

# A COLLABORATIVE SOLUTION: The Kirkwood Aquatic Center Repairs



At the heart of Kirkwood, Missouri, the Kirkwood Aquatic Center stands as a community gathering place where residents gather to swim, compete, and connect. However, by the spring of 2024, the facility's mechanical room began to show signs of water infiltration from a leaking diving pool. Recognizing the urgency of the situation, city officials embarked on a repair project that would require precise planning, expert execution, and unwavering collaboration among a team of skilled professionals.

The responsibility to find a sustainable solution fell to Oates Associates, Inc., an architectural firm with a reputation for great work, Vanstar Construction, the instrumental general contractor, and Bazan Painting, a commercial/industrial painting company hired as the sub-contractor known for its proven track record with challenging projects. Together, with support from W. R. MEADOWS, these teams set out to restore the facility. This collaboration resulted in a seamless repair effort that not only addressed the immediate issues but also fortified the facility for long-term use.

Eric Hellwig Sr., Estimator and Project Manager at Bazan Painting, brought decades of experience to the project.

*"We've had a longstanding relationship with the City of Kirkwood," Eric shared. "After successfully completing the lazy river restoration at the same facility, where we sandblasted, patched, and then recoated the river section, the city trusted us to take on this project. Our goal was clear: deliver a durable, waterproof solution for an aging pool shell."*

This case study will detail the collaborative efforts of the teams involved, the challenges they faced, and the innovative solutions they employed to ensure the structural integrity and extended usability of the pool facilities. It will also highlight the technical solutions provided by W. R. MEADOWS, emphasizing the significance of teamwork, meticulous planning, and strategic collaboration among all stakeholders to successfully tackle complex construction projects.







## IDENTIFYING CHALLENGES

An initial investigation pinpointed a compromised cold joint on the pool side, which allowed water to infiltrate through to the structure. Left unaddressed, this would not only continue to threaten the structural integrity of the pool but also jeopardize the vital mechanical systems housed within the room. Adding to the complexity, the nearby diving pool above the mechanical room exhibited leaking that further risked long-term damage to the overall structure.

This project involved repairing a critical 450 square feet area and was made especially daunting due to the need for completion before the summer season—a peak period for the aquatic center, and only weeks away. This left little room for delays or missteps.

*The urgency of the situation required rapid procurement of materials, some sourced as far away as Canada. "Thanks to Nick Wallace, W. R. MEADOWS' outside Sales Representative, and his team, we managed this efficiently," Eric explained.*

Wallace was instrumental throughout the project, making regular site visits and leading pre-installation meetings to keep all parties synchronized with the project's needs and timelines.

Spring weather brought its own set of challenges. Unpredictable conditions had the potential to disrupt outdoor work, but the robust characteristics of the W. R. MEADOWS products allowed the team to maintain productivity regardless of adverse weather conditions, ensuring continuity and efficiency in project execution.

Furthermore, the repair timeline had to align with the aquatic center's operational calendar, which included numerous community events. "Every phase was planned meticulously to minimize disruptions," Eric said. "Close coordination with the city and other partners ensured that repairs progressed without interfering with the facility's role as a community hub."





## IMPLEMENTING THE SOLUTION

The cold joint in the competition pool's mechanical room wall was identified as the primary vulnerability. This critical area had historically been a weak point, and without intervention, water ingress threatened further damage. To counter this, structural steel was installed to reinforce the wall on the pool's mechanical room side, enhancing stability and reducing future risk.

Meanwhile, the diving pool's leakage required immediate attention to protect the mechanical systems below. Without intervention, the damage could have escalated, jeopardizing the facility's long-term usability and underscoring the importance of selecting the right waterproofing system.

*"Had preventative measures not been taken, the leak could have worsened," Eric explained. "We needed a robust solution to protect the facility's integrity for years to come."*

W. R. MEADOWS, INC., known for high-quality specialized construction products, was chosen to supply the necessary materials to tackle this project. Out of the W. R. MEADOWS' GEMITE line of products, **CEM-KOTE BARRIER COTE 100**, a fiber-reinforced cementitious waterproofing system, was specified to waterproof the cold joint.

