PROJECT SHEET

Lambeau Field

2021

ABOUT THIS PROJECT:

Market Segment:
Wastewater Collection & Treatment

General Contractor:
Miron Construction Company Inc.

Products Used:
Bio-San C500

Location:
Green Bay, Wisconsin, U.S

PROBLEM

Opened in 1957, Lambeau Field, is the oldest continually operating stadium in the NFL and home to the Green Bay Packers. The stadium has undergone several renovations throughout the years as its capacity grew from 32,500 spectators in 1957 to over 81,000 in 2017.

When the capacity of Lambeau Field increased, it required a surge tank to cope with the simultaneous discharge of wastewater during events. The first surge tank was constructed in 2003 when the capacity was increased from 66,000 spectators to over 72,000. With the current capacity of over 81,000 and with plans to increase it further, a second surge tank was planned for completion in 2021.

Xypex Bio-San was directly added to the concrete eliminating the need for a liner.

Surge, or attenuation tanks, are designed to temporarily store large volumes of wastewater and release them in a regulated manner into sewer systems.

To protect the environment, surge tanks must be completely waterproof. They must also be protected from the acid-producing bacteria found in wastewater systems that cause microbial-induced corrosion (MIC). MIC is the major factor in shortening the service life of sewage structures. Without protection, this bacteria erodes the concrete and reduces the structural integrity of the structure.

THE XYPEX SOLUTION

Because of the amount of wastewater the structure was designed to hold, the team wanted the tank to be resilient and resist the aggressive and corrosive environment.

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To protect this 400,000-gallon tank, Carew Concrete and Supply Co. delivered concrete with Xypex Bio-San C500 added during batching.

Bio-San contains bio-active mineral solids that become permanently fixed within the concrete matrix, impairing bio-film formation which inhibits the growth of acid-causing sewer bacteria such as Thiobacillus.

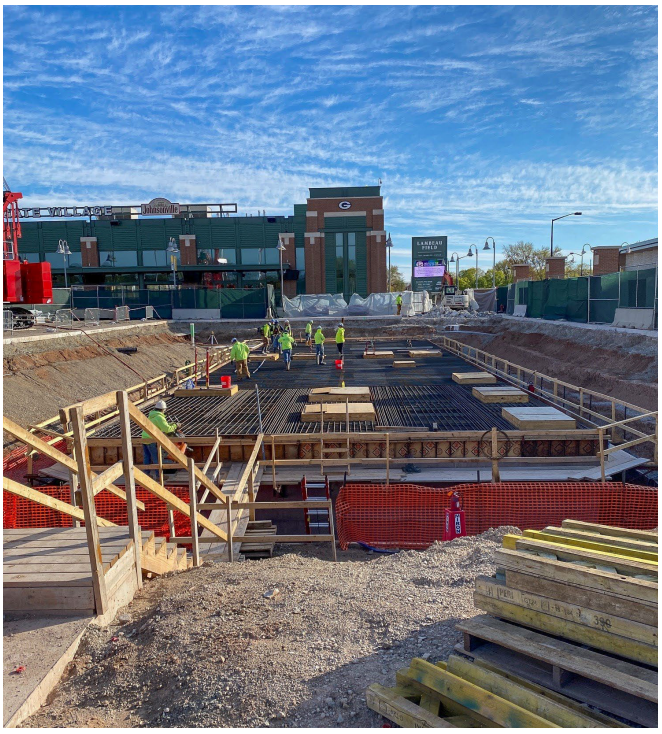
The antimicrobial components initiate a two-stage kill mechanism that stops the Thiobacillus bacteria from developing, thereby preventing the formation of sulfuric acid that attacks the concrete.

RESULTS

By selecting Xypex Bio-San C500, the general contractor, Miron Construction Company Inc, saved time and money as this product provides comprehensive waterproofing and MIC resistance without any extra drying, curing or installation time.

With the Xypex Bio-San integrated into the concrete, the concrete is protected for the structure's service life.

Due to the size of the pour and unfamiliarity with the product, the general contractor initially had some reservations.



Xypex is a permanent solution trusted by the engineers involved in the project due to their previous successful use of Xypex products.

Bio-San C500 worked well in the concrete and there were no issues during placement or after the pour.

However, Joe Ozzauto, Xypex representative, was there to provide support the use of Bio-San from the design stage until completion.

In the end, Miron Construction Company Inc. was pleased with the results: "We were uncertain about Xypex Bio-San and how it would affect the concrete mix at first," they said, "but we are very impressed by how it performed." He continued "The workability was good." and "Having no issues was a win for everyone that day."