Historic Bridge Adoption Information Packet

Parker County

Interstate 20 (I-20) Northbound Frontage Road

Brazos River

May 9, 2025

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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 Parker County, on Interstate 20 Northbound Frontage Road crossing the Brazos River.

Letters of interest and/or reuse proposals will be accepted until 5 p.m. on **August 30, 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:

Breena Riley, Environmental Project Planner
TxDOT Fort Worth District
2501 Southwest Loop 820
Phone Number: (817) 370-6567
Email address: breena.riley@txdot.gov

Bridge Location

- **County:** Parker
- **Highway or Facility:** Interstate 20 (I-20) Northbound Frontage Road
- **Feature Crossed:** Brazos River
- **GIS Locational Information** https://arcg.is/1WHmnG

Bridge Information

- **Bridge Owner** Texas Department of Transportation
- **Main-span Type:** Parker Through Truss
- **Main-span Length** 165 feet
- **Roadway Width** 24 feet
- **Year Built** 1934
- **Builder** Texas Highway Department

Bridge Condition and Load Rating

The Interstate 20 Northbound Frontage Road bridge is considered structurally deficient. The steel floor system and its connections are in poor condition due to advanced corrosion and rust. Extensive repair work is required to improve the bridge's condition, including replacing all of the floorbeams and stringers, repairing or replacing multiple damaged truss members, cleaning and painting all steel elements, and repairing the bridge's concrete substructure. Additionally, the bridge's load rating is below the legal limit and is not sufficient to carry emergency vehicles. The bridge serves as the emergency detour for the interstate's main lanes.

Historic Significance of the Bridge

The Interstate 20 (Northbound Frontage Road) bridge at the Brazos River is notable for its engineering significance. The Texas Highway Department (THD) designed the bridge in the early 1930s. Engineers chose the T24-165 design for the truss span, one of 25 different standard designs the THD developed for Parker through truss spans. The Brazos River bridge is the only example of the T24-165 design left in the state. The Buckner Brothers of Cleburne constructed the bridge between 1933 and 1934. The highway department built new bridges over the Brazos in the late 1960s and converted the 1934 truss bridge into the westbound frontage road. The Interstate Highway 20 bridge at the Brazos River is significant for embodying the defining characteristics of a THD truss bridge. It was listed in the National

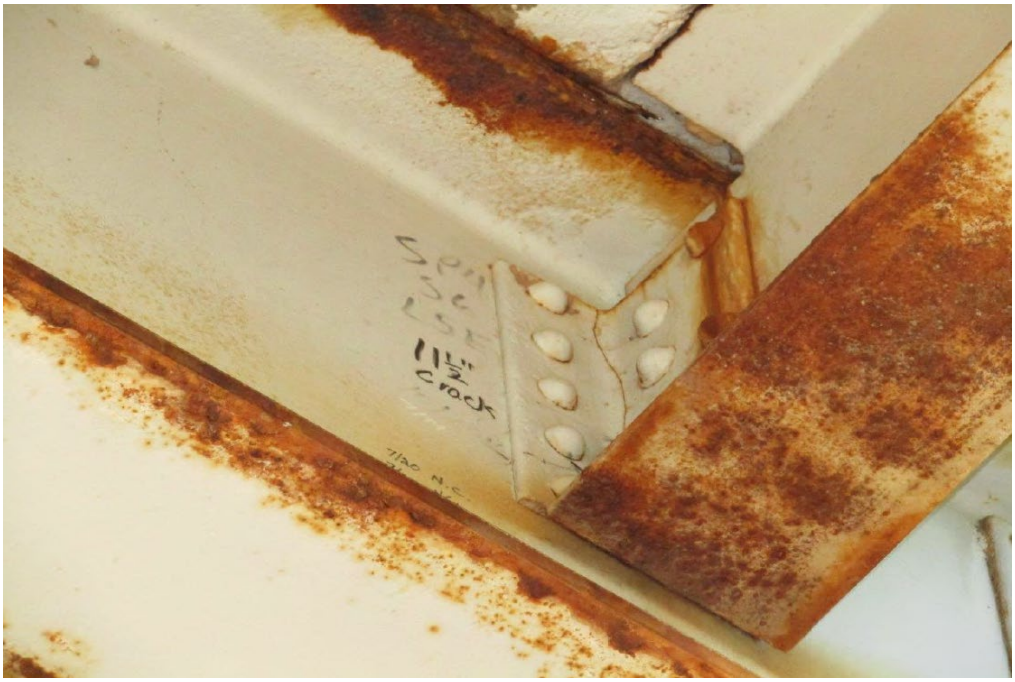
Register of Historic Places in 1996 under *Criterion C* (Engineering) at the state level of significance

Condition Photos and Descriptions

The following photos highlight some 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. Please note that additional repairs may be uncovered while moving the truss, or while completing rehabilitation activities. Other costs for converting the bridge to pedestrian use include foundations at the new location, a new rail, and a pedestrian walkway of a width to be determined by an 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 by the State.

