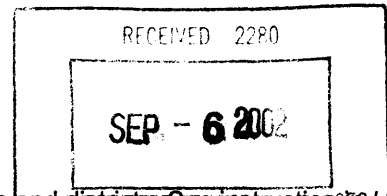


United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form



This form is for use in nominating or requesting determination for individual properties and districts. See instruction *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 Cherry Creek Bridge

other names/site number CDOT No. G-18-BL; 5DA1519

2. Location

street & number Colorado Highway 83 at milepost 46.30 [N/A] not for publication

city or town Franktown [X] vicinity

state Colorado code CO county Douglas code 035 zip code _____

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [X] 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 [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [] nationally [] statewide [X] locally. ([] See continuation sheet for additional comments.)

Stefania Corteglia State Historic Preservation Officer August 21, 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 H. Beall Signature of the Keeper 10.15.02 Date of Action

Cherry Creek Bridge
Name of Property

Douglas 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: Concrete two-rib open-spandrel arch

Materials

(Enter categories from instructions)

foundation _____
walls _____
roof _____
other Concrete _____
Asphalt _____

Narrative Description

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

Cherry Creek Bridge
Name of Property

Douglas 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

1948-1952

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

J.H. and N.M. Monaghan & Associates

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

Cherry Creek Bridge
Name of Property

Douglas 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 522930 4353360
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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National Park Service**

**National Register of Historic Places
Continuation Sheet**

Cherry Creek Bridge
Douglas County, Colorado
Highway Bridges in Colorado, MPS

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DESCRIPTION

Location: Colorado Highway 83 at milepost 46.30, south of Franktown, 16.1 mile north of the Douglas/El Paso county line.

Setting: Over Cherry Creek, at rim of Castlewood Canyon

Structure length: 374 feet
Structure width: 35.70 feet
Roadway width: 30 feet

Main span number: 1
Approach span number: 5
Main span length: 232 feet

Superstructure: Concrete two-rib open-spandrel arch
Substructure: Concrete abutments, wingwalls and arch pedestals
Floor/decking: Concrete deck with asphalt overlay
Other features: Colorado Highway Department standard slotted concrete guardrails
Colorado Highway Department bridge plates

Erected: 1948
Designer: Colorado Department of Highways
Contractor: J.H. and N.M. Monaghan & Associates

Alterations: None

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National Park Service**

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Cherry Creek Bridge
Douglas County, Colorado
Highway Bridges in Colorado, MPS

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SIGNIFICANCE

The 1948 Cherry Creek Bridge on Colorado Highway 83 in the vicinity of Franktown 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 1948 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.

During the 1910s the Colorado Highway Commission established State Primary Road 1S between Denver and Colorado Springs via Franktown. In 1922 the route was renumbered State Highway 83. As a secondary route to the North-and-South Highway, the state's most heavily trafficked road, it received only moderate use during the 1920s, 1930s and 1940s. The route crossed Cherry Creek south of Franktown over a timber stringer bridge. When the Highway Department in the 1940s began planning a major realignment of the road to straighten it out south of Franktown, this crossing would be abandoned in favor of another, more rugged location. For the proposed bridge, Colorado Highway Department (CHD) engineers delineated a long-span, concrete arch structure. CHD awarded the contract to build the bridge to J.H. and N.M. Monaghan and Associates of Denver, and it was completed in 1948. Since its completion, the Cherry Creek Bridge has functioned in place without alteration.

Engineering

The Cherry Creek Bridge is noteworthy for its structural configuration. The open-spandrel concrete arch, with its relatively long span and graceful curved lines, is one of the most distinctive of the highway bridge types. It represents a structural sophistication in concrete design and construction that has been rivaled only by more recent precast spans. Despite their aesthetic appeal, open spandrel arches were used infrequently on Colorado's highways, and today only six remain in use. With its 232 foot span, the Cherry Creek Bridge is by far the longest of the concrete arch bridges in Colorado.

The structure that CHD delineated for this crossing extended 232 feet between the skewbacks and carried a 30 foot wide roadway. This was supported by two arch ribs spaced at 20 feet on center. Each arch rib featured a constant width and a thickness that tapered from its base to midspan. It sprang on both ends into massive concrete skewbacks tied into the rock ledges. Each arch rib supported ten tapered concrete columns, which supported a series of concrete girders, which in turn supported the concrete deck. The approach span girders, one on the south end and four on the north, and the arch girders all had tapered brackets that cantilevered the roadway over the outer edges of the arches. The approaches were supported by tapered concrete columns, which like the main arch, bore on massive spread

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Cherry Creek Bridge
Douglas County, Colorado
Highway Bridges in Colorado, MPS

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footings. Concrete abutments were situated at both ends. The concrete deck was flanked on each side by an integrally poured concrete curb and CHD standard slotted concrete guardrails. Concrete bulkheads with recessed rectangular panels framed the guardrails at both ends.

The state had been advocating concrete for highway bridge construction since the early 20th century. In the 1910s the Highway Commission adopted among its first bridge standards a series of concrete slab spans, and even its standard steel I-beam bridges featured beams that were encased in concrete. In the 1920s and 1930s, CHD built hundreds of concrete structures of various sizes and types, and in the 1930s the agency began building long-span concrete arches with open-spandrel designs.

By the time that the Cherry Creek Bridge was designed late in 1947, open-spandrel concrete arches were relatively common around the country. But CHD had used them only sparingly, instead erecting steel through trusses as its long span standard. The Cherry Creek crossing resembled other bridge sites in which the Highway Department had built arches in the 1930s in that it featured a relatively deep canyon with stable, rocky ledges near the rim that could withstand the lateral pressures of an arch. In addition, the deck would be carried high above the streambed to maintain grade with the adjacent roadway and to avoid future washouts. These site characteristics made construction of a long span arch a logical choice.

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Cherry Creek Bridge
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BIBLIOGRAPHY

Barber, Frank. "Characteristics of Long-Span Concrete Bridges." *Engineering Record*, 8 April 1911.

Colorado Department of Transportation, Structure Inventory and Appraisal: Structure No. G-18-BL. Located at CDOT, Denver, CO.

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

Fraser, Clayton B. "Cherry Creek Bridge 5DA1519," Historic Bridge Inventory, 31 March 2000.

Fraser, Clayton B. Field inspection January 2000.

"The Walnut Lane Bridge Completed." *Engineering News*, 5 November 1908.

Whitney, Charles S. *Bridges: Their Art, Science and Evolution*. New York: Crown Publishers, 1983.

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Continuation Sheet**

Cherry Creek Bridge
Douglas County County, Colorado
Highway Bridges in Colorado, MPS

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GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The bridge is located on Colorado Highway 83 at milepost 46.30. 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 1-4:

Name of Property: Cherry Creek Bridge
Location: Douglas County, Colorado
Photographer: Clayton Fraser
Date of Photographs: January 2000
Negatives: Colorado Department of Transportation

Photo No. Photographic Information

- 1 View to west through bridge
- 2 View to south along roadway
- 3 View to west through bridge
- 4 View to southwest of underside

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Cherry Creek Bridge
Douglas County, Colorado
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USGS TOPOGRAPHIC MAP
Russellville Gulch Quadrangle, Colorado
7.5 Minute Series

