NPS Form 10-900 OMB No. 1024-0018

United States Department of the Interior
National Park Service
National Register of Historic Places Registration Form

1. Name of Property

Historic Name: SH 203 (Old SH 52) Bridge at Salt Fork of the Red River
Other name/site number: State Highway 52 Bridge at Salt Fork of the Red River
Name of related multiple property listing: *Historic Road Infrastructure of Texas*

2. Location

Street & number: Texas State Highway 203 at Salt Fork of the Red River
City or town: Wellington State: Texas County: Collingsworth
Not for publication: ☐ Vicinity: ☑

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ☑ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☑ meets ☐ does not meet the National Register criteria.

I recommend that this property be considered significant at the following levels of significance:
☐ national ☑ statewide ☐ local

Applicable National Register Criteria: ☐ A ☐ B ☑ C ☐ D

State Historic Preservation Officer _____
Signature of certifying official / Title **Date**

Texas Historical Commission
State or Federal agency / bureau or Tribal Government

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria.

_____ _____
Signature of commenting or other official **Date**

_____
State or Federal agency / bureau or Tribal Government

4. National Park Service Certification

I hereby certify that the property is:

___ entered in the National Register
___ determined eligible for the National Register
___ determined not eligible for the National Register.
___ removed from the National Register
___ other, explain: _____

_____
Signature of the Keeper **Date of Action**

5. Classification

Ownership of Property

	Private
	Public - Local
X	Public - State
	Public - Federal

Category of Property

	building(s)
	district
	site
X	structure
	object

Number of Resources within Property

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	**0**	**total**

Number of contributing resources previously listed in the National Register: NA

6. Function or Use

Historic Functions: TRANSPORTATION/ Road-related (vehicular)

Current Functions: TRANSPORTATION/ Road-related (vehicular)

7. Description

Architectural Classification: Other: Parker Truss Bridge

Principal Exterior Materials: METAL/Steel

Narrative Description (see continuation sheets 6 and 7)

8. Statement of Significance

Applicable National Register Criteria

	A	Property is associated with events that have made a significant contribution to the broad patterns of our history.
	B	Property is associated with the lives of persons significant in our past.
X	**C**	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
	D	Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations: NA

Areas of Significance: Engineering

Period of Significance: 1938-1939

Significant Dates: 1938, 1939

Significant Person (only if criterion b is marked): NA

Cultural Affiliation (only if criterion d is marked): NA

Architect/Builder: Texas Highway Department, Bridge Department; Resident Engineer: Thomas B. Potts; Purvis & Bertram Construction Co.

Narrative Statement of Significance (see continuation sheets 8 through 14)

9. Major Bibliographic References

Bibliography (see continuation sheets 15 and 16)

Previous documentation on file (NPS):
- _ preliminary determination of individual listing (36 CFR 67) has been requested.
- _ previously listed in the National Register
- _ previously determined eligible by the National Register
- _ designated a National Historic Landmark
- _ recorded by Historic American Buildings Survey #
- _ recorded by Historic American Engineering Record #

Primary location of additional data:
- **x** State historic preservation office (*Texas Historical Commission*, Austin)
- _ Other state agency
- _ Federal agency
- _ Local government
- _ University
- _ Other -- Specify Repository:

Historic Resources Survey Number (if assigned): NA

10. Geographical Data

Acreage of Property: 0.7 acres

Coordinates (either UTM system or latitude/longitude coordinates)

Latitude/Longitude Coordinates

Datum if other than WGS84: NA

1. Latitude: 34.887573° Longitude: -100.052238°
2. Latitude: 34.887467° Longitude: -100.049717°

Verbal Boundary Description: The SH 52/SH 203 truss bridge over the Salt Fork of the Red River is located approximately ten miles east-NE of Wellington in Collingsworth County, Texas. The nominated property encompasses all structural elements within the 120-foot width of TxDOT right-of-way, including the complete superstructure and substructure, concrete abutments, recently rehabilitated western approach span, all four steel trusses, railing, and concrete deck and piers. See map, page 17.

Boundary Justification: The boundary includes all components historically associated with the bridge.

11. Form Prepared By

Name/title: Stephen F. Austin, with Renee Benn, Mark Brown, Bruce Jensen
Organization: Texas Department of Transportation
Street & number:125 E. 11th Street
City or Town: Austin State: Texas Zip Code: 78701
Email: bruce.jensen@txdot.gov
Telephone: 512-416-2628
Date: January 2013

Additional Documentation

Maps (see continuation sheet 17)

Additional items (see continuation sheets 18 through 27)

Photographs (see continuation sheets 28 through 34)

Photographs

SH 203 Bridge
Wellington vicinity
Collingsworth County, Texas
October 2012

Photo 1
View east, approach from the west
Photo: Renee Benn

Photo 2
View east, sway braces, struts, and hip vertical, first span from eastern approach
Photo: Renee Benn

Photo 3
View east, beneath the deck, floor beams, bottom lateral bracing, bottom chord and piers.
Photo: Stephen Austin

Photo 4
View north, full bridge profile from southeastern banks of the Salt Fork of the Red River
Photo: Stephen Austin

Photo 5
View south, rivet plate connect of the first span from the eastern approach, top chord, portal bracing, diagonal, hip vertical, inclined end post
Photo: Stephen Austin

Photo 6
View east, inclined end post plaque
Photo: Stephen Austin

Photo 7
View east, from Red River bed, second truss span
Photo: Stephen Austin

Description

The Texas State Highway 52 Bridge at the Salt Fork of the Red River (currently serving SH 203) is a Parker through truss in the Texas Panhandle, in a rural area east of Wellington. Constructed in 1939, the 753' long bridge is composed of four identical trusses with eight panels each. The deck is concrete with a width of 27 feet and a roadway width of 24 feet. The substructure consists of concrete piers and steel floor beams, bracing, and bottom chord. All elements and members of the bridge superstructure are comprised of steel. The trusses carry two lanes of traffic: one eastbound and the other westbound. The bridge retains a high degree of integrity.

The SH 52 Bridge is nominated under the *Historic Road Infrastructure of Texas* multiple properties submission. The bridge is on State Highway 203 ten miles east-NE of Wellington, the county seat of Collingsworth County, and three miles from the Oklahoma border. Twenty-six miles south of Interstate 40 and fourteen miles north of Texas State Highway 62, the SH 52 Bridge provides a primary route from Wellington into Oklahoma. The bridge is situated in the High Plains of the Texas panhandle and surrounded by expansive tracts of flat and brushy plains.[1] The landscape around the bridge is sculpted by ranch lands and grassy prairie. Tall brush and trees are densely concentrated on the banks of the Salt Fork of the Red River.

The bridge forms a critical link along SH 203 as it connects the county seats of Wellington, Texas and Mangum, Oklahoma. SH 203 runs in an east-west direction from Hedley Texas, 41 miles to the Oklahoma state border, through an agrarian landscape dominated by pastures and cultivated fields. SH 203 historically experienced lighter traffic loads of about 20% of those carried on the primary north-south corridor along US 83. Before the state assumed responsibility for the route in 1928, it typified the pattern of gravel or dirt county roads following parcel boundaries. State control in 1928 resulted in a new timber pile bridge at this crossing, but no improvements to the road itself until 1939-1940. The subsequent realignment of the route eliminated multiple 90 degree turns, widened the road bed from 24' to 34' and constructed the current bridge (CSJ: 0230-01-004). The road first received a flexible base (asphalt) surface between 1941 and 1944 (CSJ: 0230-01-006 et. seq.) followed by an asphalt seal coat in 1952. A minor widening and safety project was completed in 2005.

