# National Register of Historic Places Registration Form

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AT.	REGISTER OF HISTONIC PLA	CES	

This form is for use in nominating or requesting determination for individual properties and districts. See Instruction in <u>How to</u> 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

historia nama - Plack Squirrel Crock Bridge			
historic name Black Squirrel Creek Bridge			
other names/site number <u>CDOT No. H-18-A; 5EP3561</u>			
2. Location	<del>\.</del>		
street & number <u>US Highway 24 at milepost 327.33</u>	[N/A] not for publication		
city or town <u>Falcon</u>	[X] vicinity		
state <u>Colorado</u> code <u>CO</u> county <u>El Paso</u> code <u>041</u>	zip code		
3. State/Federal Agency Certification	······································		
As the designated authority under the National Historic Preservation Act, as amended, I hereby of [X] nomination [] request for determination of eligibility meets the documentation standards for National Register of Historic Places and meets the procedural and professional requirements see my opinion, the property [X] meets [] does not meet the National Register criteria. I recome considered significant [] nationally [] statewide [X] locally. ([] See continuation sheet for additional State Historic Preservation Officer (Muthod State Historic Preservation Officer (State or Federal agency and bureau	registering properties in the et forth in 36 CFR Part 60. In mend that this property be		
In my opinion, the property [ ] meets [ ] does not meet the National Register criteria. ([] See continuation sheet for additional comments.) Signature of certifying official/Title State or Federal agency and bureau	Date		
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. [] removed from the National Register. [] other, explain [] See continuation sheet.	Date of Action 10/15/02		

# 5. Classification

Ownership of Property (Check as many boxes as apply)	Category of Prope (Check only one box)	erty	Number of F (Do not count previous Contributing	Resources Wi sty listed resources.) Noncontributing	ithin Property
[] private [] public-local [X] public State	[ ] building(s) [ ] district [ ] site		0	0	buildings
[X] public-State [ ] public-Federal	[ ] site [X] structure [ ] object		0	0	sites
	[]05]001		1	0	structures
			0	0	objects
			1	0	Total
Name of related multiple (Enter "N/A" if property is not part of a multiple Highway Bridges in Colora	property listing.)			contributing listed in the	
- Highway Bhuges In Colora			0		
6. Function or Use					
Historic Function (Enter categories from instructions)			urrent Funct ter categories from ins		
Road-related			oad-related		·····
······································					
				······································	
7. Description				······	
Architectural Classification (Enter categories from instructions)	on		aterials ter categories from ins	tructions)	
Other: Steel, rigid-connect	ed Parker through				
truss		Wa	alls		
		ro	of		······································
			her <u>Steel</u>		
			Concrete		
	<u> </u>	<u></u>	Asphalt		

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

Name of Property

# 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.)

- [X] 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**

(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):

 $\left[ {\ } \right]$  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

#

El Paso County, Colorado County/State

#### Areas of Significance (Enter categories from instructions)

Enter categories from instructions

<u>Transportation</u>

Engineering

# Periods of Significance 1935-1952

### **Significant Dates**

N/A

#### Significant Person(s)

(Complete if Criterion B is marked above).

# Cultural Affiliation

<u>N/A</u>

### Architect/Builder

Colorado Department of Highways Minneapolis-Moline Power Implement Co. Owen, Charles B. and Horner, A.S.

# Primary location of additional data:

[X] State Historic Preservation Office

- [X] Other State Agency
- [] Federal Agency
- [] Local Government
- [] University
- [] Other

Name of repository: Colorado Historical Society Colorado Dept. of Transportation

#### 10. Geographical Data

#### Acreage of Property \_\_less than one

#### **UTM References**

(Place additional UTM references on a continuation sheet.)

1.		542180 Easting	4317050 Northing	3.	Zone	Easting
2.	Zone	Easting	Northing	4.	Zone	Easting



[] 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 <u>May 21, 2002</u>
street & number <u>1300 Broadway</u>		telephone <u>303-866-4681</u>
city or town Denver	state <u>CO</u>	zip code <u>80203</u>

#### **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 Trans	portation

street & number <u>4201 E. Arkansas Avenue</u>		telephone	
city or town Denver	state CO	zin 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.

# National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Black Squirrel Creek Bridge El Paso County, Colorado Highway Bridges in Colorado, MPS

#### DESCRIPTION

Location: US Highway 24 at milepost 327.33, 7.1 miles east of Falcon

Setting: Over Black Squirrel Creek

Structure length: 226 feet Structure width: 31.10 feet Roadway width: 30 feet

Main span number: 1 Main span length: 150 feet Approach span number: 6

Superstructure: Steel, rigid-connected Parker through truss Substructure: Concrete hollow 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

Erected: 1935 Designer: Colorado Department of Highways Fabricator: Minneapolis-Moline Power Implement Company Contractor: Charles B. Owen and A.S. Horner

Alterations: None

# National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>2</u>

Black Squirrel Creek Bridge El Paso County, Colorado Highway Bridges in Colorado, MPS

#### SIGNIFICANCE

The 1935 Black Squirrel Creek Bridge on US Highway 24, 7.1 miles northeast of Falcon, 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 1935 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.

