

Pedestrian Bridge, Austin, Texas
Miró Rivera Architects, Austin

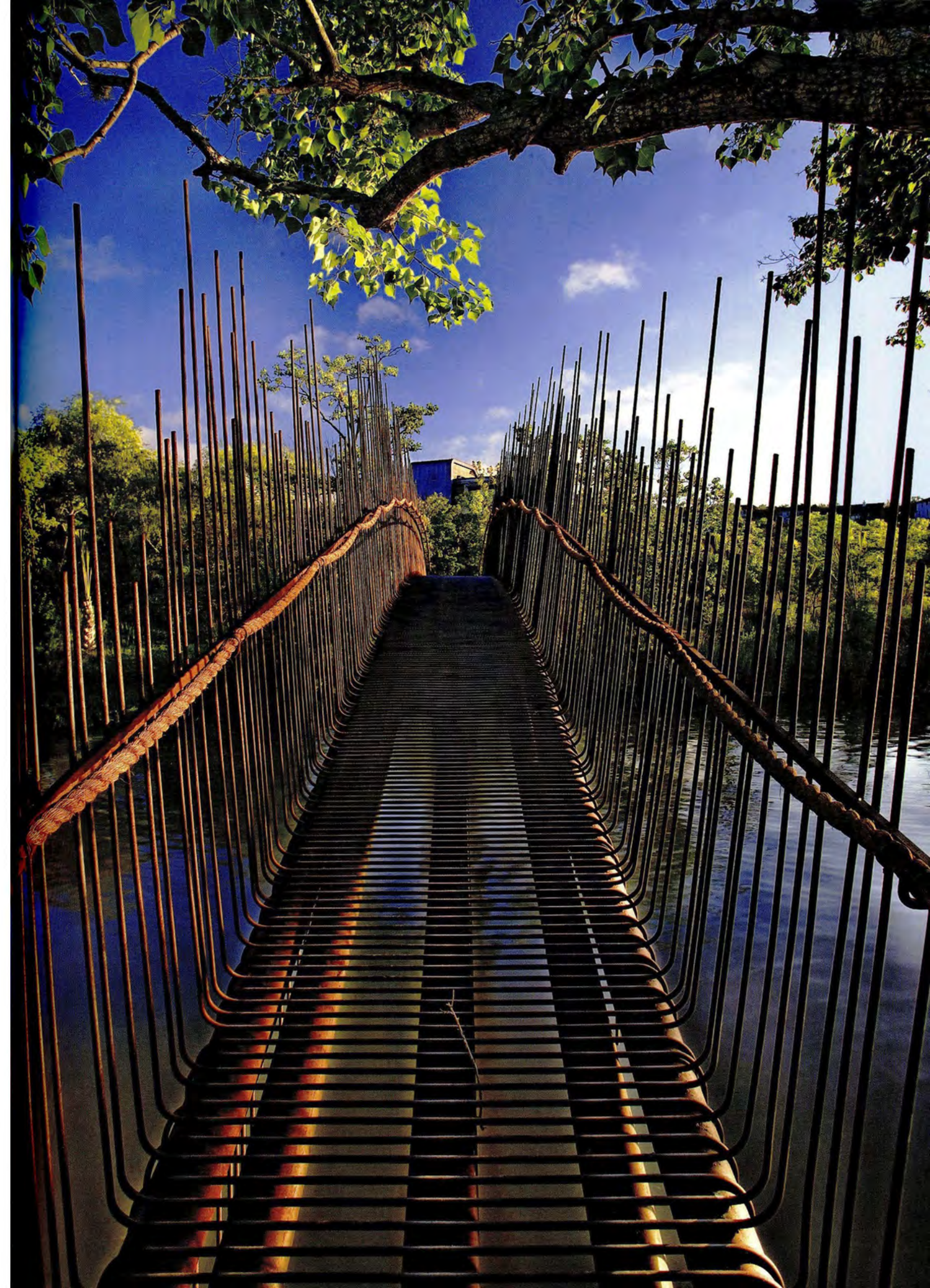
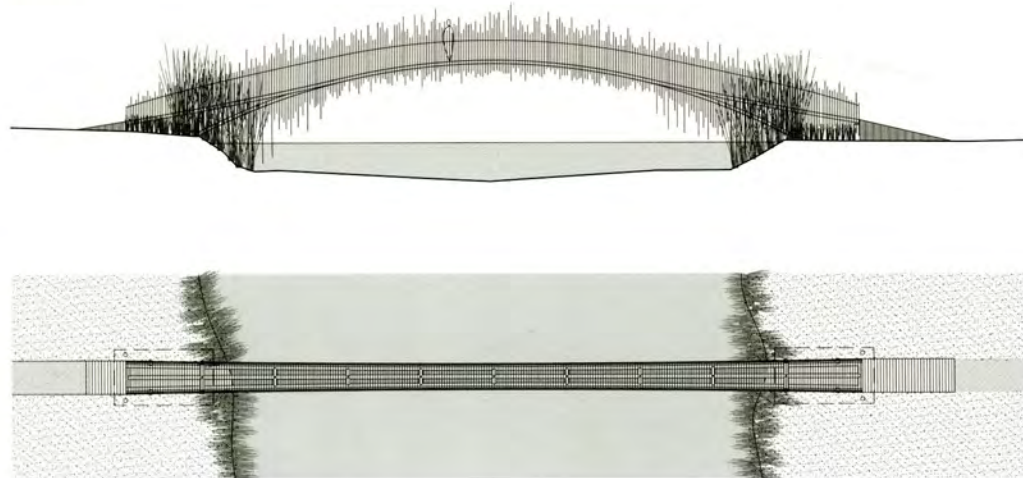
Located on a densely vegetated site on Lake Austin, the pedestrian bridge connects the main house on the property with a newly constructed guesthouse surrounded by reed-covered wetlands that provide a stop for migrating egrets, cranes, and swans. The development of the project included a comprehensive analysis of the existing vegetation and wildlife to implement a ten-year plan that will eliminate invasive plants, reintroduce native species, and restore and expand the wetlands.

With a design inspired by the reeds that cover the shores of the lake, with rebar segments that intertwine with the reeds, the footbridge is a light, maintenance-free structure integrated into its wetland setting. The rebar serves as deck and railing material at the abutments and over the length of the bridge, camouflaging it and transforming it into a nearly invisible link.

The bridge is composed of three elements. Superstructure: The arch, which spans 100 feet with a main span of 80 feet, is composed of five nested 5-inch-diameter pipes that diverge between the spring-point of the main span and the abutment at the beginning of the bridge. Decking and railing: The pipes support 1/2-inch-diameter bars, which become both decking and guardrail with a simple field bend from horizontal to vertical. The irregular lengths and close spacing of the bars mimic the native reeds on the site, and the thin profile of the superstructure appears even thinner when viewed through the veil of reeds. The handrail consists of a rope secured with steel-wire rings to a 1-inch horizontal tube welded to the vertical bars. Abutments: Native stone slabs are layered vertically to create ramps at the abutments. Deep raked joints re-create the texture of the deck and railings. To further integrate the bridge with its natural setting, the steel, rope handrails, and stone ramps have been left to weather naturally.

This page
Top: Elevation
Bottom: Plan

Opposite
View east





Opposite
 Top row: Section mockup and construction
 Middle: Structure (above); cross-section detail (below left); longitudinal-section detail
 Bottom (left to right): Partial elevation; bridge-deck soffit; detail with existing retaining wall

This page
 Top: Structural details
 Bottom: Elevation

