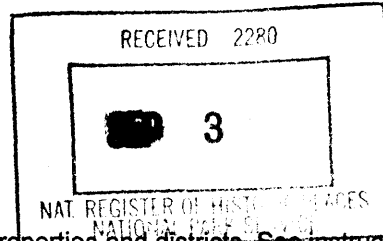


United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form



This form is for use in nominating or requesting determination for individual properties and districts. See instruction in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name St. Charles River Bridge
other names/site number CDOT No. L-19-C; 5PE3980

2. Location

street & number US Highway 50 at milepost 7.77 [N/A] not for publication
city or town Devine [X] vicinity
state Colorado code CO county Pueblo code 101 zip code _____

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 nationally statewide locally. ([] See continuation sheet for additional comments.)
Georgina Corteglia State Historic Preservation Officer August 11, 2002
Signature of certifying official/Title Date
State Historic Preservation Office, Colorado Historical Society
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria.
([] See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:
 entered in the National Register
[] See continuation sheet.
 determined eligible for the National Register
[] See continuation sheet.
 determined not eligible for the National Register.
 removed from the National Register
 other, explain _____
[] See continuation sheet.
Edson A. Beall Signature of the Keeper 10/15/02 Date of Action

St. Charles River Bridge
Name of Property

Pueblo County, Colorado
County/State

5. Classification

Ownership of Property

(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property

(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

(Do not count previously listed resources.)

Contributing	Noncontributing	
--------------	-----------------	--

0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	Total

Name of related multiple property listing.

(Enter "N/A" if property is not part of a multiple property listing.)

Highway Bridges in Colorado

Number of contributing resources previously listed in the National Register.

0

6. Function or Use

Historic Function

(Enter categories from instructions)

Road-related

Current Functions

(Enter categories from instructions)

Road-related

7. Description

Architectural Classification

(Enter categories from instructions)

Other: Steel, rigid-connected Parker through
truss

Materials

(Enter categories from instructions)

foundation _____
walls _____
roof _____
other Steel
Concrete
Asphalt

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

St. Charles River Bridge
Pueblo County, Colorado
Highway Bridges in Colorado, MPS

Section number 7 Page 1

DESCRIPTION

Location: US Highway 50 at milepost 7.77, 9.3 miles west of junction US Business Highway 50

Setting: Over St. Charles River

Structure length: 155 feet
Structure width: 31.50 feet
Roadway width: 30 feet

Main span number: 1
Main span length: 150 feet

Superstructure: Steel rigid-connected Parker through truss
Substructure: Concrete abutments and wingwalls
Floor/decking: Concrete deck with asphalt overlay
Other features: Upper chord – 2 channels with cover plate and lacing
Lower chord – 2 channels with batten plates
Vertical and diagonal – wide flange
Floor beams and stringers – steel I-beam
Steel lattice guardrails
Colorado Highway Department bridge plates

Erected: 1942
Designer: Colorado Department of Highways
Fabricator: Midwest Steel & Iron Works
Contractor: Frank M. Kenney

Alterations: Steel flex beam guardrails added at approaches circa 1980

St. Charles River Bridge
Name of Property

Pueblo County, Colorado
County/State

8. Statement of Significance

Applicable National Register Criteria

(Mark "X" in one or more boxes for the criteria qualifying the property for National Register listing.)

- 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.
- 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

(Mark "X" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

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

Areas of Significance

(Enter categories from instructions)

Transportation

Engineering

Periods of Significance

1942-1952

Significant Dates

N/A

Significant Person(s)

(Complete if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Colorado Department of Highways

Midwest Steel & Iron Works

Kenney, Frank M.

Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local Government
- University
- Other

Name of repository:

Colorado Historical Society

Colorado Dept. of Transportation

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

St. Charles River Bridge
Pueblo County, Colorado
Highway Bridges in Colorado, MPS

Section number 8 Page 2

SIGNIFICANCE

The 1942 St. Charles River Bridge on US Highway 50, 9.3 miles west of the junction of US Business Highway 50, meets the registration requirements under Criterion A in the area of Transportation and under Criterion C in the area of Engineering as set forth in the *Highway Bridges in Colorado*, Multiple Property Documentation Form. The period of significance begins in 1942 with the completion of the bridge and extends through its historic use to 1952, a date fifty-years-of-age in keeping with National Register criteria.

