

## Challenge

Flagler County's Graham Swamp Trail project included a pedestrian bridge and boardwalk through a challenging Florida wetland, complete with murky water, dense vegetation, and limited access for construction equipment. The trail crosses State Road 100 via a longspan truss bridge, creating a key pedestrian connection in the area.

While the original design called for a stick-built system with steel and cast-in-place concrete, the team ultimately chose PermaTrak's precast concrete system as a more efficient alternative.

The long spans and costly foundations added complexity, especially given the swampy conditions. Equipment access was limited, and installing foundations in saturated ground posed major constructability issues. Although not an FDOT project, the trail included state funding and crossed a state road - so FDOT specifications were incorporated by reference into the bid documents.

## Solution

PermaTrak provided a cost-effective alternative to the original design by replacing the expensive cast-in-place concrete with a precast concrete system. This allowed MASCI General Contracting to install the boardwalk faster and with less disruption to the wetland environment.

The precast system simplified construction in the challenging swamp conditions while meeting the referenced FDOT specifications. The finished boardwalk now winds through the Graham Swamp, providing a durable connection through this unique Florida ecosystem.

Both Flagler County and Kisinger Campo & Associates were pleased with the results, and the project's success in such demanding conditions demonstrates the effectiveness of the PermaTrak solution.

## **TECHNICAL DESCRIPTION**

Boardwalk Length(s): 102'-6",302'-6",1182'-6"

Tread Width: 13'-6"

Color: Adelaide Gray

Texture: Beachwood

Installation Date: 3/30/2022



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