

Challenge

The upscale Light Farms community in northern Texas features two oval tributaries surrounded by an extensive trail system. To give residents greater connectivity to amenities, TBG Partners sought to construct five pedestrian bridges to span each water source.

As the floodplain area is prone to extreme wet and dry conditions, TBG needed a cost-effective solution that could withstand the elements while delivering on the community's guiding standards of lifestyle, sustainability, and agrarianism.

Solution

Five precast concrete pedestrian bridges were constructed around the tributaries, connecting to the existing trail system. Having performed a life cycle maintenance cost analysis, designers at TBG knew that their clients would save on maintenance costs over the life cycle of PermaTrak structures. TBG Partners estimated the additional maintenance and replacement cost for a wood or composite boardwalk to be roughly 250% of the initial investment over a 60-year period, but a PermaTrak boardwalk would only cost an additional 10% over the same period of time.

Jodi House of TBG felt confident in choosing PermaTrak, saying "We needed a cost-effective solution. PermaTrak seems to be the best choice out there for an area that fluctuates with water saturation in terms of maintenance and flood control. If we had gone with wood or composite, there would always be a question of 'how long will the material last?'"

The durable PermaTrak pedestrian bridges have given the Light Farms community the ability to cross the water, walk the trails, and access the community's impressive amenities.

TECHNICAL DESCRIPTION

Boardwalk Lengths: 20 ft., 24 ft.,

24 ft., 24 ft., 70 ft.

Tread Width: 9 ft. 3 in.

Color: Natural Concrete

Texture: Sandblast

Installation Dates: August 2016 (Phase 1) June 2017 (Phase 2)

