

Arch Bridges

Peace River Bridge at Arcadia

DeSoto County
FDOT #450001, 8DE0381

In 1925, DeSoto County replaced a multiple-span, metal truss bridge with this four-span, reinforced concrete arch deck to carry old SR-18 across the Peace River at Arcadia. The original structure, abandoned for many years, now serves as a pedestrian bridge in Desoto Park. The replacement 201-foot long Peace River Bridge was designed and constructed by the Luten Bridge Company for \$25,500. It included a standard solid parapet with cast-in rectangular patterns. The closed spandrel walls were most likely filled with compacted earth and rock.



Photo 5-5. Peace River Bridge at Arcadia, DeSoto County (No. 450001)

The Peace River Bridge played a significant role in the transportation history of the Peace River area. It gains further merit for its association with the Luten Bridge Company. It is the largest remaining Luten bridge in Florida. Despite the bridge's alterations and its need for repair and maintenance, the structure has retained its historical physical integrity. Therefore, it was determined NRHP-eligible during the 2000 survey under Criterion A in the areas of Transportation and Community Planning and Development. It is also eligible under Criterion C in the area of Engineering as an early example of a multiple arch deck bridge constructed by the Luten Bridge Company.



Photo 5-6. Osprey Avenue Bridge, Sarasota County (No. 175950)

Osprey Avenue Bridge over Hudson Bayou

Sarasota County
FDOT #175950, 8SO2376

This 1915 bridge carries Osprey Avenue over Hudson Bayou in Sarasota. It was designed and constructed by the Luten Bridge Company. The 43-foot long, single-span, reinforced concrete arch deck bridge features a Neoclassical Revival style balustrade.

Contracted by Manatee County in 1916, before the creation of Sarasota County, the bridge carried the first Sarasota-to-Venice "hard road" (now known as Osprey Avenue). The county

included this bridge as part of a large contract awarded to the Luten Bridge Company to construct bridges and culverts as part of an improved roadway to Venice. A major endeavor at the time, and in a region somewhat remote from the county seat at Bradenton, the project came under the supervision of the district Engineer-in-Chief, Charles A. Brown. The local newspaper reported that a seven-man crew, along with a foreman and superintendent, built the bridge of solid concrete, reinforced with steel barbs every 12 inches. Observing that the concrete abutments were placed on rock foundations, the newsman concluded that the structure would "stand all the ravages of time."

The Osprey Avenue Bridge represents an important early effort at road improvement between Sarasota, Osprey, and Venice and should be considered an important historic bridge. It retains its historic physical integrity and is an excellent example of pre-World War I Luten bridges. Therefore, it was determined NRHP-eligible during the 2000 survey under Criterion A in the area of Transportation and under Criterion C in the areas of Architecture and Engineering as an example of an early arch deck bridge designed with Neoclassical Revival style features by the Luten Bridge Company.



**Photo 5-7. Little Payne Creek Bridge, Hardee County
(No. 060034)**

CR-664/Little Payne Creek Bridge

Hardee County

FDOT #060034, 8HR0374

This 96-foot, three-span reinforced concrete arch deck bridge crosses Little Payne Creek, west of Bowling Green. It was built by the Luten Bridge Company in 1915 for the county (then DeSoto County, before the creation of Hardee County), which also included building a bridge across Payne Creek (No. 064069). The bridge served as an improved road that connected with routes to Bradenton. Cantilevered floor beams support the deck which is wider than the arch substructure, a feature characteristic of many Luten concrete bridges. A cast-in recessed panel design appears on the solid concrete railings.

The Little Payne Creek Bridge was determined NRHP eligible by the SHPO on September 24, 2009. It is significant under Criterion C in the area of Engineering as one of Florida's earliest arch deck bridges and for its historical associations with the Luten Bridge Company, a leader in building lower cost reinforced concrete structures.