One of the first primary roads designated by the Highway Commission extended along the Arkansas River Valley in southeastern Colorado. Beginning at Pueblo, State Primary Road No. 5 followed the Atchison, Topeka & Santa Fe Railroad and the river eastward through the farming communities of Boone, Manzanola, and Rocky Ford to La Junta, where it joined with Primary Road No. 6 and ran to the Kansas state line. Extending some 65 miles, Primary Road No. 5 followed one of the oldest overland routes through Colorado. It soon became part of the National Old Trails Highway, one of several transcontinental auto routes that extended across the state. In 1922, the U.S. Bureau of Public Roads approved Colorado's first federal aid highway system. Of the 48,000 miles of roads in the state, some 3,360 were declared as state highways, under the aegis of the Colorado Highway Department (CHD). Under the new system, State Primary Road No. 5/6 was redesignated as State Highway 6. Three years later State Highway 6 was incorporated into US Highway 50, which ran from Holly on the eastern edge of the state to Grand Junction on the west.

During the 1910s, Pueblo County and the state made incremental improvements to the route, grading the roadway and building drainage structures. When the existing bridge over the St. Charles River east of Pueblo was destroyed by the June 1921 flood, CHD replaced it with a major steel truss, using federal aid funds. Twenty years later, this truss had become a serious bottleneck on the highway, and CHD began planning its replacement. In 1942, CHD undertook Federal Aid Project 163(2), which included construction of the current St. Charles River Bridge. For this long-span replacement truss, CHD delineated a rigid connected Parker through truss, subdivided into eight equal length panels, the standard CHD design for long spans.

CHD awarded the contract to build the bridge to Frank M. Kenney of Denver. Using a steel superstructure fabricated in Denver by the Midwest Steel & Iron Works, Kenney completed the St. Charles River Bridge in 1942. Since then it has carried mainline traffic on US Highway 50. In essentially unaltered condition, the bridge remains an important transportation related resource.

**United States Department of the Interior
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**National Register of Historic Places
Continuation Sheet**

St. Charles River Bridge
Pueblo County, Colorado
Highway Bridges in Colorado, MPS

Section number 8 Page 3

Engineering

The bridge is noteworthy as an intact example of CHD standard truss design. The highway department erected numerous Parker trusses between 1922 and 1945, ranging in length from 125 to 200 feet, at highway river crossings throughout the state. Subsequent attrition of these long span bridges has been severe, and only eight Parker through trusses remain in place on Colorado's highways. The St. Charles River Bridge is important as one of the few surviving examples of what was once a mainstay structural type. Substructural repairs made circa 1980 and the installation of steel flex beam guardrails at the approaches are the only alterations.

Among the first Parker through trusses built from CHD standard plans were the single span structure over the Rio Grande River near Monte Vista; the Las Animas Bridge, a five span structure over the Arkansas River; and the Buttes Bridge, a two span structure over Fountain Creek in El Paso County. Erected in 1922-1923, these bridges all used eight panel, 150 foot trusses, with only minor variations in their portal struts and web members.

Although designed 20 years later, the St. Charles River Bridge reflected little change from its predecessors. The Parker truss that CHD delineated for this structure extended 150 feet between the bearing pins and carried a 30 foot wide roadway. It was subdivided into eight 18 feet 9 inch panels, the tallest of which stood 25 feet 10 inches from chord to chord. The upper chords and inclined endposts consisted of two back-to-back 12 inch steel channels, covered by a continuous 3/8 inch steel plate on top and joined by bar lacing underneath. The verticals were 10 inch wide flanges, as were the diagonals in the outermost panels. The interior panel diagonals consisted of two 3x4 inch angles with batten plates. These were braced laterally by a laced two angle member that extended horizontally across the central four panels. The lower chords were made up of two back-to-back 12 inch channels with batten plates. All of these web members were field riveted using 3/8 inch steel gusset plates.