Over its lengthy existence, the road across eastern El Paso County now known as US Highway 24 has functioned in a variety of capacities. When the Colorado Highway Department (CHD) upgraded the highway in the 1930s, it further bolstered the road's importance. As an integral part of this latter endeavor, the Black Squirrel Creek Bridge is important for its contribution to Colorado transportation.

During 1911-1912, the Colorado Highway Commission established State Primary Road No. 30 in eastern Colorado. Beginning at Colorado Springs, the route paralleled the Rock Island Pacific Railroad tracks northeast to Limon and then zigzagged eastward to Burlington and the Kansas state line. Although secondary to the Omaha-Lincoln-Denver Highway and the Lincoln Highway in the state's northeastern corner, this road carried interstate traffic between Colorado Springs and the east. During the 1910s, the highway was incorporated as part of the Midland Trail, the Golden Belt Route, the Pikes Peak Highway and the Ocean-to-Ocean Highway.

In 1922, the US Bureau of Public Roads approved Colorado's first federal aid highway system. Under the new system, the Colorado Spring's to Burlington Road was redesignated as State Highway 4, reflecting its importance to the state. Three years later, CHD again renumbered the state's routes to integrate with the newly designated federal highway network. Before its eventual designation as US Highway 24, the Colorado Springs to Limon Road became part of US Highway 40 South, and the continuation of the route to Burlington was included as part of US 40 North.

In the early 1930s, CHD undertook a major reconstruction of the route through El Paso County, rebuilding the roadway and erecting new drainage structures. One of the bridges built at this time was the long-span steel truss over Black Squirrel Creek northeast of Falcon. The contract to fabricate and build the bridge was awarded to Charles B. Owen and A.S. Horner. Using a steel superstructure produced by the Minneapolis-Moline Power Implement Company, Owen and Horner completed the bridge in 1935. Since then the Black Squirrel Creek Bridge has carried mainline traffic in essentially unaltered condition.

# National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>3</u>

Black Squirrel Creek Bridge El Paso County, Colorado Highway Bridges in Colorado, MPS

### Engineering

The Black Squirrel Creek Bridge is technologically noteworthy as an intact example of CHD standard truss design. The department erected numerous Parker trusses between 1922 to 1945, ranging in span length from 125 to 200 feet. Subsequent attrition of these long span bridges has been severe, and only eight Parker through trusses remain in place on Colorado's highways. The Black Squirrel Creek Bridge is one of the few surviving examples in the state of what was once a mainstay structural type

For this structure, CHD delineated a 150 foot long, rigid connected Parker through truss, the standard CHD design for long spans. It was subdivided into eight 18 foot 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 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 was simply supported on its four corners by heavy cast steel bearing shoes, fixed on one end and rocking on the other, which were anchor-bolted to massive, reinforced concrete abutments. These abutments had unusual U-shaped wingwalls that, lacking earth fill, were configured as three concrete slab internal spans, essentially resulting in a bridge within the bridge.

# National Register of Historic Places Continuation Sheet

Black Squirrel Creek Bridge El Paso County, Colorado Highway Bridges in Colorado, MPS

Section number 9 Page 4

#### **BIBLIOGRAPHY**

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

Fraser, Clayton B. "Black Squirrel Creek Bridge," History Bridge Inventory, 31 March 2000.

Fraser, Clayton B. Field inspection October 1999.

Keck, C.M. "The Midland Highway." Colorado Highways 3:9, March 1924.

- Means, John S. "Road Construction of Different Types During Recent Years." *Colorado Highways* 1:6, September 1922.
- Second Biennial Report of the State Highway Commission 1911-1912. Denver: Smith-Brooks Printing Company, 1912.

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

Wiley, Marion C. The *High Road*. Denver: Colorado Highway Department, 1976.

# National Register of Historic Places Continuation Sheet

Section number <u>10</u> Page <u>5</u>

Black Squirrel Creek Bridge El Paso County, Colorado Highway Bridges in Colorado, MPS

#### **GEOGRAPHICAL DATA**

#### VERBAL BOUNDARY DESCRIPTION

The bridge is located on US Highway 24 at milepost 327.33. 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:	Black Squirrel Creek Bridge
Location:	El Paso County, Colorado
Photographer:	Clayton Fraser
Date of Photographs:	October 1999
Negatives:	Colorado Department of Transportation

Photo No.

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Photographic Information

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

# National Register of Historic Places Continuation Sheet

Section number \_\_\_\_ Page 6\_\_\_

## Black Squirrel Creek Bridge El Paso County, Colorado Highway Bridges in Colorado, MPS

#### **USGS TOPOGRAPHIC MAP**

Eastonville Quadrangle, Colorado 7.5 Minute Series

