## 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 Morley Bridge

other names/site number CDOT No. CHA297-00.40; 5CF.413

2. Location

street & number Chaffee County Road 297 at milepost 2.40

city or town Romley

state Colorado

#### code 015 zip code 81201 county Chaffee

[N/A] vicinity

[N/A] not for publication

code CO

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.) State Historic Preservation Officer nature of certifying official/Title Office of Archaeology and Historic Preservation, 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.) eri d. Signature of certifying official/Title Forest Service USDA State or Federal agency and bureau

#### 4. National Park Service Certification

I hereby certify that the property is:

Mentered 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.

Date of Action

OMB No. 10024-0018

#### Morley Bridge

Name of Property

#### 5. Classification

Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box) [ ] building(s)	Number of R (Do not count previous) Contributing		ithin Property <sup>9</sup>
<ul><li>[ ] private</li><li>[ ] public-local</li><li>[ ] public-State</li></ul>	[] district [] site	0	0	buildings
[X] public-Federal	[X] structure [ ] object	0	0	sites
		1	00	structures
		0	0	objects
		1	0	Total
Name of related multiple (Enter "N/A" if property is not part of a multiple p Highway Bridges in Colora	property listing.)	Number of o previously l Register.		
Thighway bhuges in colora		0	· · · · · · · · · · · · · · · · · · ·	
6. Function or Use				
Historic Function (Enter categories from instructions)		Current Function (Enter categories from instru-		
Rail-related Road-related		Pedestrian-rela	ted	
7. Description				
Architectural Classificatio (Enter categories from instructions)	on	Materials (Enter categories from instru	uctions)	
Other; Pratt deck truss		foundation walls <u>Stone</u>		
		roof other_Wood, Iro	n	

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):

[ ] 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 1881-1953

#### Significant Dates

1881

#### Significant Person(s)

(Complete if Criterion B is marked above).

N/A

#### **Cultural Affiliation**

N/A

#### Architect/Builder

**Denver South Park & Pacific Railroad** 

#### Primary location of additional data:

[X] State Historic Preservation Office

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

Name of repository: Colorado Historical Society Name of Property

#### 10. Geographical Data

#### Acreage of Property less than one

#### **UTM References**

(Place additional UTM references on a continuation sheet.)

1.	13 Zone	381330 Easting	4281400 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, prinicipal

organization Colorado Historical Society and Fraser Design		date_February 25, 2003	
street & number_1300 Broadway		_telephone_303-866-4683	
city or town Denver	_state_CO	_ 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 USDA Forest Service- Salida Ranger	District	
street & number <u>325 W. Rainbow Blvd.</u>		telephone <u>(719) 539-3591</u>
city or town <u>Salida</u>	state_CO	zip code <u>81201</u>
Paperwork Reduction Act Statement: This information is being collected for determine eligibility for listing, to list properties, and to amend existing listing: Preservation Act, as amended (16 U.S.C. 470 et seq.	or applications to the National R s. Response to this request is r	Register of Historic Places to nominate properties for listing or equired to obtain a benefit in accordance with the National Historic
Estimated Burden Statement: Public reporting burden for this form is estim	ated to average 18.1 hours per	response including time for reviewing instructions, gathering and

Estimated Birden Statement: Polic reporting birden of this form is estimated to average to. I notes per response including time for revewing instructions, gamening a maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

Morley Bridge Chaffee County, Colorado Highway Bridges in Colorado, MPS United States Department of the Interior National Park Service

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#### DESCRIPTION

Location: County Road 297 at milepost 2.40, 2.2 miles southwest of St. Elmo

Setting: Over Pomeroy Gulch

Structure length: 83 feet Structure width: 14.5 feet Roadway width: 13.2 feet

Main span number: 1 Main span length: 80 feet

Superstructure: Wrought iron, pin-connected Pratt deck truss Substructure: Stone masonry abutments and wingwalls Floor/decking: timber deck Other features: timber beam guardrails, 1 eyerod with turnbuckle timber stringers

Erected: 1881 Designer: Denver South Park & Pacific Railroad Fabricator: New Jersey Steel & Iron Company Contractor: Denver South Park & Pacific Railroad

Alterations: None

SIGNIFICANCE

#### National Register of Historic Places Continuation Sheet

Morley Bridge Chaffee County, Colorado Highway Bridges in Colorado, MPS

# The 1881 Morley Bridge on County Road 297, 2.2 miles southwest of St. Elmo, 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 1881 with the completion of the bridge and extends through its historic use to 1953, a date fifty years-of-age in keeping with National Register criteria.

