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 determinations for individual properties and districts. See instructions in National Register Bulletin How to Complete the National Register of Historic Places Registration Form. If any 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.

1. Name of Property
   Historic name: Rock Island Snow Plow No. 95580
   Other names/site number: Union Pacific Snow Plow No. 900016 / 5LN.579
   Name of related multiple property listing:

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

2. Location
   Street & number: Limon Heritage Museum, 899 First Street
   City or town: Limon  
   State: CO  
   County: Lincoln
   Not For Publication: n/a  
   Vicinity: n/a

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 at the following level(s) of significance:
   ___ national  ___ statewide  ___ local
   ___ A  ___ B  ___ C  ___ D

   Signature of certifying official/Title: Deputy State Historic Preservation Officer  
   Date  
   History Colorado, Office of Archaeology & Historic Preservation

   State or Federal agency/bureau or Tribal Government
   In my opinion, the property ___ meets ___ does not meet the National Register criteria.

   Signature of commenting official:  
   Date

   Title:  
   State or Federal agency/bureau or Tribal Government
**4. National Park Service Certification**

I hereby certify that this property is:

- [ ] entered in the National Register
- [ ] determined eligible for the National Register
- [ ] determined not eligible for the National Register
- [ ] removed from the National Register
- [ ] other (explain:) _______________________

<table>
<thead>
<tr>
<th>Signature of the Keeper</th>
<th>Date of Action</th>
</tr>
</thead>
</table>

---

**5. Classification**

**Ownership of Property**

(Check as many boxes as apply.)

Private: [X]

Public – Local [ ]

Public – State [ ]

Public – Federal [ ]

**Category of Property**

(Check only one box.)

Building(s) [ ]

District [ ]

Site [ ]

Structure [X]

Object [ ]
Rock Island Snow Plow No. 95580
Lincoln County, Colorado
Name of Property
County and State

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

<table>
<thead>
<tr>
<th>Contributing</th>
<th>Noncontributing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>buildings</td>
</tr>
<tr>
<td></td>
<td>sites</td>
</tr>
<tr>
<td>1</td>
<td>structures</td>
</tr>
<tr>
<td></td>
<td>objects</td>
</tr>
</tbody>
</table>
| 1            | 0               | Total

Number of contributing resources previously listed in the National Register 

6. Function or Use

Historic Functions
(Enter categories from instructions.)

TRANSPORTATION/rail-related

RECREATION/museum

Current Functions
(Enter categories from instructions.)
7. Description

Architectural Classification
(Enter categories from instructions.)

No Style

Materials: (enter categories from instructions.)
Principal exterior materials of the property: METAL

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a summary paragraph that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

Rock Island Snow Plow No. 95580 sits on rails it originally cleared in the 1950s–’80s currently owned by Kyle Railway, within the environs of the Limon Heritage Museum, which includes the National Register-listed Limon Railroad Depot (5LN.221, NRIS.03000038, listed 2/20/2003). The plow is about a block east of the Depot at 899 1st Street and just south of the museum’s Exhibit Building at 701 1st Street. Built as a typical standard gauge wedge plow from a steam locomotive tender by the Chicago, Rock Island & Pacific Railroad (Rock Island) shop in 1951, it was reconditioned, repainted, and used by the Union Pacific Railroad (UP) as No. 900016 beginning in 1981 after the Rock Island ceased operations in 1980. The snow plow was retired to the UP Cheyenne, Wyoming shops in the 1990s and later donated to the Limon Heritage Museum by the UP in 1995. In 2015, the snow plow was restored to its original Rock Island color and format and renumbered to 95580. It has been minimally altered from the historic Rock Island design and has good integrity.

Narrative Description

Snow Plow No. 95580 was built in 1951 from a Rock Island steam locomotive tender known as a “semi-Vanderbilt” that was itself a modification of a Vanderbilt tender first acquired by Rock Island in 1912 or 1913. The semi-Vanderbilt’s distinctive triangular shape, resulting from a modified cylindrical tank lying on its side, is still visible on Snow Plow No. 95580 (photos 4-6).
The body and underframe of the snow plow are made of steel, which are in turn carried on roller bearing trucks installed in 1981.