Engineering

Each steel truss span (figures 7 & 8) has a web configuration of diagonal members that are in tension and vertical posts that are in compression.[2] The intersection of diagonals and counter bracing occurs in the two middle panels of each span. A defining feature of the Parker truss span is the polygonal top chord. Gradual inclined members and a progression of shortened vertical and diagonal members are elements of the Parker's truss and top chord (figure 10).[3] This design is able to achieve span lengths equal to its predecessor the Pratt truss while using less steel[4]. The Parker's polygonal top chord achieved longer span lengths while allowing greater savings in materials and weight.[5] Bridge prices were traditionally dictated by the weight of materials used in the superstructure.[6] Thus, the Parker became popular with Texas Highway Department engineers for its material efficiency which helped to offset construction costs.

[1] Donald R. Abbe, "COLLINGSWORTH COUNTY," *Handbook of Texas Online* (http://www.tshaonline.org/handbook/online/articles/hcc17), accessed November 29, 2012. Published by the Texas State Historical Association.
[2] Texas Department of Transportation (TxDOT), "Historic Road Infrastructure of Texas" (Austin, TX: TxDOT, 2013),125.
[3] Brinckerhoff, Parsons and Engineering and Industrial Heritage, "A Context For Common Historic Bridge Types: NCHRP Project 25-25-, Task 15", Washington D.C., 2005.
[4] Ibid.
[5] Ibid.
[6] Ibid.

The SH 52 Bridge's top chord possesses five slopes including two inclined end posts (figure 8).[7] The top chord of the truss is connected by four portal struts, seven sway braces, and six pairs of lateral bracing (figure 10).[8] Each truss span is connected with riveted plates at each joint on the top and bottom chords (figure 8).[9] The deck is concrete and surfaced with asphalt, the substructure consists of a steel bottom chord, five steel stringers running the length of the structure, steel floor beams, and steel bottom lateral bracing (figure 7). The steel bottom chord is connected to concrete piers with fixed and rocker bearings (figure 6).[10] There are two concrete abutments, one at each end of the bridge and four concrete dumbbell type piers submerged in the river bed at depths between 11' and 48'.[11] The bridge has one approach span at its western end consisting of concrete piers and deck, asphalt roadway, and type P traffic railings (figure 6).

All steel components are painted silver. Rust is visible on every span, primarily at connection joints and the guard railing. Graffiti is carved into the paint of the eastern inclined end post concentrated around the Texas State Highway Department plaque. There are sections of the deck system with exposed concrete and other erosion damage. Aside from general maintenance of the deck surface, paint, and some repair to sway bracing plate connection, there are no major structural changes to the bridge since its construction. Currently the Texas Department of Transportation (TxDOT) is rehabilitating the bridge. In coordination with the Texas Historical Commission, the work will focus on removing lead paint, repairing the deck with in-kind materials, and additional work to the approach span and guard rails following the Secretary of Interior's Standards for Rehabilitation. As a result of these efforts, the Texas State Highway 203 Bridge at the Salt Fork of the Red River will continue to remain recognizable to its period of significance, retaining its historical integrity of location, design, materials, setting, workmanship, feeling and association.

SH 203 Bridge, General Specs

Main Span Type	Simple Span
Bridge Type	Parker through truss
Number of Spans	4
Deck	Concrete, cast –in-place
Roadway Width	24 ft.
Total Structure Length	753 ft.
Max Span Length	179
Main Roadway	Through
Main Member	Parker truss, polygonal top
Deck Width	27 ft.

[7] Texas Department of Transportation (TxDOT) files, "Plans for Proposed Salt Fork of the Red River Bridge Control-Section-Job No. 0203-01-003".: (Austin, TX, TxDOT headquarters 1928-1978, photocopies), 2.
[8] Ibid.
[9] Ibid.
[10] Ibid.
[11] Ibid.

Statement of Significance

The SH 203 (old SH 52) Bridge is significant for its association with bridge design during the period that the Texas Highway Department (THD) standardized the process in Texas. The bridge's period of significance dates to 1938-1939, coinciding with its construction. The SH 203 Bridge is a Parker through truss; the design was the dominant bridge design for long spans in Texas from 1920 until the late 1940s. The SH 203 Bridge was constructed at the peak of use of the Parker truss bridge design in Texas and is therefore significant for its engineering under Criterion C at the state level of significance.

THD engineers embraced the Parker through truss bridge design between the 1920s and the 1940s, but it fell out of favor quickly. The growth of automobile ownership and advances in bridge and material technologies phased the Parker truss out of use by the postwar period. The SH 203 Bridge was built during the high point of Parker truss construction by THD Bridge engineers who favored the design for its effective use of materials, cost and time efficiency, longer span lengths, and its ability to be easily modified. As the last remaining Parker through truss in the Texas Panhandle, the SH 203 Bridge is now a rare surviving example of a once common bridge type in Texas.

Established in 1876, Collingsworth County is located in the eastern part of the Texas Panhandle. Its 894 square miles form a square border which spans north to Wheeler County and south to Childress County. The western border extends to Donnelly County and the eastern border ends at the Oklahoma state line. Ranching was the primary economic driver in Collingsworth County through the late nineteenth century. Drought and blizzards during the mid-1880s eliminated many large ranches in the county, giving way to smaller ranching operations and the beginning of small scale agriculture in the county.[12] By 1930, Collingsworth County had become a mixed agricultural economy, boasting 2,112 farms and ranches and 14,461 residences.[13]

The Great Depression and Dust Bowl strongly impacted the vitality of the economy in Collingsworth County. As agricultural markets collapsed, federal programs were employed to assist farmers and ranchers with the disposal of cattle and to implement crop and soil restoration practices.[14] Between 1920 and 1940, Collingsworth County lost 754 farms and ranches and over 4,000 residents.[15] As populations in the county dropped, many residents began to merge their small rural populations into larger towns. [16] School consolidation was a driving factor in the growth of Quail, Dodson, and Wellington.[17] The unification of these communities was made possible by the rise of automobile ownership and the expansion of roads within Collingsworth during the 1920s.[18] The sparse population made automobile travel a necessity in Collingsworth County during the Great Depression.[19] Vehicle registration records indicated that Collingsworth County supported 2,546 automobiles in 1932. [20]

[12] Donald R. Abbe, "COLLINGSWORTH COUNTY," *Handbook of Texas Online*(http://www.tshaonline.org/handbook/online/articles/hcc17), accessed December 17, 2012. Published by the Texas State Historical Association.
[13] Ibid.
[14] *Collingsworth County History*. Vol. 2. Wellington: Collingsworth County Museum, 2009.
[15] I Donald R. Abbe, "COLLINGSWORTH COUNTY," *Handbook of Texas Online*(http://www.tshaonline.org/handbook/online/articles/hcc17), accessed December 17, 2012. Published by the Texas State Historical Association.
[16] *Collingsworth County History*. Vol. 2. Wellington: Collingsworth County Museum, 2009.
[17] Ibid.
[18] Ibid.
[19] Ibid.
[20] Clyde Chestnut Brown, "A Survey History of Collingsworth County, Texas", master's thesis, University of Colorado, 1934.

Travel was vital to community and educational connections in Collingsworth County; however, research indicates that automobile traffic was of little importance to the economy of Collingsworth. From its inception, the county was connected by railroad lines and had a direct line to coastal and northern markets by 1932.[21] Before the automobile became essential to county life, the railroads linked Collingsworth with supply lines to sell agriculture and livestock and obtain goods from the Great Plains.[22] The SH 203 Bridge was not built to promote or sustain routes of economic importance. Research suggests that the SH 203 Bridge was erected out of a need to build a durable, long lasting bridge in a rural and riparian area of Texas. The Salt Fork of the Red River had an established history of severe flooding capable of damaging bridges. This fact prompted THD engineers to construct a Parker through truss. The design was chosen for its perceived ability to meet the future traffic demands of Collingsworth County and endure any future flooding.

