

## Jean Lafitte National Historical Park Boardwalk



Location: **Marrero, Louisiana**  
Owner: **National Park Service**  
Designer: **Martin and Martin**  
Contractor: **E&L Construction Group**  
Installer: **E&L Construction Group**

### Challenge

Jean Lafitte National Park, located in the Louisiana wetlands south of New Orleans, had a narrow 4-foot wide timber boardwalk that no longer met modern accessibility standards. The humid, moisture-rich environment caused the timber to deteriorate quickly, requiring significant ongoing maintenance. The National Park Service needed to upgrade the trail while protecting the surrounding wetland environment, trees, and wildlife.

The project faced serious construction obstacles. The work area was extremely tight, only 20 feet wide, making it very difficult to bring in large equipment from the sides. The soft, unstable ground was so challenging that the geotechnical engineer's equipment got stuck during the initial site visit.

Adding to the complexity, the new boardwalk needed to be strong enough to support maintenance vehicles while having minimal impact on the sensitive wetland ecosystem.

### Solution

Working closely with design engineers Martin and Martin, the project team selected PermaTrak's precast concrete boardwalk and implemented a hybrid top-down construction method suited to the site's constraints. The contractor installed helical pier foundations with concrete caps first, moving from back to front along the narrow corridor. Once foundations were in place, precast beams and treads were installed from above, eliminating the need for heavy equipment to access the boardwalk from the sides.

This hybrid approach allowed the team to optimize foundation spacing, with the precast concrete spanning up to 16 feet between supports, reducing the total number of piers needed and cutting both costs and installation time.

PermaTrak's durable precast concrete system eliminates ongoing maintenance concerns in the challenging wet environment. The completed boardwalk doubled the width from 4 feet to 8 feet, creating a fully ADA-compliant elevated trail that will serve the National Park Service for decades.

#### TECHNICAL DESCRIPTION

Boardwalk Length: 234'

Tread Width: 10'-0"

Color: Adelaide Gray

Texture: Beachwood

Installation Date: 2023