At the front, or “A” end, of the snow plow is the single-track wedge plow itself (photo 1-2). Measuring 16’-7” from the tip of the plow to the edge of the plow box that attaches to the tender, the plow has an angled horizontal blade that lifts snow upward, which is then forced by the center vertical blade to either side of the track. The plow measures 12’-4” tall from the rail to the top edge, 10’-0” wide at the top, 11’-0” wide at its full width, and 7’-0” wide at the rail. A headlight is mounted at the top of the plow.

At the rear, or “B” end, of the snow plow are two sets of steel ladders on either side that facilitate access to catwalks that run along each side of the body (photos 5-6). A steel stirrup step hangs from the sill at each corner of the car. A tool box is attached just right of center above the sill. Attached at the top, just to the right of the left ladder, is a brake wheel with a chain leading down to the brake mechanism below.

On either side of the snow plow body is a steel catwalk with handrail that leads from the B end to the plow box. Towards the A end, where the plow box meets the body, the catwalks end at another set of steel ladders (on either side) which provide access to the top of the plow box and the headlight. On top of the body of the snow plow, set back from the plow box by a few feet, is a narrow gabled-roof “dog house,” or small cabin, which houses the brakeman. On the right side of the snow plow the catwalk handrail attaches to either side of the dog house to allow access to the steel cabin door (photos 3-4). The left side of the dog house has a plated-over window (photos 7-8). Both sides of the snow plow feature the lettering “RI/95580” along the middle of the body.

The overall dimensions of the snow plow are 15’-4 ½” in height from the rail to the top of the doghouse and 38’-4 ¾” in length from the tip of the plow to the coupler. The total weight is 190,400 lbs.¹

**Alterations**

Snow Plow No. 95580 retains its overall design from the time of its conversion from a semi-Vanderbilt tender to a snow plow by the Rock Island shops in 1951, which in addition to adding the plow box and blade to the tender front, included loading the original water and fuel compartments with rock ballast and adding additional ballast to the bottom over each truck. This particular tender was one of only three semi-Vanderbilts that originally included the dog house, which was retained at the time of conversion.² Since that conversion, alterations include the replacement of the original friction bearing type trucks with the current roller bearing trucks in 1981 when UP reconditioned the plow for its use. At an unknown date, but possibly at the time of UP’s work, the window in the dog house was plated over. UP’s painting of the plow in its own

---

² Ibid, p.32
color scheme and numbering system have since been restored in 2015 to the historic Rock Island color and number.

**Integrity**

Rock Island Snow Plow No. 95580 has good integrity for all seven aspects of integrity. Its *setting* and *location* on track that the plow historically served near the National Register-listed Limon Depot meets the integrity requirements as set forth in the National Register white paper on setting for locomotives and rolling stock, namely that it remains on a section of track adjacent to a railroad line; original location and meeting the burden of Criterion Consideration B are not required. The nearby Rock Island Depot and its other pieces of railroad equipment on track complete the appropriate setting for the plow, allowing for high integrity of *feeling* and *association* as a piece of railroad maintenance-of-way equipment. The snow plow’s *design*, *materials*, and *workmanship* are relatively unchanged; Union Pacific made no substantial changes to the basic construction of the plow once it was in their possession following Rock Island’s selling off of its equipment in 1980, and the 2015 restoration returned the plow’s Rock Island paint scheme and numbering. The snow plow looks as it did at the height of its Rock Island use with its original color and signage.
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.

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.

Criteria Considerations
(Mark “x” in all the boxes that apply.)

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.)

TRANSPORTATION
ENGINEERING

Period of Significance
1951-1968

Significant Dates

Significant Person
(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder

Chicago, Rock Island & Pacific Railroad shops

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Rock Island Snow Plow No. 95580 is locally significant under Criterion A for Transportation for its association with the Chicago, Rock Island & Pacific Railroad (Rock Island) and for its crucial role in keeping tracks clear of snow on the plains of Eastern Colorado and Western Kansas, where major storms could easily make tracks impassable. The snow plow is further locally significant under Criterion C for Engineering as a good example of a wedge-type railroad snow plow converted from a locomotive tender. Prior to conversion, Snow Plow No. 95580 was a semi-Vanderbilt tender built by Rock Island; the plow still features the distinctive “loaf of bread” shape as developed by Rock Island and is a testament to the repurposing of equipment constantly employed by railroads. The plow was in use by Rock Island until its bankruptcy in 1978 and selling off of equipment in 1980.
Rock Island Snow Plow No. 95580 Lincoln County, Colorado
Name of Property County and State

