



Orange Street Underpass  
Name of Property

Missoula, Montana  
County and State

**5. Classification**

**Ownership of Property**  
(Check as many boxes as apply)

**Category of Property**  
(Check only **one** box)

**Number of Resources within Property**  
(Do not include previously listed resources in the count.)

- private
- public - Local
- public - State
- public - Federal
- private

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

Contributing	Noncontributing	
		buildings
		sites
1		structures
		Objects
		buildings
1	0	<b>Total</b>

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

**Number of contributing resources previously listed in the National Register**

Montana's Historic Steel Stringer and Steel Girder Bridges, 1901-1961

N/A

**6. Function or Use**

**Historic Functions**

(Enter categories from instructions)

TRANSPORTATION/Road-related (vehicular) =  
Bridge

**Current Functions**

(Enter categories from instructions)

TRANSPORTATION/Road-related (vehicular) =  
Bridge

**7. Description**

**Architectural Classification**

(Enter categories from instructions)

OTHER: Steel Stringer Underpass

**Materials**

(Enter categories from instructions)

foundation: CONCRETE, METAL: Steel

walls: \_\_\_\_\_

roof: \_\_\_\_\_

other: CONCRETE, METAL: Steel

Orange Street Underpass

Name of Property

Missoula, Montana

County and State

---

### **Narrative Description**

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

#### **Summary Paragraph**

The Orange Street Underpass consists of one contributing structure, a steel stringer bridge that functions as a roadway underpass. The structure is one of several built by the Montana Highway Department during the 1930s and is, by far, the best example of the type within the state. It contains many features standard to the design, including the arcaded walkways flanking the road, but also features that are not common to the type, like the buildings built atop its roof. The underpass has not been significantly altered or modified since its construction. The setting of the property has also not been significantly changed since the 1930s.

---

### **Narrative Description**

The Orange Street Underpass crosses under the Montana Rail Link tracks and West Railroad Street and 1<sup>st</sup> Street West in Missoula, Montana. Orange Street was originally known as Harris Street until the early 1930s when the city renamed the street. Founded in 1866 as an agricultural community, Missoula is located in a broad valley where the Bitterroot River empties into the Clark Fork River. The valley is also at the junction of the Bitterroot and Jocko valleys. The valley is delineated by the Bitterroot Mountains to the west and the Mission Range and Nine Mile Divide to the north and Sapphire Mountains to the east. The Clark Fork River is located a short distance south of the underpass. This route once functioned as a bypass around downtown Missoula between US Highway 10 and 93. Missoula is the second largest city in Montana with a population of 66,788 (2010 census). The underpass is located near the downtown business district and the area surrounding it is a mix of commercial and residential properties.<sup>1</sup>

The Orange Street Underpass carries the Montana Rail Link (formerly the Northern Pacific Railway) tracks over Orange Street, which provides a connection between Interstate 90 and US Highway 93 south of Missoula. The overpass is approximately 250 feet in length and 396 feet wide. The roadway passing under the structure is two lanes and measures 1,032 feet in length and 30 feet in width. The roof of the structure consists of ten steel girders. The girders are encased in reinforced concrete. The roof currently supports two warehouses, West Railroad Street, North 1<sup>st</sup> Street West, and five MRL tracks. The underpass has an overhead clearance of 13'8".

The underpass rests on reinforced concrete footings and abutments. Two 5-foot wide sidewalks flank the roadway; the sidewalk is raised above the level of the roadway. The sidewalks are accessed through both ramps and stairs and pass through an arcaded passageway. The arcades have steel pipe guardrails and wire mesh was recently placed over the arcade opening to prevent people or objects from being thrown into traffic. The portals of the underpass have raised pilasters framing the portals to the sidewalks. Steel railings with concrete balusters flank the top deck of the underpass on the north and south.

#### **Integrity**

The Orange Street Underpass retains excellent integrity of design, workmanship, materials, and feeling. There have been few alterations to the portals of the structure other than where over-height trucks have struck and damaged the lintels. The interior of the structure retains all of its original structural components and structural detailing, including the decorative arcades flanking the roadway. Wire mesh, however, has been placed over the arcade openings to prevent people and objects from being thrown onto the roadway.

---

<sup>1</sup> David Alt and Donald W. Hyndman, *Roadside Geology of Montana*, (Missoula: Mountain Press Publishing, 1986), 71-73.