*The GEMITE product line is known for its advanced technologies for repairing, protecting, and waterproofing reinforced concrete structures.*

W. R. MEADOWS acquired GEMITE in March of 2022, to enhance its waterproofing and restoration product offerings.

Other products, such as **GEM-COTE EP 100** and **GEM-PLAST TC**, provided additional layers of protection. **MEADOW-CRETE GPS** was used for structural repairs, and **REINFORCING FABRIC HD** enhanced the overall strength and durability of the system. Each product was part of an integrated solution designed to meet the project's unique demands.



## A COLLABORATIVE EFFORT

"Using a waterproofing system we hadn't worked with before was a unique challenge," Eric shared. The application process began with meticulous sandblasting of the cold joint to eradicate old epoxy coatings, followed by the strategic application of the comprehensive W. R. MEADOWS waterproofing system. This method not only rectified the existing leaks but also significantly bolstered the structural integrity of the walls, ensuring long-term stability and resilience.

Eric's team found the products easy to apply despite the system's multi-step process.

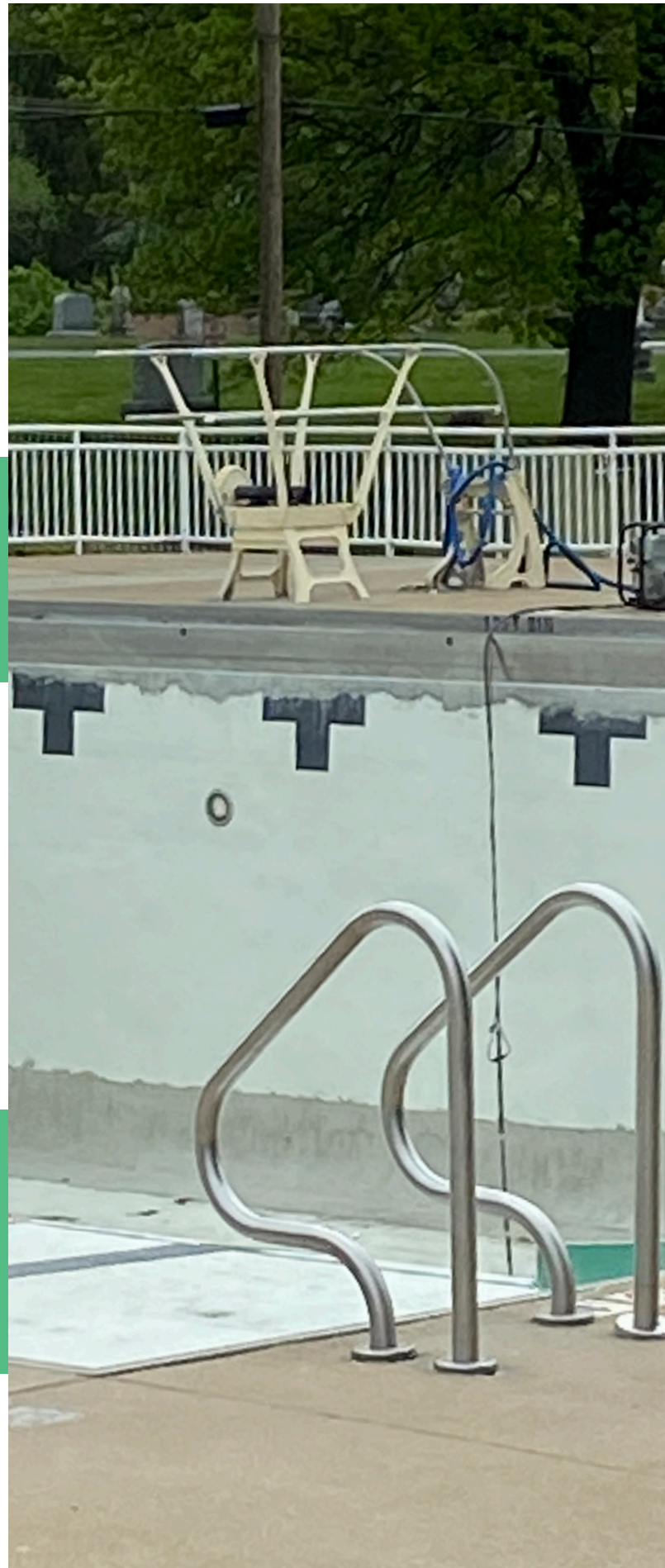
*"The quick-curing properties of the products allowed us to complete multiple applications in a single day," he said. "This efficiency helped us stay ahead of schedule."*