The bridge was located on SH 52 (now SH 203) during its period of significance. The portion of highway east of Wellington where the bridge was located remained SH 52 until 1945 when it was renumbered as SH 203. State Highway 203 itself carries traffic between two county seats- Wellington Texas and Mangum Oklahoma (where it is named Oklahoma State Highway 9). SH 203 runs in an east-west direction and begins as SH 9 at the state border of Oklahoma and Arkansas near Fort Smith, running west across the entirety of Oklahoma and ending in Hedley, Texas (population approximately 400). As a state highway, it is less prominent in use and importance in Texas than that of nearby US 83, which runs north and south from the Canadian border to the Mexican border at Matamoros. This is borne out in traffic counts, the 2009 data show that average daily traffic (ADT) on US 83 north of Wellington to the Red River was 770, and ADT on SH 203 east of Wellington to the state border was 130. In 1946 (the earliest data ADT available post bridge construction) the ADT for US 83 between Wellington and the Red River was 2230 and for SH 203 between US 83 in Wellington and the state border - 490.

Historic Road Corridor Assessment

SH 203 itself was assessed to determine if there was NRHP-significance to this route. Before SH 203 (then SH 52) was realigned in 1939, county roads likely of gravel or dirt surface following parcel boundaries carried traffic between the cities. Some of these bypassed county roads remain, functioning as one lane gravel roads or driveways to farms. The state took control of SH 52 in 1928 and completed a 20’ wide timber pile bridge in 1929 (CSJ: 0230-01-001). No improvements were made to the road itself until 1939-1940 when the road was realigned to eliminate 90 degree turns and the subject bridge constructed (CSJ: 0230-01-004), which would be the largest undertaking on SH 203 to date.

Today the road carries two 12’ lanes of traffic (one in each direction) with shoulders within a ROW of 120’. Culverts had safety end treatments applied in 2005. The 10’ shoulders taper to 2’ on each side as you travel east. There are four bridge class culverts, constructed of multiple concrete boxes, between US 83 and the state line. All were constructed in 1940 and the one closest to US 83 (NBI 250440023001007) was widened in 1975 to accommodate the current 10’ shoulders at the location near the intersection. Two of the bridge class culverts had Type P rail when built but this has been removed and replaced with modern metal beam guard rail. These concrete bridges and culverts replaced timber and metal pipe structures.

When THD realigned the roadway in 1939, it was two lanes (one in each direction) with a 24’ maximum width (15’ minimum), gravel (unimproved) surface. THD widened it to 34’ gravel surface with 16 concrete box culverts installed within a 120’ to 200’ ROW between US 83 and the border. Land use is shown on the plan set and consists mostly of pasture and cultivated fields with some groves of trees concentrated around drainages and creeks.

[21] Clyde Chestnut Brown, “A Survey History of Collingsworth County, Texas”, master’s thesis, University of Colorado, 1934.
[22] Ibid.

Building use is agricultural, residential or educational (Midway school). The land use and setting remains much the same today, although the school is gone.

There are no historic-age road related resources on SH 203 in Texas except for one. A ca. 1920 combined service station, house and tourist cabins building is located to the west of the bridge. The property appears on the 1930 plan set as a house and barn (the barn was destroyed by realignment of SH 52). The abandoned house/cabins/service station building is now oriented away from the SH 203 roadway (facing south) due to the shift in alignment. The wood frame L-shaped building is missing all windows and doors and has one side of its canopy bricked in. Little integrity remains and the property is not eligible for listing, as determined by TxDOT and the THC in 2004. A local historian described the property as a "bootlegging" facility prior to 1933. 1962 aerials show a drive-in theater near US 83 in Wellington but it is no longer extant.

On the Oklahoma side, the road narrows to two lanes (24' total) with 4' shoulders in both directions within a 100' ROW. Culverts are typical concrete boxes, drop inlets, or steel pipes, and are of undetermined various ages. One bridge, located three miles east of the state line, was constructed in 1979. The road connects the unincorporated communities of Vinson in Harmon County and Reed in Greer County on its way to Mangum. The shoulders widen to 10' in both the Vinson and Reed vicinity. There are two historic-age road related resources (former service stations) in both the Vinson and Reed vicinity but they do not retain integrity to contribute to a potential historic road corridor. Land use in general is rural with farms and ranches, with few trees planted for windbreaks or clustered near drainages, similar to the Texas side of the border.

Historic map research was conducted for the Texas side of the route between Wellington and the border, a distance of approximately 12 miles. The 1936 THD map shows about 25 properties within five miles of Wellington along SH 52, with about five outside the town. A school is shown about four miles east of Wellington on SH 52 and also NE of the subject bridge off SH 52 on a county road. Neither are extant. 1960, 1962 and 1982 quads show approximately the same number of properties between US 83 and the border as were extant in 1936, though density in the Wellington vicinity is much less. This number and density remains the same today. Extant properties between Wellington and the Texas border include farms and ranches, as well as a cotton processing facility (ca. 1980) near the town.

Location, setting and feeling remain since the POS. Aspects of design and materials, however, have changed due to paving and widening of the roadway and one bridge, removal of rail on bridges, and safety end treatments on culverts. Aspects of workmanship were never present except on the subject bridge itself. SH 203 was not one of the initial 38 designated state highways, as the route did not rise to that level of importance. It carries traffic in the Panhandle only through two counties. The SH 203 Bridge did not connect important economic routes and is located on a roadway that has no significance to broader patterns of US or state history. The roadway is an unremarkable example of a typical rural state highway in the State of Texas and does not rise to the level of NRHP-significance.

Engineering aspects of Parker trusses

Prior to the development of the Parker truss, the Pratt through truss reigned as the most popular bridge design of the late-nineteenth and early-twentieth century. Heavy vertical and thin diagonal members acting against each other in compression and tension as a way of distributing traveling loads comprised the engineering system of the Pratt type (figure 10).[23] The direct and simple design features of the Pratt allowed for expedient construction, adding to the

[23] Texas Department of Transportation (TxDOT), "Historic Road Infrastructure of Texas" (Austin,TX: TxDOT, 2013, digital) 125.

type's popularity, but it lacked the ability to achieve large span lengths. Using the Pratt as a template, engineers began to develop subsets of the design that maintained the Pratt's efficiency but were capable of longer lengths.

Developed in 1870 as one of these subsets, the Parker through truss achieved longer span lengths and used materials efficiently. Its standardized designs helped streamline labor and lower fabrication expenses, rendering it increasingly popular in the Texas market.[24] The Parker truss was adopted by the Texas Highway Department (THD) during the 1920s and throughout the 1940s, in part for its cost efficiency and versatility.[25] The added economic turmoil of the Great Depression increased the appeal of the cost effective Parker design as the THD worked to improve the state's transportation system.

The configuration of the Parker truss maintains the deep web members of the Pratt but abandoned the horizontal top chord (figure 8). Instead, a multi-sided polygonal top chord is employed, increasing structural rigidity and allowing for span lengths between 100 and 300 feet. For this reason the THD developed standard design plans for the Parker truss, ranging in different span lengths, which could be modified as needed. THD plan sets hint that the SH 203 Bridge is derived from the T-24-175 standard plans designed in 1936.

The Parker truss design allowed engineers to modify the length of each bridge with relative ease while maintaining structural durability under heavy concentrated moving loads.[26] THD engineers saw a need for such durability, largely because of the increase in automobile traffic across Texas. With high occupancy traffic in mind, the THD developed standardized design plans for the Parker truss that would be strong enough to withstand the most rigorous conditions in the state while remaining cost efficient. The SH 52 corridor was not in a particularly high traffic area (approx.150 vehicles per day in 1938).[27] However, the THD was concerned with producing a bridge that would retain its structural integrity over time. In addition, the THD wanted a bridge that would withstand the type of flooding that had destroyed the wooden predecessor to the SH 203 Bridge. For the THD, it was cost and time efficient to erect a bridge from standardized plans that was, in many ways, over built for the loads it would face in rural Collingsworth County. The agenda for the THD was to build a bridge that would not only meet traffic needs in 1939 but remain a viable bridge in the long term.