Orange Street Underpass  
Name of Property

Missoula, Montana  
County and 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 old or achieving significance within the past 50 years.

**Areas of Significance**

(Enter categories from instructions)

Engineering

Transportation

**Period of Significance**

1939-1961

**Significant Dates**

1939

**Significant Person**

(Complete only if Criterion B is marked above)

**Cultural Affiliation**

**Architect/Builder**

Montana Highway Department

Jerome Boespflug

**Period of Significance (justification)**

The Period of Significance encompasses the completion of the underpass in 1939 through its service as a component of a bypass roadway in Missoula that provided a connection between US Highways 10 and 93.

Orange Street Underpass

Name of Property

Missoula, Montana

County and State

**Criteria Considerations (explanation, if necessary)**

**Statement of Significance Summary Paragraph** (provide a summary paragraph that includes level of significance and applicable criteria)

The Orange Street Underpass can be listed on the National Register of Historic Places under Criteria A and C. The structure is representative of the Montana Highway Department's attempts to provide grade separation structures at important and busy at-grade railroad crossings to provide a safer roadway for motorists. It is also exemplary of the department's attempt to provide functional and visually appealing bridges on Montana's highways during the 1930s. There have been no significant modifications made to the structure since its construction in 1939 and it retains all the features that distinguish it as the best example of the type remaining in Montana.

**Narrative Statement of Significance** (provide at least one paragraph for each area of significance)

The Orange Street Underpass can be listed on the National Register of Historic Places under Criterion A for its association with the federal government and Montana Highway Department's program to provide grade separation structures on roads with high traffic volume and/or dangerous at-grade railroad crossings. In 1934, the department began designing and constructing underpasses in urban centers around the state. In all, the highway department built fifteen underpasses in Miles City, Billings, Glasgow, Livingston, Missoula, and other communities around the state between 1934 and 1941. The Orange Street Underpass is the longest and most massive underpass built by the department during that period and the only one to accommodate buildings and streets on the structure's roof rather than just railroad tracks. This structure was part of the New Deal's Federal Grade Crossing program in effect from 1935 to 1941. The underpass was constructed under New Deal regulations and represents how the program was designed to maximize labor while minimizing the use of heavy machinery. The overpass also best exemplifies the department's policy in the 1930s of designing and building bridges that were both functional and visually appealing.

The underpass is also an excellent and intact example of the type of steel stringer underpass structures designed and built by the Montana Highway Department between 1934 and 1941. The underpass retains the pilastered concrete portals, flanking arcaded sidewalk enclosures, and guardrails on the roof. The structure, moreover, supports two city streets, and two historic-age warehouses in addition to the railroad tracks. There have been no significant changes made to the structure since its construction with the exception of repair work to the portals when struck by over-height vehicles and the addition of the mesh screening to the sidewalk arcades. The Orange Street Underpass is one of fifteen underpasses built by the highway department during the Great Depression and is the best and most intact structure still remaining in Montana. The underpass is eligible for the National Register as an excellent example of the type and is eligible for the National Register under Criterion C.

**Engineering Significance**

The Orange Street Underpass is the biggest railroad underpass built by the Montana Highway Department. It was one of fifteen underpass structures built by the department under the Works Progress Grade Highway Crossing Program between 1934 and 1941. It was part of a bypass project in Missoula to provide a direct connection between US Highways 10 and 93 that would avoid Missoula's downtown business district. The Orange Street Underpass supported two city streets, five railroad tracks, and two warehouses on its roof. The arcaded walkways and decorative portals are also important to this structure and, while present on other overpasses in Montana, are most distinctive on this representative example. The underpass continues to function in its original capacity.

**Developmental history/additional historic context information** (if appropriate)

The Montana Highway Department began surveying for an underpass in downtown Missoula in May 1937. Two at-grade railroad crossing provided access across eleven sets of tracks in the downtown area. Trains often held up traffic between the two sections of Missoula and often prevented emergency vehicles from accessing north Missoula. Of particular concern to the City and to the Montana State Highway Commission were safety issues regarding school children. Once the highway department engineers had selected a site on Harris Street for the underpass, design of the structure got into full-swing. They designed a structure 396 feet long with the approaches stretching 516 feet on either side of it to provide

Orange Street Underpass  
Name of Property

Missoula, Montana  
County and State

the necessary 14-foot clearance. The underpass would have to cross under West Railroad Street and North 1<sup>st</sup> Street, two buildings (a railroad warehouse and a warehouse belonging to the Pacific Fruit & Produce Company), and eleven sets of tracks.<sup>2</sup>

