

Historic Bridge Adoption Information Packet

Limestone County
County Road (CR) 723/Old Thornton
Big Creek
October 2024

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Announcement

The Texas Department of Transportation (TxDOT) seeks adopters for the historic bridge detailed below for reuse according to federal transportation and historic preservation laws. The bridge is located in Limestone County, on County Road (CR) 723/Old Thornton Road crossing Big Creek.

Letters of interest and/or reuse proposals will be accepted until 5 p.m. on **January 31, 2025**. TxDOT is currently undergoing alternatives analysis for this project. The outcome of the analysis may impact the availability of this bridge. Priority for assistance will be given to public entities seeking to reuse the bridge in a public or publicly visible space. Bridges available through this program are not suitable for vehicular service. All rehabilitation work must conform to the Secretary of the Interior's *Standards for Rehabilitation* in consultation with the Texas Historical Commission (THC).

Interested parties may request additional information, indicate an interest, or submit a reuse proposal by contacting:

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Bridge Location

• County: Limestone

Highway or Facility: County Road (CR) 723/Old Thornton

• Feature Crossed: Big Creek

GIS Locational https://arcg.is/5vfif0

Information

Bridge Information

Bridge Owner Limestone County

Main-span Type: Warren pony truss

Main-span Length 50 feet

Roadway Width 15 feet

Year Built 1920

Builder State Highway Department

Bridge Condition

The CR 723/Old Thornton Road at Big Creek is in fair condition. Corrosion and section loss in the truss members reduced the bridge's load carrying capacity. The bridge cannot safely carry emergency vehicles due to its reduced load-carrying capacity. Additionally, at 15-feetwide, the bridge effectively serves as a one-lane crossing due to its narrow width.

Historic Significance of the Bridge

In 2014, the Texas State Historic Preservation Office (SHPO) determined that all extant metal truss bridges in Texas are historically significant at the local level as rare surviving examples of their type. This 1920 Warren pony truss retains the essential physical features that enable it to convey the historic character of metal truss bridges from the early-to-mid- 20^{th} century.

Condition Photos and Descriptions

The following photos show areas of the truss needing repair. Some repairs will be required prior to converting the bridge to pedestrian use, while others can be deferred to a later date. Each photo is accompanied by a description of the repair and recommendations for timing of the repair. Please note that additional repairs may be uncovered while moving the truss, or while completing rehabilitation activities. Other costs required for converting the bridge to pedestrian use include foundations at the new location, a pedestrian rail, and a pedestrian walkway of a width to be determined by engineering analysis. Finally, the truss will need to be moved from the current site to the new location. Costs to the recipient will be dependent on distance to be moved and may be partially or fully covered the State. The new owner is responsible for conducting a site assessment to determine the full scope of needed repair.

Photo 1: Bottom Chord



The bottom chord of the truss shows significant corrosion with section loss at connection plates at the bottom chord. The total number of connections is not determined. These repairs can be completed after moving the truss and can be deferred further if needed. However, corrosion will continue until addressed by cleaning, painting, and sealing areas of deformation where water will collect. TxDOT highly recommends cleaning and painting the entire structure. The bottom chord controls the load rating.

Photo 2: Truss Connections



All 14 connections at the bottom chord of the truss show significant pitting on gusset plates, connection angles, and rivet heads with section loss at the gusset plate and bottom chord. These repairs can be completed after moving the truss and can be deferred further if needed. However, corrosion will continue until addressed by cleaning, painting, and sealing areas of deformation where water will collect. TxDOT highly recommends cleaning and painting the entire structure.

Photo 3: Truss Connections



Same recommendations as Photo 2.

Photo 4: Bearings



The bolts on the bearings have severe corrosion resulting in approximately 50% of the section remaining. These repairs would need to be performed once the truss is moved, since they will likely be torched off to enable the move.

Photo 5: Truss End Cover Plate



The end cover plate at one location has severe corrosion resulting in a hole greater than two inches in length. These repairs can be completed after moving the truss and can be deferred

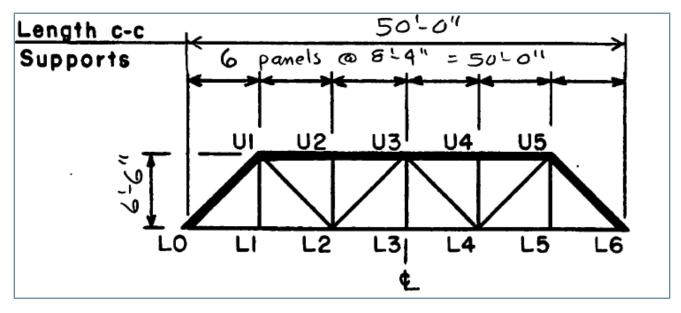
further if needed. However, corrosion will continue until addressed by cleaning, painting, and sealing areas of deformation where water will collect. TxDOT highly recommends cleaning and painting the entire structure.

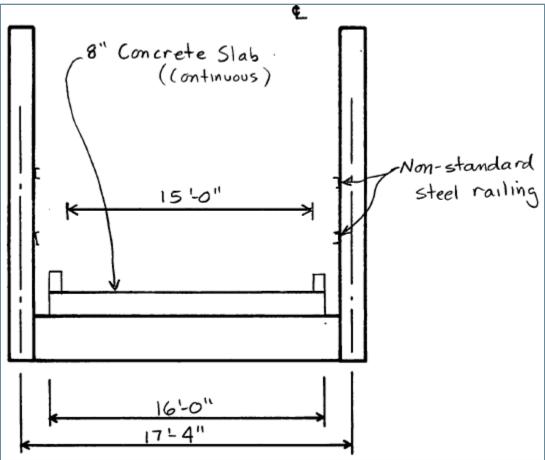
Photo 6: Existing truss railing



The steel rails in truss span have minor surface corrosion and minor deflections. These repairs can be completed after moving the truss but should be completed prior to converting the truss to pedestrian use. This railing is not considered acceptable for pedestrians.

Photo 7 and 8: Truss Dimensions in Elevation and Cross Section





The configuration and dimensions of the structure are shown to assist in estimating costs associated with moving the truss, and for purchasing and installing the pedestrian walkway and railing. The 8-inch concrete deck will need to be removed prior to moving the truss. The width of

the walkway will need to be determined from pedestrian load rating calculations provided by a

professional engineer.

Bridge Photographs