In 1939, the THD undertook improvements to the route linking Wellington, Texas and Mangum, Oklahoma, creating an all-weather state highway facility that met modern standards. Prior to the creation of the Texas State Highway Department, bridge construction and design almost solely existed in the hands of private sector contractors. The cost and design of a bridge prior to the creation of the THD depended more on the ability of bridge company salesman to persuade cities and counties to purchase them rather than infrastructure needs. In 1915, the Collingsworth County Commissioners Court purchased a wooden bridge built by the Austin Brothers Bridge Company.[28] The Bridge was replaced in 1929 by a THD wooden timber span bridge which stood until flooding damaged the bridge in 1938.[29]

[24] Ibid.
[25] Ibid.
[26] Ibid.
[27] Texas Department of Transportation, "Records Management. Project Correspondence: Collingsworth Co. (pt. 31-3-5)", (Austin, TX: TxDOT, 1937-40.
[28] Clyde Chestnut Brown, "A Survey History of Collingsworth County, Texas", master's thesis, University of Colorado, 1934.
[29] Texas Department of Transportation. "Control-Section-Job No. 0203-01-003", (Austin,TX: TxDOT,2013.photocopies), 2.

Record flooding of 17.5 feet[30] occurred on June 15, 1938, subsequently damaging two bridges located upstream from the SH 203 Bridge.[31] The washout of piers and other debris from these upstream structures were responsible for the damage inflicted on the bridge. Deemed unsalvageable, a temporary ford crossing was built to mitigate traffic flow and to maintain a direct route between Wellington and the Greer County seat of Mangum, Oklahoma as planning for a permanent replacement bridge began.[32] THD Engineer Julian Montgomery recommended finding a more stable location for the bridge due to the nature of damage sustained by its predecessor. Construction preparations began in August of 1938 with test borings and alignment surveys taking place under the supervision of division engineer J.B. Nabers.[33] Right-of-way for the bridge and the new approach alignment was purchased by the THD once preliminary survey work had been completed by Nabers.[34] The new bridge was moved seventy-five yards north of the previous bridge as a result.[35] This new location was chosen for its stable red clay and shale bedrock which would help prevent future flood damage. Thomas B. Potts was named the resident engineer in charge of overseeing construction.[36]

The funds for the bridge were jointly allocated by the Texas Highway Department and the Federal Aid System, (as a U.S. Emergency Relief Project), each of which committed $80,000. When letting for the contract was concluded Purvis & Bertram Construction Co. of Ft. Worth, Texas were awarded the construction contract with the winning bid of $126,162.51. The economic hardships of the 1930s influenced many aspects of the bridge. The choice by THD to select the lowest possible bid was another example of attempts at cost savings for the project.

The Federal Aid System was established as part of the Federal-Aid Highway Act of 1916 and was extended in 1921. Though the bridge was designated as a Federal Aid Project, a deliberate effort to employ local labor was illustrated by THD and Collingsworth County officials. The Wellington Leader wrote in 1939, “Local labor will be used on the two bridges, Judge Bishop said, and pointed out that while they are federal projects, they are not WPA projects and WPA labor will not be used.”[37]

Two Federal Aid Project plaques are located at road level of both the eastern and western approaches which read:

East Bound:	**West Bound:**
Texas	Texas
E.R.P. 7	E.R.P. 7
STA. 487+80	495+33.33
Length 0.142	Length 0.142
Built 1939	Built 1939

[30] Texas Department of Transportation, “Records Management. Project Correspondence: Collingsworth Co. (pt. 31-3-5),” (Austin, TX: TxDOT, 1937-40).
[31] “Loss Toll Mounts From Flood Waters”, *Wellington Leader*, June 16, 1938.
[32] Texas Department of Transportation, “Records Management. Project Correspondence: Collingsworth Co. (pt. 31-3-5),” (Austin, TX: TxDOT, 1937-40).
[33] Ibid.
[34] Ibid.
[35] “Opening of Bids for Two Bridges On February 21.” *Wellington Leader*, February 9, 1939.
“Construction Is Underway on East Salt Fork Bridge.” *Wellington Leader*, April *27*, 1939.
[37] “Opening of Bids for Two Bridges On February 21.” *Wellington Leader*, February 9, 1939.

Bronze Plaques on east and west inclined end posts of the structure read:

SALT FORK RED RIVER BRIDGE
BUILT IN 1939 BY THE
TEXAS HIGHWAY DEPARTMENT
FEDERAL WORKS AGENCY
PUBLIC ROADS ADMINISTRATION
STATE HIGHWAY COMMISSION
BRADY GENTRY CHAIRMAN
HARRY HINES MEMBER
ROBERT LEE BOBBITT MEMBER
JULIAN MONTGOMERY
HIGHWAY ENGINEER
PURVIS & BERTRAM CONSTRUCTION CO.
CONTRACTORS

Conclusion

The SH 203 Bridge is one of only nineteen Parker truss bridges remaining in Texas (Table 1). Its design is significant as it represents the advances in standardization of bridge design and engineering. The bridge is a once common bridge design employed by the Texas Highway Department between the 1920s and 1940s.[38] The bridge is eligible for listing on the National Register of Historic Places under Criterion C in the area of engineering at the state level. The bridge retains its integrity of design and materials, feeling, and location. Its setting also has not been compromised by development and remains very close to its original state at time of construction.

[38] Texas Department of Transportation (TxDOT), "Historic Road Infrastructure of Texas" (Austin, TX: TxDOT, 2013), 125.

Table 1. TxDot Bridge Database– Parker Through Truss Bridges, ca. 2012.

Parker Through Truss Bridges In Texas			
Facility Carried	**Feature Crossed**	**Year Built**	**Structure Length**
IH 20 NFR	BRAZOS RIVER	1934	892
SH 290	PECOS RIVER	1933	940
IH 10 N FR	JOHNSON FORK CREEK	1938	666
FM 817	LEON RIVER	1939	412
SH 19 SB BYPASS	TRINITY RIVER	1941	2934
FM 521	BRAZOS RIVER & SH 332	1939	1124
US 90	COLORADO RIVER	1932	766
BU 71 F	COLORADO RIVER	1949	1042
US 87	GUADALUPE RIVER	1938	1295
BU 71E	COLORADO RIVER	1941	1414
US 183 SBFR	COLORADO RIVER	1938	1221
CR 456	BRUSHY CREEK	1912	140
IH 10NFR	CIBOLO CREEK 1933	1933	434
US 281 SB ML	GUADALUPE RIVER	1935	612
US 90 EB ML	NUECES RIVER	1933	975
US 190	NECHES RIVER	1943	1601
SH 63	SABINE RIVER	1937	1882
SH 16	COLORADO RIVER	1939	1205
SH 203	SALT FORK OF RED RIVER	1939	753

The SH52 Bridge is of median length and year of construction in the list of Parker through truss bridges remaining in Texas.

Bibliography

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Boundary Map
Source: Google Earth, accessed March 25, 2013.