The Montana State Highway Commission and highway department programmed the Orange Street underpass project for construction in October 1937. The following month, the Federal Bureau of Public Roads (BPR) approved the project and authorized the highway department to secure the necessary right-of-way. Fortunately, highway department right-of-way agents had already been trying to acquire the right-of-way needed for the project. Three property owners in the vicinity of the project, however, did not want to sell to property to the department, including two real estate speculators. Consequently, much of the property needed for the project was acquired through condemnation. By December 1937, the department's right-of-way agents secured the necessary property and the highway commissioners advertised the project for construction. On 31 March 1938, the commissioners awarded the project to the Miles City-based Jerome C. Boespflug Company for the construction of "a steel and concrete highway underpass of the Northern Pacific Railway Company's tracks at [Orange] Street . . . together with the construction of 0.210 miles of approach road and other subsidiary work." Boespflug, one of nine contractors who bid on the project, bid \$226,531. The company began work on the structure in late April 1938.<sup>3</sup>

Work on the underpass progressed rapidly and Boespflug nearly completed the structure by the spring of 1939. The contractor employed no special or unusual construction methods. The company used a "pumpcrete" plant to place all the concrete in the structure. The longest distance concrete was pumped was 750 feet. Aggregate for the concrete came from gravel pits along the Bitterroot River. Twenty-eight railroad cars of cement were used on the project with all concrete face forms lined with plywood and the concrete surfaces rubbed when green. Boespflug completed the project on 1 July 1939. When completed, the underpass was lighted with 86 lights of different types and sizes.<sup>4</sup>

---

## 9. Major Bibliographical References

---

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

Alt, David and Donald W. Hyndman. *Roadside Geology of Montana*. (Missoula: Mountain Press Publishing, 1991).

Axline, Jon. *Conveniences Sorely Needed: Montana's Historic Highway Bridges, 1860-1956*. (Helena: Montana Historical Society, 2005).

Bridge Inspection Record No. R08107002+00251. Montana Department of Transportation. Helena, Montana.

"Engineers for Commission to Make Study Here." *The Daily Missoulian*, 6 May 1937.

Johnson, P.M. "Harris Street Underpass, Missoula, Montana." *The Center Line*, Vol. 2, no. 5 (July 1939).

Sanborn Fire Insurance Maps: Missoula, Montana

**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:**

State Historic Preservation Office  
 Other State agency  
 Federal agency  
 Local government  
 University  
 Other  
Name of repository: Montana Department of Transportation

---

<sup>2</sup> "Engineers for Commission to Make Study Here," *The Daily Missoulian*, 6 May 1937; P. M. Johnson, "Harris Street Underpass, Missoula, Montana," *The Center Line*, Vol. 2, no. 5 (July 1939), 42; Sanborn Fire Insurance Maps: Missoula, Montana, 1958.

<sup>3</sup> Montana State Highway Commission Meeting Minutes, Book 7, 257-260 (19 November 1937), 312 (31 March 1938).

<sup>4</sup> Johnson, "Harris Street Underpass," 42-43; Montana State Highway Commission Meeting Minutes, Book 9, 32 (6 July 1939).

Orange Street Underpass  
Name of Property

Missoula, Montana  
County and State

Historic Resources Survey Number (if assigned): \_\_\_\_\_

**10. Geographical Data**

**Acreage of Property** 3.0  
(do not include previously listed resource acreage)

**UTM References**

(Place additional UTM references on a continuation sheet)

1	<u>12</u>	<u>271820</u>	<u>5195760</u>	3	_____	_____	_____
	Zone	Easting	Northing		Zone	Easting	Northing
2	_____	_____	_____	4	_____	_____	_____
	Zone	Easting	Northing		Zone	Easting	Northing

**Verbal Boundary Description** (describe the boundaries of the property)

The boundary for the Orange Street Underpass is a rectangle measuring 250 x 395 feet. The rectangle encompasses the underpass and approximately 1,000 feet of Orange Street. The boundary is centered on the underpass.

**Boundary Justification** (explain why the boundaries were selected)

Boundaries for the Orange Street Underpass are drawn to encompass the grade separation structure and Orange Street where it passes through the structure.