The period of significance is from 1951, the year the plow was created using the former tender, to 1968, a date fifty years in the past in keeping with National Register guidelines. As a historically moving piece of railroad equipment on track adjacent to a rail line, the plow does not need to meet the burden of Criteria Consideration B and meets the particular integrity of setting requirements for rolling stock.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

Criterion A
Rock Island Snow Plow No. 95580 is significant for Transportation for its association with the Chicago, Rock Island & Pacific Railway and the important role it played in keeping the tracks that crossed the plains clear. The aftermath of blizzards allowed no travel on the rails until the snow plows removed the snow banks. These blizzards were not an unusual event on the Western Kansas and Eastern Colorado plains. Massive amounts of snow would blow and drift, forcing the railroad to begin the process of snow removal. The single-track wedge plow provided an efficient means of removing the snow, splitting the snow banks and forcing them to the sides of the rails.

Criterion C
The snow plow reflects the resourceful engineering exemplified by the Rock Island shops during the 1950s. Plow No. 95580 was built in 1951 from a retired Rock Island tender and was constructed as a single-track wedge plow for the specific use of clearing long stretches of prairie rails. It was designed for economy, durability and strength. Fabricated with a hardened steel plow, bolted side skirts and steel housing, it went through the snow with extreme efficiency moving snow to each side of the track. It retains the distinctive shape of the Rock Island-modified tender known as a “semi-Vanderbilt.”

Historic Background

In the early 1880s, the managers of the Chicago, Rock Island & Pacific (CRI&P) considered various plans to extend their rail line westward from Kansas to connect with other railroads in Colorado. Of particular interest was the proposed Colorado Midland that was to run west out of Colorado Springs to the mountain mining communities. The Rock Island incorporated the wholly-owned subsidiary Chicago, Kansas, and Nebraska Railway (CK&N) in 1885 to construct the expanded route. The CK&N conducted surveys and acquired rights-of-way and other properties to extend a line through northern Kansas and into Colorado. Actual construction began from Horton, Kansas, on July 1, 1886. By early 1888, the rails reached Goodland,

---

3 This type of snow removal could be used when there was only one track, as it resulted in snow piles on either side – hence the term “single-track.” Double-track wedge plows moved snow to only one side, opposite from the other track, thereby avoiding dumping snow on it.
Kansas. To speed construction in the spring of 1888, the CK&N put multiple work crews into the field.

The Rock Island planned to have a single track across the eastern plains into Colorado, branching as it approached the mountains—one track going to Denver and the other to Colorado Springs. The CK&N crossed the Union Pacific (UP) line at Limon’s Camp, about 15 miles west of the Union Pacific Railroad division point in Hugo, proceeding southwestward to Colorado Springs where it joined with the Denver & Rio Grande Railroad to access the north-south route between Denver and Pueblo (see Figure 1). CK&N also contracted with UP to run trains directly from Limon to Denver. By 1891 the CK&N subsidiary was absorbed by Rock Island.

Railroad transportation would be a key factor in the establishment of Limon and its growth during the first half of the twentieth century. Rail service allowed Limon to become an important shipping point for agricultural products. The town’s location at the intersection of the Union Pacific Railroad and the Chicago, Rock Island & Pacific Railroad made Limon an important regional rail center and a major source of local employment.

The many miles of track across the plains became snowbound and unusable for train travel after blizzards over Colorado and Kansas. Snow plows played a crucial role in keeping the lines open, and the railroads invested in many different types depending upon the conditions encountered and the materials available.
Fig. 1 – Colorado railroad network: 1915, from Donald B. Robertson, *Encyclopedia of Western Railroad History*.

