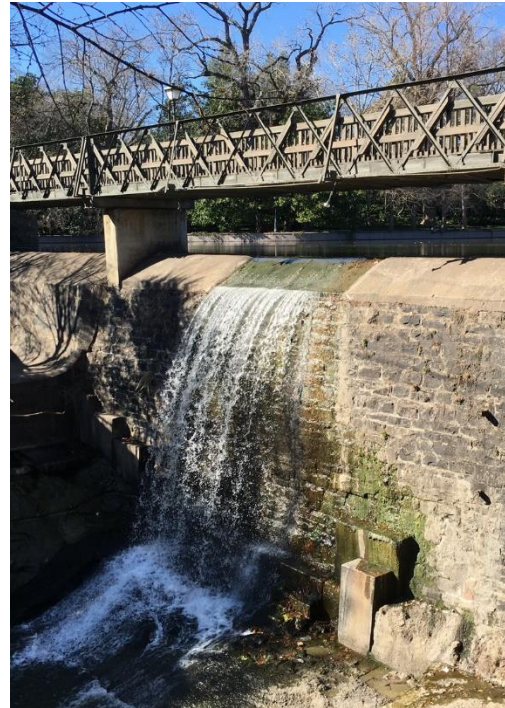




PROJECT PROFILE

Exall Dam Pedestrian Bridge

Bridge Condition Assessment and Repair Design | Highland Park, TX



CLIENT

Town of Highland Park, Texas

BACKGROUND

As part of the Philadelphia Place Land Development, Exall Dam was constructed on Turtle Creek circa 1890, forming Exall Lake. A pedestrian bridge was constructed atop the dam in the 1940s. The bridge substructure consists of two reinforced concrete piers and two concrete abutments at each end of the span. The bridge structure consists of three equal spans of approximately forty-four feet each. The superstructure includes two riveted steel double-intersecting Warren trusses with a wood decking system. Since its last renovation, maintenance activities had fallen behind. Over time, various railings and other accessibility-related additions had also obscured some of the bridge's interesting architectural and structural features.

To better understand the condition of the bridge, the Town contacted WJE to perform a thorough assessment of the bridge. Known conditions, which required maintenance, included failure of the coating on the steel framing members, localized steel corrosion, and deterioration of the wood decking.

SOLUTION

WJE performed a structural condition assessment of the pedestrian bridge located along the Exall Dam. The assessment included visual observations (including observations via boat) of the structural members, railings, and coating system. A report was provided to the client with observations, recommendations for repair, and a repair cost estimate.

WJE was then further engaged by the client to design the bridge repairs and provide construction administration services during the repair. WJE's services included structural analysis, lead paint abatement research, conceptual design discussion with the owner, final design, development of construction documents, and bidding assistance. The WJE team also performed construction administration and construction phase observations (including attending a preconstruction meeting), reviewed contractor-provided submittals and shop drawings, responded to contractor-initiated requests for information, attended progress meetings, and made periodic site visits to observe ongoing work.