"The application of these products was straightforward and delivered excellent results," Eric shared. "Their performance perfectly aligned with the project's requirements, providing a sound and waterproof surface." The decision to use a single-source manufacturer, W. R. MEADOWS, simplified the process significantly for Bazan Painting. "Having all materials from one supplier greatly facilitated coordination and application," Eric added, highlighting the value of Nick Wallace's continuous guidance, which ensured that the execution went smoothly.

*Eric concluded, "Opting for W. R. MEADOWS products was a strategic decision, influenced by their proven effectiveness and suitability for the environmental challenges we faced in this project."*

This choice was instrumental in achieving the desired outcomes, safeguarding the aquatic center's infrastructure against future issues.

The synergy between Bazan Painting, W. R. MEADOWS, and the other stakeholders was a





cornerstone of the project's success. The preconstruction meeting set the stage for smooth execution, ensuring all parties understood the scope and steps involved.

*"Collaboration was key," Eric emphasized. "When everyone is on the same page, the results speak for themselves."*

## RESULTS & EVALUATIONS

The Kirkwood Aquatic Center repairs were completed ahead of schedule, with each phase meticulously carried out by Bazan Painting to ensure precision. The team's commitment to detail was evident in every step, from embedding the reinforcing fabric to applying the topcoats. This meticulous attention was crucial for meeting the project's objectives and ensuring the durability of the repairs.



As the work drew to a close, the effectiveness of the undertaken measures became apparent. The areas targeted for repair were not only made waterproof but were also structurally reinforced to prevent future problems. The cold joint in the competition pool's mechanical room wall was effectively sealed, restoring the mechanical room's structural stability. Similarly, the interventions in the diving pool halted the water intrusion that had long troubled the facility.

*"The project met all requirements and exceeded expectations," Eric remarked. "We're assured that this solution will serve the facility well for many years to come."*

