Xypex for two additional regional chilled water facilities planned to begin construction in 2026.



BEST BIO-SAN PROJECT



East Primary Pump Station

Hendry County, Florida, USA



Athens Utilities completed construction of the East Primary Pump Station to support wastewater conveyance and system reliability for the City of Athens. During project evaluation, the owner identified low velocity sewer flow as a contributing factor to the generation of hydrogen sulfide posing the risk of microbial induced corrosion. Based on internal research and technical discussions, Xypex Bio-San was selected as an integral concrete treatment to provide long term protection against concrete deterioration.

Approximately 3,200 lbs. of Xypex Bio-San was incorporated into cast in place concrete supplied by Moon Concrete Services. The integral crystalline waterproofing system permanently seals capillaries and micro cracks while the bio active component inhibits the growth of acid producing bacteria associated with wastewater environments. The successful implementation of Xypex Bio-San at one of the Primary Pump Station led Athens Utilities to further evaluate Bio-San for use across additional wastewater infrastructure, including manhole structures. The Xypex system provides concrete protection, reduced maintenance requirements, and long-term durability for critical wastewater assets.