To brace the two webs laterally, overhead struts extended 16 feet above the roadway at the panel points. The interior struts consisted of two back-to-back pairs of 3x5 inch angles, joined by bar lacing and braced underneath by latticed panels. The portal struts were heavily gusseted, steel angle lattices, with the lower chords angled downward toward the endposts to form integral kneebraces. Wide flange floor beams, 27 inches deep, were riveted to the verticals at the panel points; these supported six lines of 16 inch wide flange stringers, on which the concrete slab deck rested. This 8 inch thick deck was cambered 3 3/8 inches from end to center. It was flanked on each side by an integrally poured concrete curb and steel lattice guardrail with steel plate hub rail. Concrete bulkheads with recessed rectangular panels framed the guardrails at both ends. The truss carried standard CHD bronze bridge plates on its bulkheads and cast iron plates on its endposts. The truss was simply supported on its four corners by heavy cast steel bearing shoes, fixed on one end and rocking on the other, that were anchor bolted to massive, reinforced concrete abutments.

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**National Register of Historic Places
Continuation Sheet**

St. Charles River Bridge
Pueblo County, Colorado
Highway Bridges in Colorado, MPS

Section number 9 Page 4

BIBLIOGRAPHY

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Colorado Highway Department. Bridge Kardex File. Located at CDOT Bridge Division, Denver, CO.

First Biennial Report of the State Highway Commission 1910-1911. Denver: Smith-Brooks Printing Company, 1911.

Fourth Biennial Report of the State Highway Commission 1915-1916. Denver: Smith-Brooks Printing Company, 1917.

Fraser, Clayton B. Field inspection March 2000.

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Second Biennial Report of the State Highway Commission 1911-1912. Denver: Smith-Brooks Printing Company, 1912.

Taylor, Ralph C. "Pueblo Completes Bridge Program." *Colorado Highways* 4:4, April 1925.

Third Biennial Report of the State Highway Commission 1913-1914. Denver: Smith-Brooks Printing Company, 1915.

Waddell, J.A.L. *Bridge Engineering.* New York: John Wiley and Sons, 1916.

St. Charles River Bridge
Name of Property

Pueblo County, Colorado
County/State

10. Geographical Data

Acreage of Property less than one

UTM References

(Place additional UTM references on a continuation sheet.)

1. 13 544740 4232980
Zone Easting Northing

2. _____
Zone Easting Northing

3. _____
Zone Easting Northing

4. _____
Zone Easting Northing

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Office of Archaeology and Historic Preservation and Clay Fraser, principal
organization Colorado Historical Society and Fraser Design date May 21, 2002
street & number 1300 Broadway telephone 303-866-4681
city or town Denver state CO zip code 80203

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Colorado Department of Transportation
street & number 4201 E. Arkansas Avenue telephone _____
city or town Denver state CO zip code 80222

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*)

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Continuation Sheet**

St. Charles River Bridge
Pueblo County, Colorado
Highway Bridges in Colorado, MPS

Section number 10 Page 5

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The bridge is located on US Highway 50 at milepost 7.77. The boundaries of this nomination consist of a rectangle of land 10 feet out in each direction from the footprint of the bridge.

BOUNDARY JUSTIFICATION

The nomination includes all the land directly and historically associated with the bridge.

PHOTOGRAPH LOG

The following information pertains to photograph numbers 1-2:

Name of Property: St. Charles River Bridge
Location: Pueblo County, Colorado
Photographer: Clayton Fraser
Date of Photographs: March 2000
Negatives: Colorado Department of Transportation

Photo No. Photographic Information

- 1 View to northeast of roadway
- 2 View to north through bridge

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Continuation Sheet

St. Charles River Bridge
Pueblo County, Colorado
Highway Bridges in Colorado, MPS

Section number ___ Page 6

USGS TOPOGRAPHIC MAP
Vineland Quadrangle, Colorado
7.5 Minute Series,