1. Latitude: 34.887573° Longitude: -100.052238°
2. Latitude: 34.887467° Longitude: -100.049717°

Figure 1. SH 203 Bridge
Date: December 11, 1939
View west, from bank of the Salt fork of the Red River, without vegetation
Photo: TxDOT Staff

Figure 2. SH 203 Bridge
Date: December 11, 1939
View west, from bank of the Salt fork of the Red River, without vegetation
Photo: TxDOT Staff

Figure 3. TxDot GIS Analysis Map – Texas U.S. highways and Parker Truss Bridges, 2012.
Black lines: U.S. Interstate highways in Texas
Red dots: remaining Parker truss bridges in Texas (2012**)**
GIS Analyst: Warren Grannis

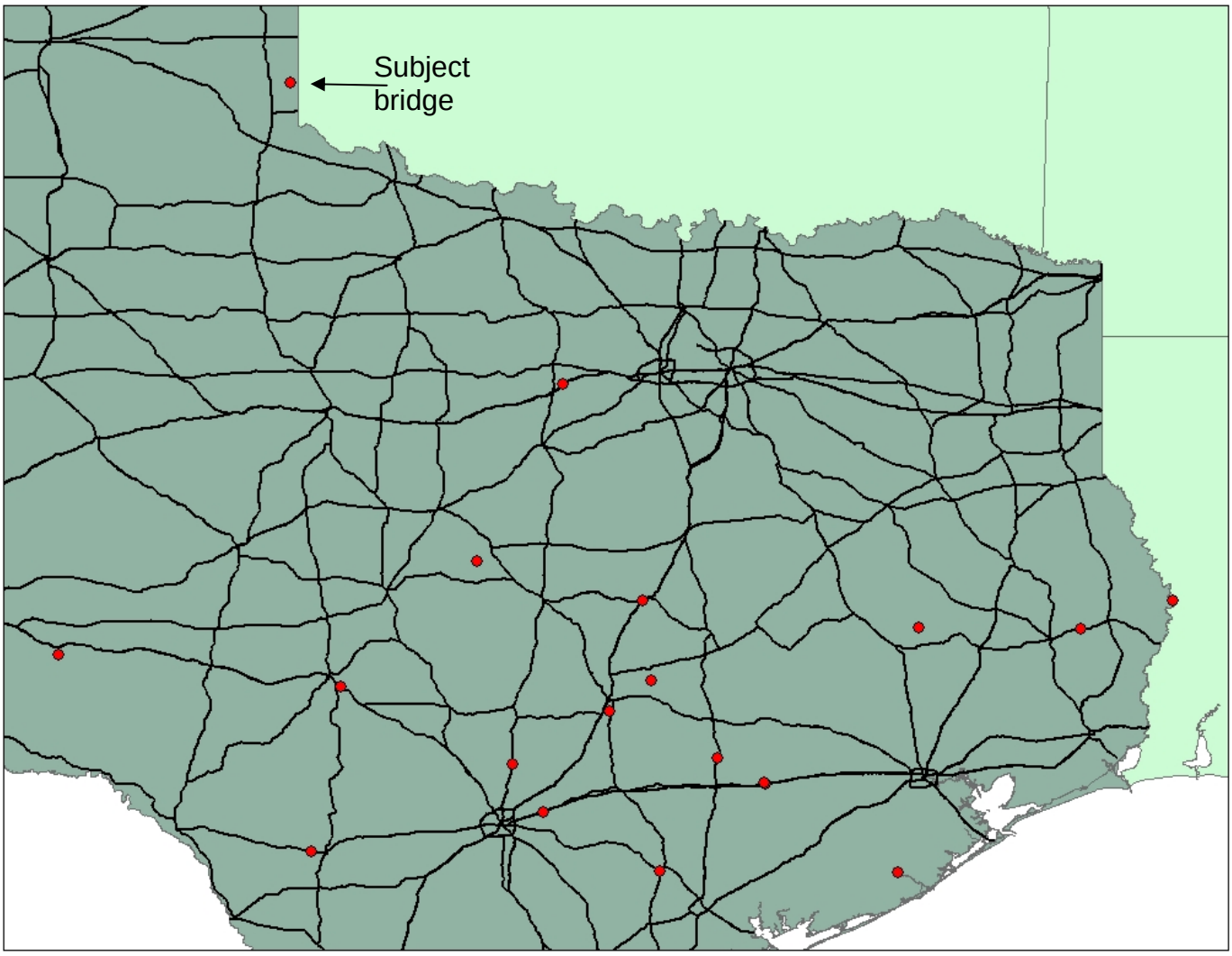


Figure 4. TxDOT GIS Analysis Map – Historic map overlay

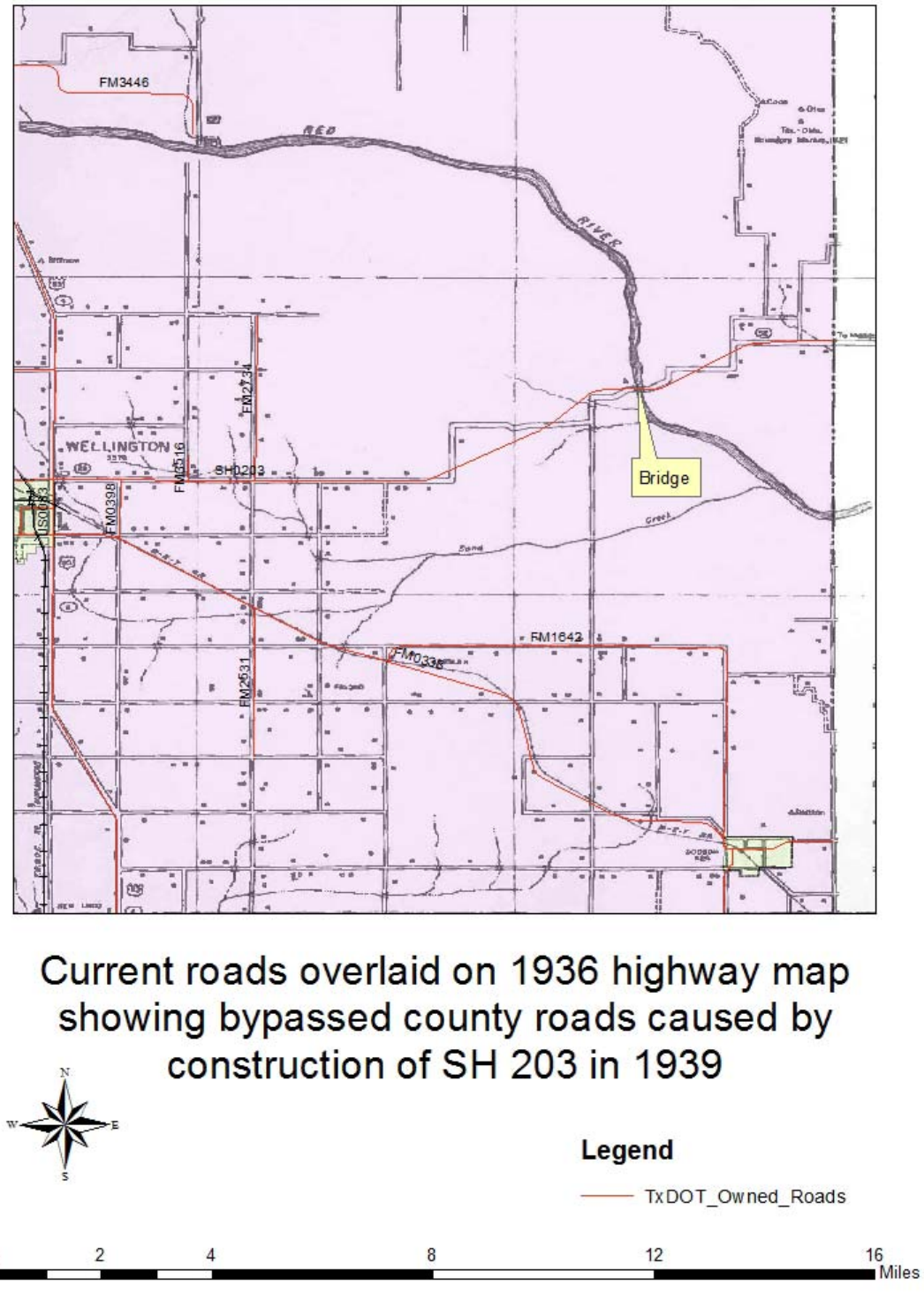


Figure 5. Texas Highway Department: Plans for Proposed Salt Fork of Red River Bridge. Control-Section-Job 0203-01-03