Corrosion at stringers

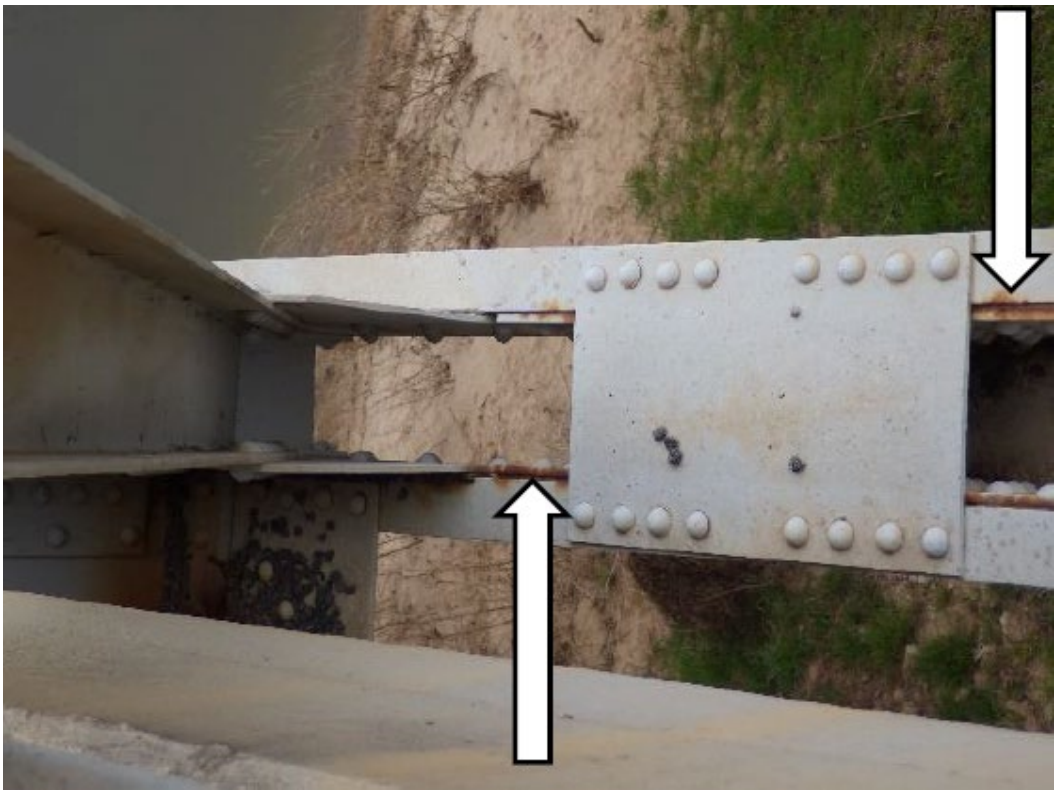
Typical floor system corrosion



Cracking at floor system connections. Found at multiple locations.

Typical deck damage

Pack rust with deformation at lower chord-gusset plate connection.



Pack rust at splice plates

Impact damage

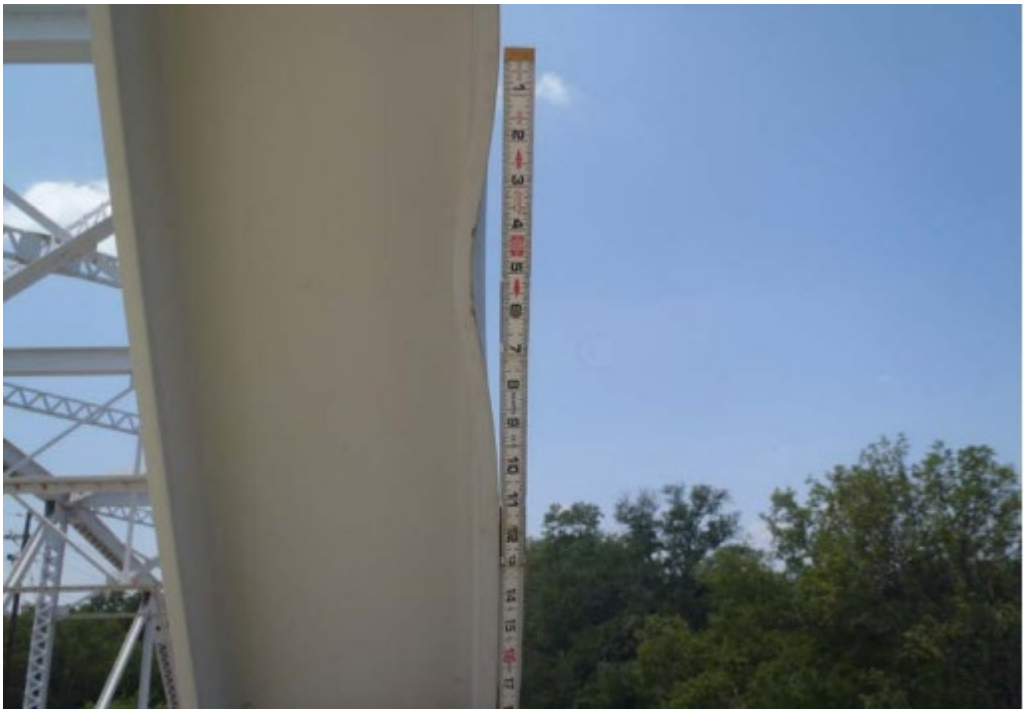
Distorted portal bracing member at location of previously repaired impact damage.

Distorted lacing and welded repair at location of previously repaired impact damage.

Bent vertical member at location of previously repaired impact damage (U3-L3).

Bent vertical member at location of previously repaired impact damage (U2-L2).

Impact damage



Impact damage to end post

Delamination at girder stem

Delamination at substructure

Scour and undermining

Bridge Photographs