

Swing Bridges



Photo 5-55. Ft. Denaud Swing Bridge, Hendry County (No. 070013)

Fort Denaud Swing Bridge

Hendry County

FDOT #070013, 8HN0632

The Fort Denaud Bridge over the Caloosahatchee River consists of five prestressed concrete slab approach spans, with a low concrete railing. The spans are joined to a 132-foot-long Warren pony swing span on a rim-bearing pivot. The total length of this bridge is 435 feet. The Powell Brothers Construction Company of Fort Lauderdale, established by former Champion Bridge Company engineer Hugh Quinn, built the structure in 1940. The State Road Department dismantled the bridge in 1958 and re-erected it at its present location in 1963.¹²¹ The structure was

rehabilitated in 1987. The most important alteration during the rehabilitation was the addition of shallow cable stay supports along the top chords of the truss. Despite its alterations, this bridge retains its historic physical integrity. It was determined NRHP-eligible during the 2000 survey under Criterion C in the area of Engineering as a rare example of a rim-bearing swing bridge.

Blackburn Point Swing Bridge

Sarasota County

FDOT #170064, 8SO1890

This Warren pony truss swing span bridge carries Blackburn Point Road over the Intracoastal Waterway, linking Tamiami Trail (US-41) with Casey Key. This bridge was constructed in 1925 by the Champion Bridge Company of Ohio. Essential repairs were made over the years, notably in 1981, after the bridge was struck by a barge. Subsequent repairs were made in 1987 and 1995. The 142-foot-long, single-span Warren pony truss swing bridge operates on a center-bearing pivot located in the middle of the channel. Rigidly connected and sturdily built, the truss



Photo 5-56. Blackburn Point Swing Bridge, Sarasota County (No. 170064)

¹²¹ Atkins and Keeler (1981) date this reconstruction to 1959, but departmental records indicate 1963.

uses steel beam chords and angle bars, strengthened with stay plates, for the verticals. At only 19 feet wide, the roadway carries only one lane of traffic in one direction at a time.

Sarasota County built this bridge as part of an effort to spur development and tourism on the Gulf Beaches. For the sum of \$22,890 in 1925, the Champion Bridge Company supplied Sarasota County with one of its typical swing bridge designs. A second Champion bridge (now demolished) crossed Little Sarasota Bay north of the Blackburn Point Bridge.

The Blackburn Point Bridge represents one of seven remaining pony truss swing bridges in the state. It is one of two single-lane swing bridges in Florida. Repairs include the replacement of the majority of its structural steel truss members and its entire fender system. The mechanical and electrical components also have been repaired. Despite its many repairs and alterations over the years, the Blackburn Point Bridge remains in good condition and retains its historic physical integrity. This bridge was listed in the NRHP in 2001 under Criterion A in the area of Transportation and Criterion C in the area of Engineering.¹²²

St. Mary's River Swing Bridge

Nassau County
FDOT #740008, 8NA0240

The 1927 St. Mary's River Bridge carries US-17, also known as the Atlantic Coastal Highway, across the border of Florida and Georgia. When constructed, US-17 was the principal federal highway providing northern access into Florida. A 563-foot-long structure consisting of six concrete girder approach spans and three steel trusses, this bridge helped open Florida to travelers from the northeastern part of the nation.



**Photo 5-57. St. Mary's River Swing Bridge, Nassau County
(No. 740008)**

Also a part of the Dixie Highway, this unusual structure reputedly made possible the "only ferry-less route to Florida," by replacing an undependable ferry at what was called Wilds Landing.

Although partially owned by Georgia, the State of Florida, with federal aid, constructed the St. Mary's River Bridge and continues to maintain the bridge. The St. Mary's River Bridge was constructed by the Pensacola Shipbuilding Company. Acting as subcontractors, A. Bentley and Sons of Ohio built the substructure and approaches, and the Virginia Bridge and Iron Company of Roanoke fabricated and erected the trusses. The bridge opened to traffic in February 1927 after approximately 11 months of construction. Both states conducted ceremonies to mark its opening. For several years after its construction, Florida State Road Department publications featured this bridge in its publications for its engineering and because it opened the border between the two states.

¹²² Spain Schwarz, Rebecca and Robert Jones. Blackburn Point Bridge, National Register of Historic Places Registration Form, 2001.