



Michigan Avenue Harrison Road Sewer Improvement



2020

ABOUT THIS PROJECT:		
Market Segment: Wastewater Collection and Treatment	Owner: City of East Lansing	Products Used: Xypex Admix C-500 Xypex Bio-San C500
Location: East Lansing, Michigan, US	Engineers: Tetra Tech, Inc.	Concrete Producer: Northern Concrete Pipe (precast)
	General Contractor: The Christman Company	

THE CHALLENGE

With increasing demands on its aging sewage infrastructure, the City of East Lansing, Michigan, undertook the rehabilitation of the Michigan Avenue and Harrison Road Sewer.



Xypex Bio-San used in precast concrete of sewer systems for permanent waterproofing and corrosion protection.

Project engineer Tetra Tech, Inc. specified that all precast concrete in the sanitary or combined sewage system incorporates Xypex Bio-San antimicrobial and crystalline waterproofing admixture, dosed at 1% of cementitious content. In addition, Xypex Admix C-500 crystalline waterproofing was specified for all areas in the sewer system not at risk of Microbial Induced Corrosion(MIC).

THE XYPEX SOLUTION

Xypex Bio-San is a uniquely designed admixture for integral, long-term protection of concrete in harsh sewage conditions with levels of H2S that cause microbial induced corrosion (MIC). Bio-San combines potent antimicrobial protection along with the unique crystalline technology of the Xypex Admix C-Series.

Bio-San contains bio-active mineral solids that become permanently fixed within the concrete matrix, impairing bio-film formation thus inhibiting the growth of acid-causing sewer bacteria such as Thiobacillus due to concentrations of H2S.



The new precast concrete pipes containing Xypex for the upgraded East Lansing sewer system.

The unique Xypex Crystalline Technology creates a permanent crystalline structure throughout the pores and capillary tracts of the concrete, providing waterproofing and enhanced chemical protection, including acid and sulphate resistance. Bio-San prevents microbial induced corrosion, stops infiltration/exfiltration of water, and provides acid and sulphate resistance, significantly extending the service life of concrete sewage collection systems and wastewater infrastructure.

Xypex Admix C-500 is a chemical treatment for the waterproofing, protection and improvement of concrete. Added to the concrete mix at the time of batching, Xypex Admix simplifies the pre-casting and construction process.

Using crystalline admixture ensures waterproofing permanent protection and increased service life for the rehabilitated infrastructure.

To learn more about how Xypex products play a major role in the prevention and treatment of problems common to both segments in Wastewater Infrastructure, [click here](#).