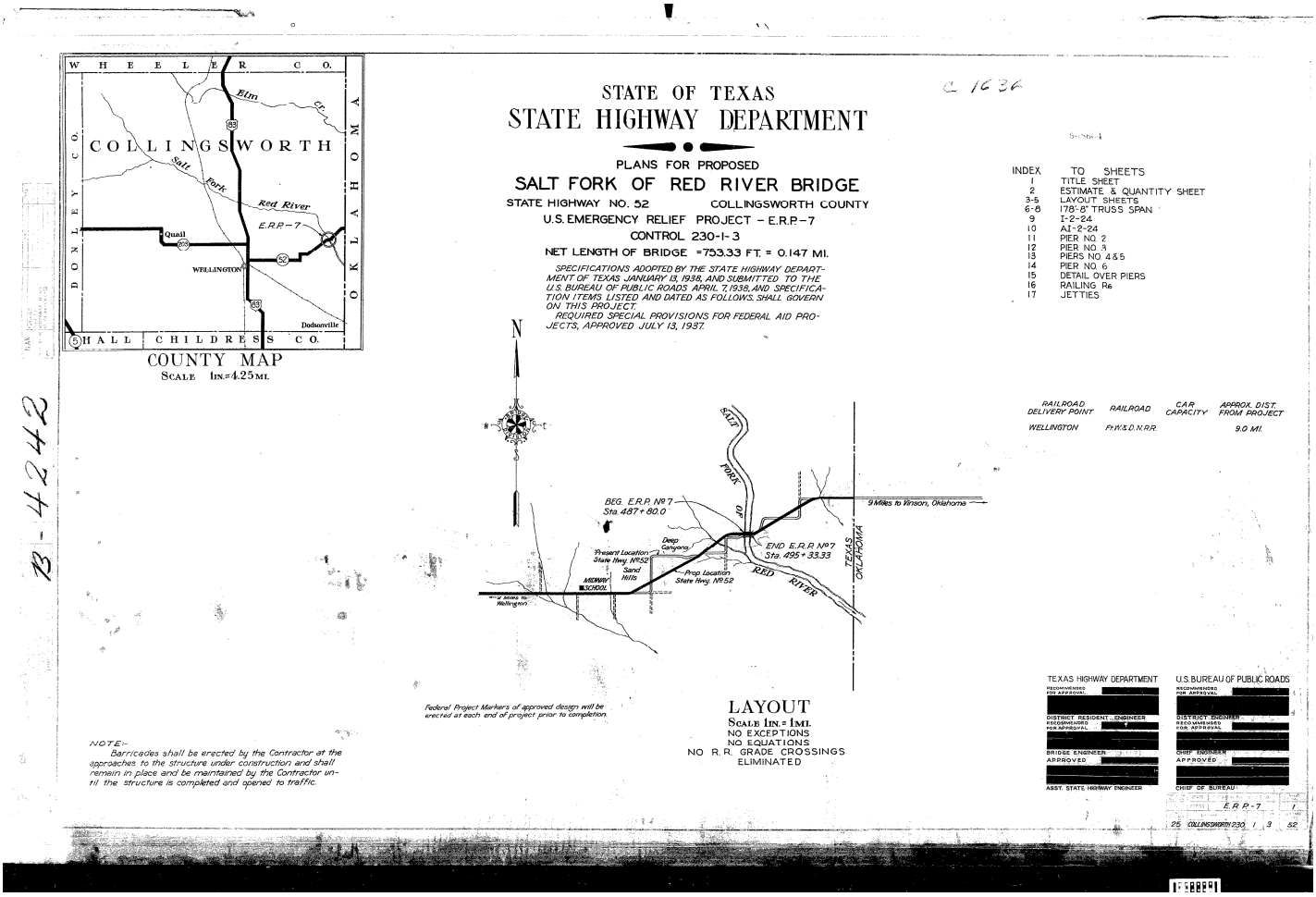


Figure 6. Texas Highway Department: Plans for Proposed Salt Fork of Red River Bridge. Control-Section-Job 0203-01-03

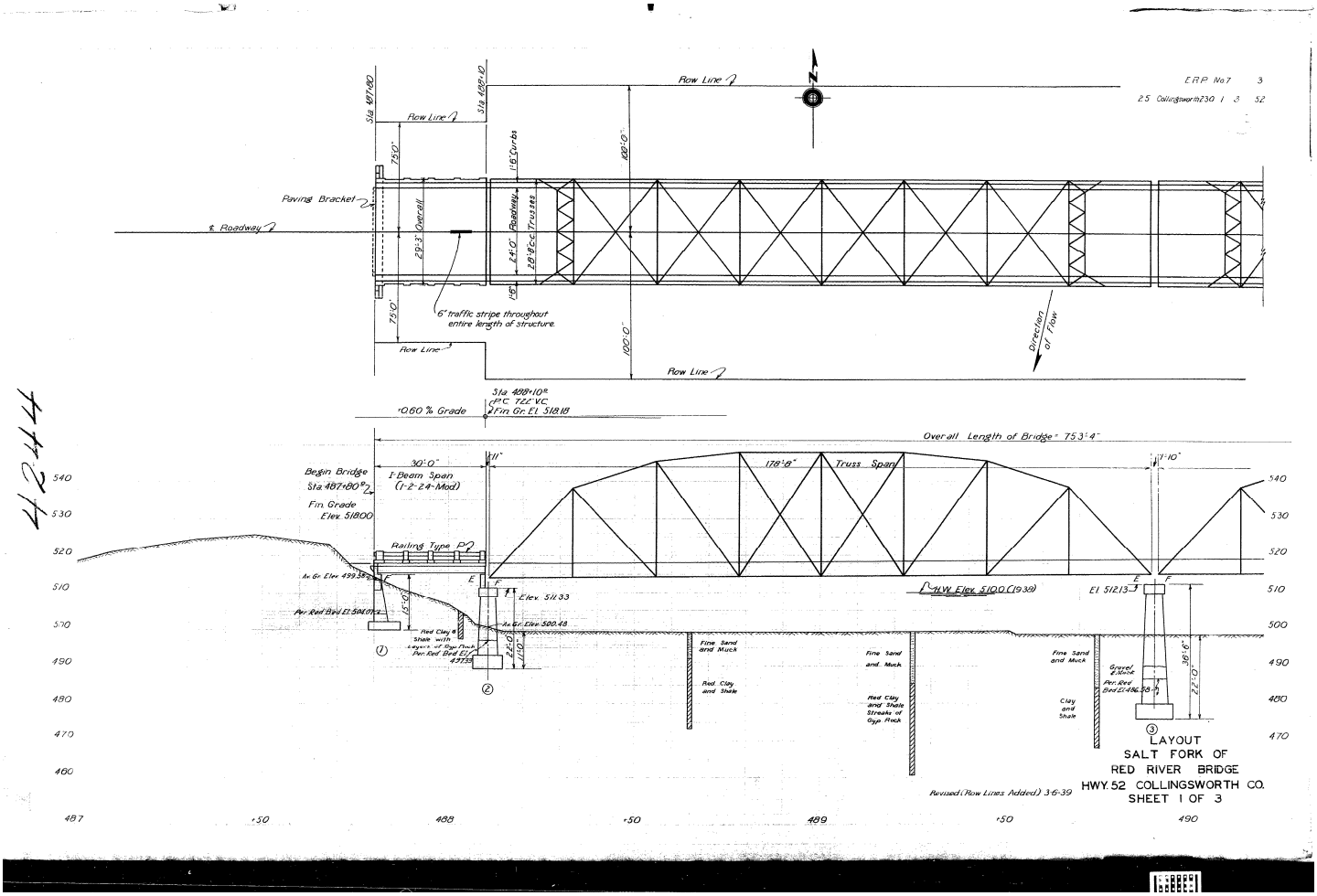


Figure 7. Texas Highway Department: Plans for Proposed Salt Fork of Red River Bridge. Control-Section-Job 0203-01-03

