## GREGORY ROAD BRIDGE AT DUCK CREEK

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## Gregory Road Bridge at Duck Creek (# 7 on Bridge Brochure)

The Gregory Road Bridge over Duck Creek near Sanger in Denton County, Texas, was built about 1923. It is a fine surviving example of the pony truss steel bridges that were once popular for providing vital transportation connections between relatively isolated farming communities in rural Texas. Its span over Duck Creek is 52' 0", the width of its deck is 16' 0 ", and it has a concrete roadbed, although the original roadway surface was probably timber.<sup>1</sup>

Pony truss is a commonly used name for structures such as this, but technically the Gregory Road Bridge is a Warren truss with vertical reinforcements. A father-and-son team from Massachusetts, Caleb and Thomas W. Pratt, patented a truss design in 1844. Four years later, Englishmen James C. Warren and Willoughby T. Monzoni began producing a variant of the Pratt truss. This design, which is known as a Warren truss, was preferred over the original Pratt design by 1900 for short spans. By that time, too, steel had replaced iron as the material of choice for bridge builders. The Gregory Road Bridge is actually a modified three-panel Warren truss, fabricated of steel, with an approach (14 feet in length) that rests on I-beams. It in fact has the best structural integrity of the ten Warren truss bridges still in Denton County, and as such was listed on the National Register of Historic Places in 2004.<sup>2</sup>

The contractor who built the Gregory Road Bridge is unknown, in part because the structure has no visible plates or markings identifying the original builder. Initially, the dominant iron bridge builder in Denton County in the 1880s and 1890s was the King Iron and Bridge Company, established by Zenas King at Cleveland, Ohio, in 1871. By its second decade of operation, this firm was the largest producer of iron bridges in the United States, having built over 5,000 by 1882 and continuing to build at a rate of 250 to 300 per year. King's nephew, George E. King, developed a branch of his uncle's company in Iowa, then became independent. Zenas King's firm built fourteen bridges in Denton County by the end of the 1890s, and King's nephew, George, built twelve more before about 1910. But the latter had a rival in Denton County. George Austin arrived in Dallas in 1889 as an agent of the George E. King Bridge Company of Iowa, and his brother Frank joined him in 1896. They incorporated as Austin Brothers Contractors in 1902. This firm had a production shop in Dallas (as well as elsewhere), and they made



lots of Warren trusses that they sold through their catalog. Many of these bridges were built in Denton County, as well as throughout the United States. Charles R. Moore bought this company in 1918, and during the 1920s renamed it as the Austin Bridge Company. This firm, which continued to construct and maintain bridges in Denton County, probably benefited when three steel bridges were approved for purchase by County Commissioner J. B. Fritz, for Precinct 4 of Denton County in 1923. Approval of the County Commissioners Court was given on August 13, 1923, for the three bridges. It appears likely, given its construction date, that the Gregory Road Bridge was a project of the Austin Bridge Company.<sup>3</sup>

The Gregory Road Bridge originally crossed Duck Creek in the extreme northern portion of Denton County, just south of the Cooke County line. It served Lois, Pollard, Gregory and Hoehn roads. When erected, it had the capacity to carry rural wagon loads, but it later carried automobile traffic. Although only one lane, the bridge was used by postal and school vehicles, as well as many others that were traveling in the northern/northwestern section of Denton County and into southern Cooke County. The bridge was never intended to support the weight of modern motor vehicles, and it was condemned in 2007 and later removed to its present site at the Denton County Administrative Complex.<sup>4</sup>

## **NOTES**

- 1. "Gregory Road Bridge at Duck Creek" (http://atlas.thc.state.tx.us/sheii-countv.htm [accessed 8-25-2011]); The Historical Iron Bridges of Denton County, Texas ([Denton:] N.p., n.d.); Peggy Heinkel-Wolfe, "The Bridges of Denton County," Texas Highways 52 (Nov. 2005): 26.
- 2. "Gregory Road Bridge at Duck Creek;" "Historic Bridges of lowa" (<a href="http://www.iowadot.gov/historicbridges/construction.asp">http://www.iowadot.gov/historicbridges/construction.asp</a> [accessed 8-25-2011]); David Guise, "The Evolution of the Warren, or Triangular, Truss" (<a href="http://www.historyccoperative.org/journals/sia/32.2/guise.html">http://www.historyccoperative.org/journals/sia/32.2/guise.html</a> [accessed 8-25-2011]); Denton Record Chronicle, June 25, 2006.
- 3. The Historical Iron Bridges of Denton County, Texas; Allen King Sloan, "Discovering Zenas King" (http://www.kingbridgeco.com/siapaper.html [accessed 8-25-2011]); Allen King Sloan, "All in the family of Zenas King" (http://www.kingbridgeco.com/all in the z king family.htm [accessed 8-25-2011]);



"Texas/Oklahoma/Arkansas" (<a href="http://www.kingbridgecompany.com/texas.htm">http://www.kingbridgecompany.com/texas.htm</a> [accessed 8-25-2011]);
"Austin Bridge & Road: History" (<a href="http://www.austin-ind.com/bridge-and-road/about-austin-bridge-and-road/history">http://www.austin-ind.com/bridge-and-road/about-austin-bridge-and-road/history</a> [accessed 8-25-2011]); Denton County Commissioners Court Minutes, Aug. 13, 1923 (Photocopies, Denton County Historical Commission, Resource Room Files, Denton County Courthouse), pp. K393-K394.

4. The Historical Iron Bridges of Denton County, Texas; "Gregory Road Bridge at Duck Creek" (http://atlas.thc.state.tx.us/shell-county.htm [accessed 8-25-2011]); Denton Record Chronicle, June 25, 2006; Heinkel-Wolfe, "The Bridges of Denton County," 26.