#### TRANSPORTATION

In 1879, silver was discovered in the Sawatch Mountains south of Leadville. Within months, the town of Gunnison was platted as the smelting center for mining districts around St. Elmo, Tin Cup, Irwin, and Gothic. Almost immediately, two railroads- the Denver, South Park & Pacific and the Denver & Rio Grande- raced to lay track to Gunnison from their existing termini at Leadville. During the summer of 1880, the DSP&P built westward from Nathrop up Chalk Creek to St. Elmo before guitting construction for the winter. Early in 1881, track crews pushed past nearby Morley (also called Red Town because all the buildings were painted red, and later renamed Romley in 1897) to Alpine Pass, where they began construction of a tunnel. The tunnel lay in Ute Indian hunting lands, however, and the Ute Indians reportedly laid a curse on it because the presence of men and machinery ruined the place as a hunting ground. The work was difficult and dangerous. In their remote location, the building crew experienced difficulties among themselves that they resolved by hanging one crewmember. When the tunnel was finally completed the first train through it derailed. In 1882, the first DSP&P train steamed successfully into Gunnison through the Alpine Tunnel, then the highest tunnel on the continent. The railroad built numerous other timber and iron bridges on its way from Nathrop to Gunnison, including this wrought iron deck truss over Pomeroy Gulch at Morley. Built by a DSP&P construction crew in 1881, the Morley Bridge carried railroad traffic into the 20th century. As the mines in the region gradually played out, segments of the rail line were closed- this one in 1926- and converted to a county road. The Morley Bridge was redecked to carry cars and it carried vehicular traffic until 1992 when it was converted to a pedestrian bridge. The bridge now stands unaltered and adapted to a new use.

#### ENGINEERING

Beginning in the late 1870s, the pin-connected wrought iron truss was the roadway bridge of choice for medium- and long-span crossings in America. Made of numerous built-up metal members connected to form series of triangles in a variety of web configurations, trusses functioned as complex, long-span beams. Colorado's counties erected a typical array of truss types, but concentrated primarily on the Pratt and its subtypes in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The earliest Pratts featured pinned connections in what was known as the "American style" of truss assembly. While the Pratt truss was a popular design for many years, the ever-changing technology of the field required constant upgrades and improvements to the earlier designs. As a result, cast-iron and wrought iron bridge members were virtually eliminated due to the availability of steel by the 1890s; extant examples are rare and significant in Colorado.

Supported by stone masonry abutments, the Morley Bridge features a Pratt configuration with six panels spaced evenly over an 80-foot span. The structure employs wrought iron members rolled in the Trenton Works of the New Jersey Iron Company. Its upper chords are comprised of two back-to-back channels with lacing. The verticals are similarly configured with back-to-back channels laced together by metal straps. The lower chords are made up of two or four rectangular bars with punched eyes.

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Morley Bridge Chaffee County, Colorado Highway Bridges in Colorado, MPS

The diagonals and inclined endposts use two punched eyebars; the counters are eyerods with slotted turnbuckles. The struts are comprised of two laced channels, and the lateral braces are iron rods. Bolted to the upper chords at each panel point are paired I-beam floor beams that carry the timber deck and iron rails.

Functioning in place for over 120 years, the Morley Bridge is Colorado's oldest dateable vehicular truss. It is one of the few trusses remaining in the state with wrought and cast iron components and the only pin-connected deck truss identified in the statewide historic bridge inventory. Historically and technologically significant, the Morley Bridge is one of Colorado's most important spans.

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Morley Bridge Chaffee County, Colorado Highway Bridges in Colorado, MPS

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#### BIBLIOGRAPHY

- Colorado Department of Transportation. Structure Inventory and Appraisal: Structure No. CHA297-00.40. Denver, CO: CDOT, n.d.
- Beebe, Lucius M. and Charles Clegg. *Hear the Train Blow.* New York: E.P. Dutton & Company, Inc., 1952.
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- Chappell, Gordon S., Cornelius W. Hauck, and Robert W. Richardson. The South Park Line, A Concise History (Colorado Rail Annual No. 12). Golden, CO: Colorado Railroad Museum, 1974.
- Helmers, Dow. Historic Alpine Tunnel. Colorado Springs, CO: Century One Press, 1963.
- Ormes, Robert. Tracking Ghost Railroads in Colorado. Colorado Springs, CO: Century One Press, 1975.
- Union Pacific Railroad. Bridges and Buildings and Other Structures. Omaha, NE: Republican Printing, 1886.

Field Inspection by Clayton Fraser, October 1998.

Morley Bridge Chaffee County, Colorado Highway Bridges in Colorado, MPS

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#### GEOGRAPHICAL DATA

#### VERBAL BOUNDARY DESCRIPTION

The bridge is located on County Road 297 at milepost 2.40. The boundaries of this nomination consist of a rectangle of land 50 feet out 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 1-16 except as noted:

Morley Bridge
Chaffee County, Colorado
Meghan Murphy
June 2003
USDA Forest Service- Salida office

Photo No.	Photographic Information
1	View of bridge deck, camera facing south
2	View of bridge deck, camera facing south
3	Close-up of bridge deck, camera facing south
4	Oblique view of bridge, camera facing southeast
5	Oblique view of bridge, camera facing southeast
6	Side view of bridge, camera facing east
7	Oblique view of stone abutment, camera facing southeast
8	Close-up of stone abutment
9	Close-up view of decking from underneath bridge
10	Close-up view of truss support system from underneath bridge
11	Side view of bridge, camera facing east
12	Oblique view of bridge, camera facing southeast
13	View of bridge deck, camera facing north
14	View of west bridge deck, camera facing north
15	View of east bridge deck, camera facing north
16	Close-up of wood bridge deck

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

#### Morley Bridge Chaffee County, Colorado Highway Bridges in Colorado, MPS

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#### USGS TOPOGRAPHIC MAP

St. Elmo Quadrangle, Colorado 7.5 Minute Series

UTM: Zone 13 / 381330E / 4281400N PLSS: NM PM; Unsurveyed Elevation: 10520 feet