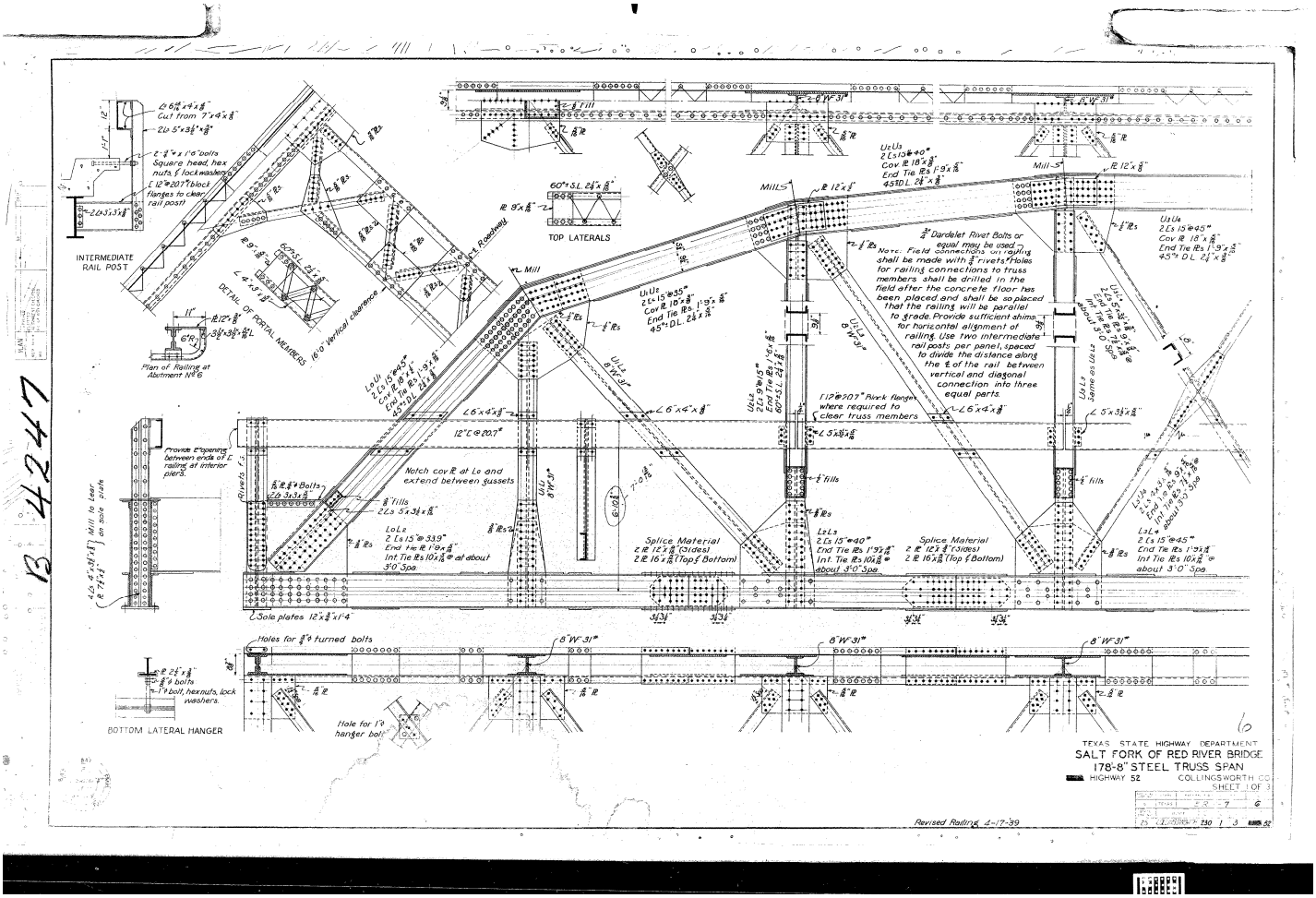


Figure 8. Texas Highway Department: Plans for Proposed Salt Fork of Red River Bridge. Control-Section-Job 0203-01-03

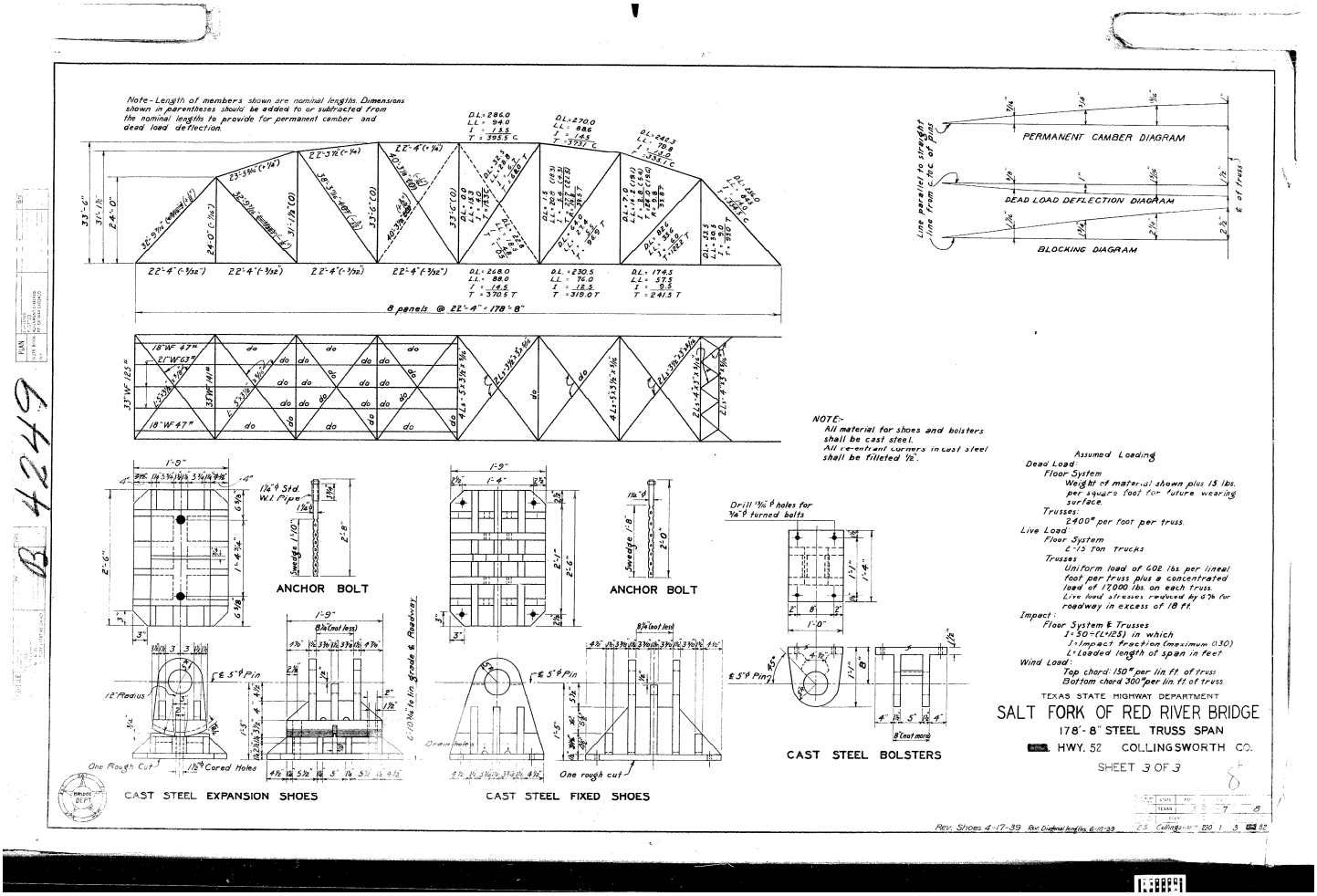


Figure 9. Texas Highway Department: Plans for Proposed Salt Fork of Red River Bridge. Control-Section-Job 0203-01-03