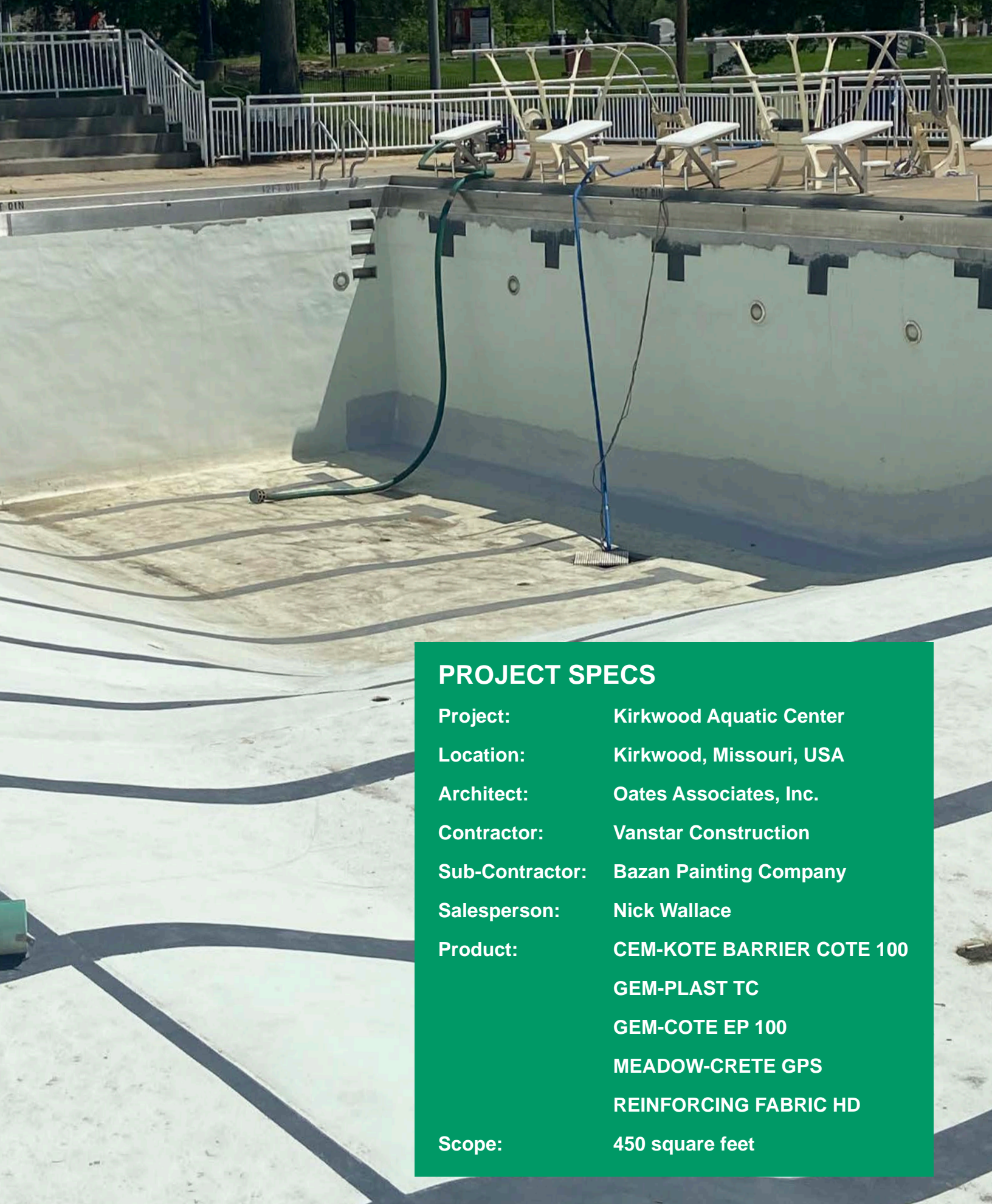
The City of Kirkwood responded with overwhelmingly positive feedback, praising both the quality of the work and the professionalism of the team involved.

For Bazan Painting, this project underscored the significant value of collaboration and thorough planning. Eric highlighted the critical role of pre-construction meetings and the involvement of W. R. MEADOWS' representative, Nick Wallace, in setting the stage for success. "Having a clear plan and a supportive partner like W. R. MEADOWS made all the difference. This was a challenging project, but the outcome speaks for itself," Eric stated.

The Kirkwood Aquatic Center Pump Room Repairs project stands as a shining example of what can be achieved through collaboration, preparation, and innovative solutions. By combining Bazan Painting's expertise, Oates Associates' design, Vanstar's hard work, and W. R. MEADOWS' industry-leading products, the team delivered a repair that will serve the community for years to come.

As Hellwig summed it up, "This was a team effort from start to finish, and we're proud to have been a part of it." For contractors and industry professionals, the project serves as both inspiration and a roadmap for approaching similar challenges with confidence and collaboration.





## PROJECT SPECS

Project:	Kirkwood Aquatic Center
Location:	Kirkwood, Missouri, USA
Architect:	Oates Associates, Inc.
Contractor:	Vanstar Construction
Sub-Contractor:	Bazan Painting Company
Salesperson:	Nick Wallace
Product:	CEM-KOTE BARRIER COTE 100 GEM-PLAST TC GEM-COTE EP 100 MEADOW-CRETE GPS REINFORCING FABRIC HD
Scope:	450 square feet

## About W. R. MEADOWS

Since 1926, W. R. MEADOWS has been a leader in developing products that protect structures from moisture infiltration. From below-grade installations to rooftops and in-between, issue-specific products target and prevent potential, costly problems. Today, patented technologies enable more environmentally effective, efficient designs, and many of our products contribute LEED-certification “green” credits. With nine manufacturing facilities throughout the U.S. and Canada, the materials you need are within easy reach. For additional information, call 800.342.5976 or visit [www.wrmeadows.com](http://www.wrmeadows.com).