**11. Form Prepared By**

name/title Jon Axline/Historian  
organization Montana Department of Transportation date 11 June 2009  
street & number 2701 Prospect Avenue telephone (406) 444-6258  
city or town Helena state MT zip code 59620-1001  
e-mail jaxline@mt.gov

**Additional Documentation**

Submit the following items with the completed form:

- **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. Key all photographs to this map.
- **Continuation Sheets**
- **Additional items:** (Check with the SHPO or FPO for any additional items)

Orange Street Underpass  
Name of Property

Missoula, Montana  
County and State

**Photographs:**

Submit clear and descriptive black and white photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property:

City or Vicinity:

County:

State:

Photographer:

Date Photographed:

Description of Photograph(s) and number:

1 of \_\_\_\_.

**(See Continuation Sheets)**

**Property Owner:**

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

name Montana Department of Transportation  
street & number 2701 Prospect Avenue telephone 406-444-6200  
city or town Helena state MT zip code 59602-1001

**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.460 et seq.).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and 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, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

United States Department of the Interior  
National Park Service

**National Register of Historic Places  
Continuation Sheet**

Orange Street Underpass

Name of Property

Missoula, MT

County and State

Montana's Historic Steel Stringer and Steel  
Girder Bridges, 1901-1961

Name of multiple listing (if applicable)

Section number Maps Page 9



Northwest Missoula, Montana USGS Quadrangle Map, 1978

United States Department of the Interior  
National Park Service

**National Register of Historic Places  
Continuation Sheet**

Orange Street Underpass

Name of Property

Missoula, MT

County and State

Montana's Historic Steel Stringer and Steel  
Girder Bridges, 1901-1961

Name of multiple listing (if applicable)

Section number Photographs Page 10

Name: Orange Street Underpass  
County and State: Missoula County, Montana  
Photographer: Unknown  
Date of Photograph: 1939  
Location of original negative: Montana Department of Transportation. Helena, Montana.  
Description and view of camera: North side. View to the south.  
Photograph: 0001

Name: Orange Street Underpass  
County and State: Missoula County, Montana  
Photographer: Kristi Hager  
Date of Photograph: 2011  
Location of original negative: Montana Department of Transportation. Helena, Montana.  
Description and view of camera: South side. View to the north.  
Photograph: 0002

Name: Orange Street Underpass  
County and State: Missoula County, Montana  
Photographer: Kristi Hager  
Date of Photograph: 2011  
Location of original negative: Montana Department of Transportation. Helena, Montana.  
Description and view of camera: North side. View to the south.  
Photograph: 0003

Name: Orange Street Underpass  
County and State: Missoula County, Montana  
Photographer: Kristi Hager  
Date of Photograph: 2011  
Location of original negative: Montana Department of Transportation. Helena, Montana.  
Description and view of camera: Detail of interior arcade. View to the west.  
Photograph: 0004

Name: Orange Street Underpass  
County and State: Missoula County, Montana  
Photographer: Kristi Hager  
Date of Photograph: 2011  
Location of original negative: Montana Department of Transportation. Helena, Montana.  
Description and view of camera: Detail of arcade walkway. View to the north.  
Photograph: 0005

United States Department of the Interior  
National Park Service

# National Register of Historic Places Continuation Sheet

Orange Street Underpass

Name of Property

Missoula, MT

County and State

Montana's Historic Steel Stringer and Steel Girder Bridges, 1901-1961

Name of multiple listing (if applicable)

Section number      Photographs     

Page      11     



Photo 0001. Orange Street Underpass. North profile. View to the south.



Photo 0002. Orange Street Underpass. South side. View to north.

United States Department of the Interior  
National Park Service

# National Register of Historic Places Continuation Sheet

Orange Street Underpass

Name of Property

Missoula, MT

County and State

Montana's Historic Steel Stringer and Steel Girder Bridges, 1901-1961

Name of multiple listing (if applicable)

Section number Photographs

Page 12



Photo 0003. Orange Street Underpass. North side. View to southwest.



Photo 0004. Orange Street Underpass. Detail of interior arcade. View to the west.

United States Department of the Interior  
National Park Service

**National Register of Historic Places  
Continuation Sheet**

Orange Street Underpass

Name of Property

Missoula, MT

County and State

Montana's Historic Steel Stringer and Steel  
Girder Bridges, 1901-1961

Name of multiple listing (if applicable)

Section number      Photographs     

Page      13     



Photo 0005. Orange Street Underpass. Detail of arcade walkway. View to north.