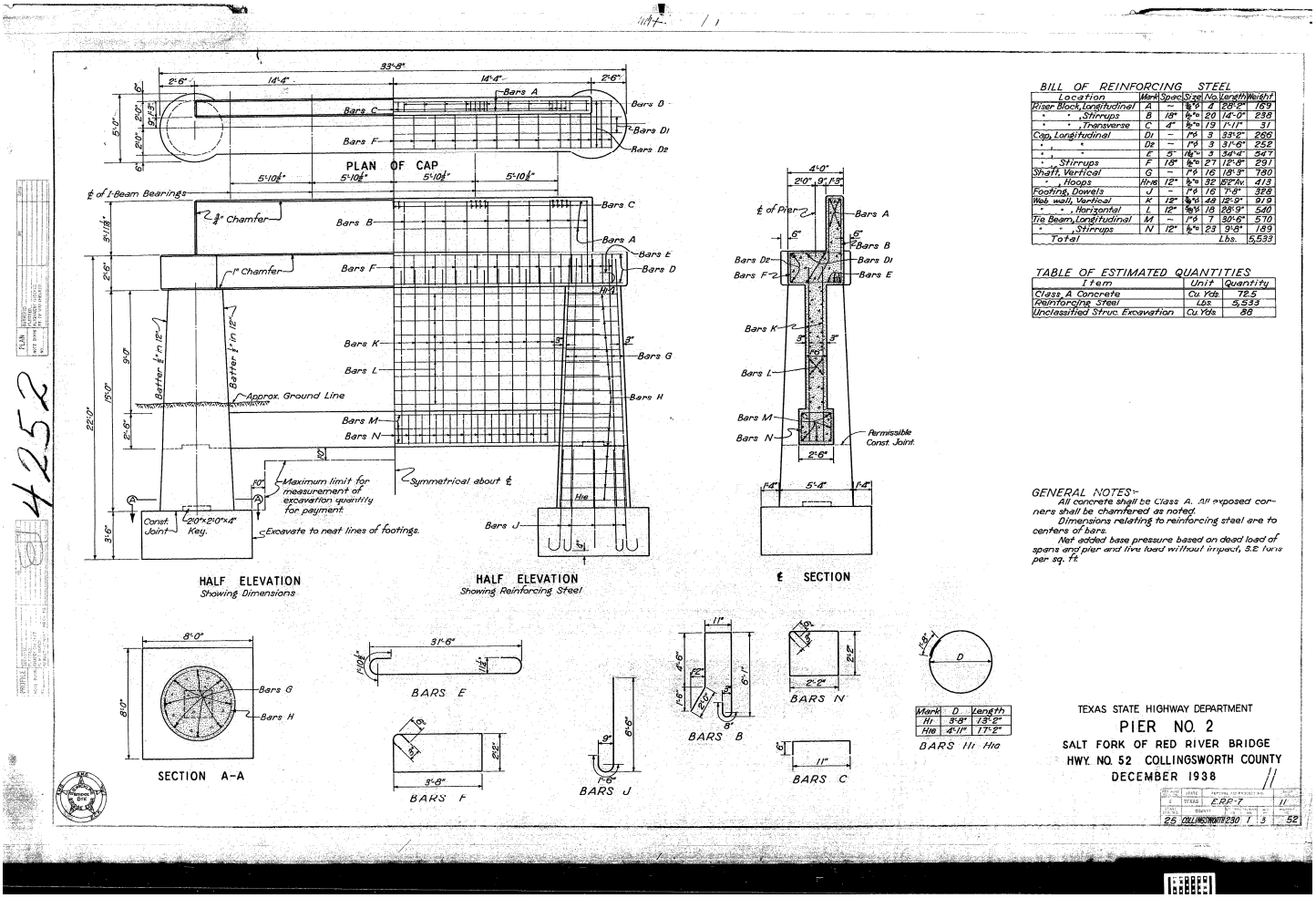
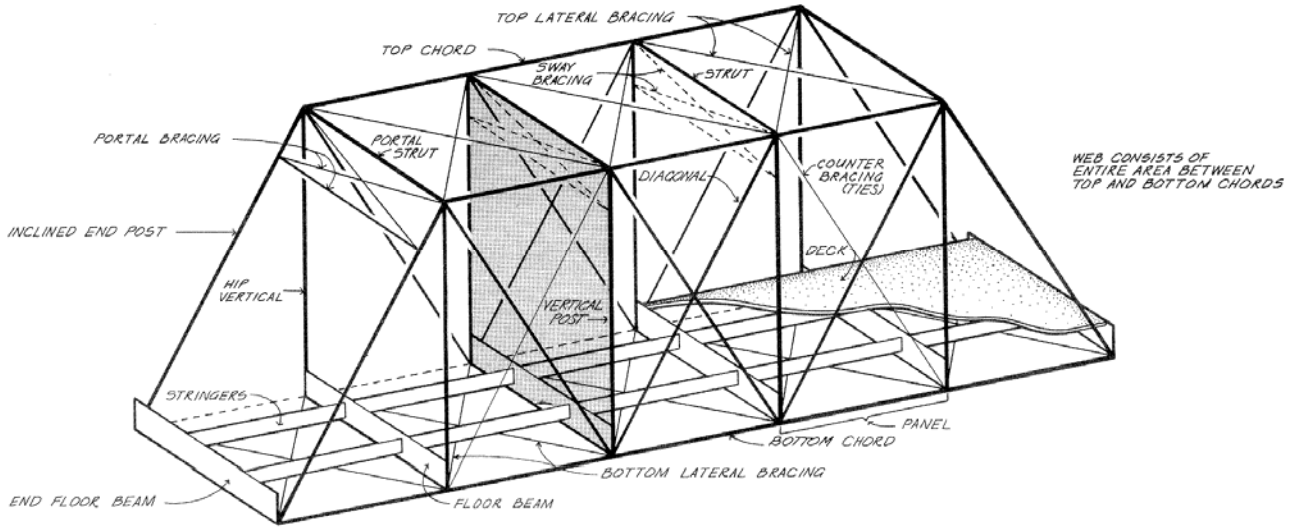


Figure 10.

Truss Bridge Identification Chart
Historic American Engineering Record



Photographs

SH 203 Bridge
Wellington vicinity
Collingsworth County, Texas
October 2012

Photo 1
View east, approach from the west
Photo: Renee Benn

Photo 2
View east, sway braces, struts, and hip vertical, first span from eastern approach
Photo: Renee Benn

Photo 3
View east, beneath the deck, floor beams, bottom lateral bracing, bottom chord and piers.
Photo: Stephen Austin

Photo 4
View north, full bridge profile from southeastern banks of the Salt Fork of the Red River
Photo: Stephen Austin

Photo 5
View south, rivet plate connect of the first span from the eastern approach, top chord, portal bracing, diagonal, hip vertical, inclined end post
Photo: Stephen Austin

Photo 6
View east, inclined end post plaque
Photo: Stephen Austin

Photo 7
View east, from Red River bed, second truss span
Photo: Stephen Austin

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