**Rock Island Tenders**

Rock Island Snow Plow No. 95580 was built in 1951 from a former Rock Island tender, which itself was a 1920s modification of a Vanderbilt tender first purchased by the railroad in 1912 or 1913. Vanderbilt tenders were steel cylindrical tanks set on steel underframes (see Historic Photo 2); in the 1920s, when Rock Island’s Vanderbilt tenders began to deteriorate at the junction between the curved side of the tank and the frame, the railroad rebuilt the bottom portion, resulting in a rounded top with flat sides that sloped down to a flat bottom (or semi-

---

Vanderbilt), which ultimately allowed for more water storage within the tank (see Historic Photo 3). As discussed in an article on Rock Island’s tenders,

The unusual tenders—no other railroad owned them except those that purchased used Rock Island motive power—acquired a variety of names over the years. Rock Island diagram sheets list them as “semi-Vanderbilt” tanks, but they also went by the nicknames of “triangular,” “loaf of bread,” and “turtleback.”

Due to their low center of gravity, the semi-Vanderbilt tenders were considered excellent candidates for conversion to wedge-type snow plows, which required “the bulk of their weight [being] as close to the track as possible.” Lacking its own motive power, the snow plow was pushed through the snow from behind by a locomotive.

Wedge plows have a horizontal wedge to lift snow above the level of snow accumulation beside the track. The large front plow is V-shaped to split the snow as the plow moved forward. A leading edge made of cast iron or steel just above the rails would cut through ice and added weight to discourage the tendency of the wedge to climb over hard-packed snow, thereby causing derailment by lifting the wheels off the rails (see historic photo 1). Under most conditions, the tendency to climb was further reduced by the weight of snow on the upper side of the wedge, and by downward force accompanying the upward acceleration of lifted snow. However, this downward snow loading may be absent when a plow first strikes a snow drift or packed snow face where the plow train has previously stalled. Before making a running start against such conditions, prudent crews would dig into the lower edge of the drift or snow face, creating a notch to receive and guide the leading edge of the horizontal wedge.

The power and basic construction of the wedge snow plow led to its successful use and longevity on both the Rock Island and Union Pacific Railroads. The wedge plow was economical in contrast to the more complex rotary plow designed for mountain snow slides and deeper snow. It was also less expensive to operate as it was pushed by one or more locomotives already in use on the train, rather than having its own power source. The functional design included its ballast system filled with dry granite rocks that supplied the weight needed to push through snow banks. The design relied on proven concepts from years of western rail operations. Adjustment was provided by the bolted flip-down top portion of the plow and the removable bolted side skirts, which could easily be removed for the plow to be lifted in case of derailment. Easy access with the ladder and walkway allowed economical maintenance and servicing.

**Rock Island Snow Plow No. 95580**

Following its conversion from a tender in 1951, Rock Island Snow Plow No. 95580 served the Rock Island line in Iowa, Illinois, Kansas, and Colorado until the railroad ceased operations in

---

6 Wojtas, p. 47.

7 Ehrnberger, “The UP’s Ex-Rock Island Snow Plow” p. 32.
Rock Island Snow Plow No. 95580  
Name of Property  
Lincoln County, Colorado  
County and State

1980 following its bankruptcy in 1978. After its reconditioning for UP in 1981, the plow was stationed at Oakley, Kansas until the early 1990s when it was retired to UP’s Cheyenne shops and eventually donated in 1995 to the Limon Heritage Museum housed within Limon’s former Rock Island Depot. In 2015, UP’s paint and numberings scheme was restored to the original Rock Island color and number.

Today the snow plow sits about a block away from the depot on Kyle Railway track. By special arrangement, the Museum has free storage on the Kyle track and Kyle Railway has free use of the snow plow in the event one of the historic eastern plains snowstorms should ever strike again.

---

8 Ibid.
9. Major Bibliographical References

**Bibliography** (Cite the books, articles, and other sources used in preparing this form.)


“Union Pacific’s Snow Plows,” UtahRails.net, October 17, 2017  

“UP Wedge Snow Plows,” UtahRails.net, March 13, 2014  

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 # __________
___ recorded by Historic American Landscape Survey # __________

Primary location of additional data:

___ State Historic Preservation Office
___ Other State agency
___ Federal agency
___ Local government
___ University
___ Other

   X   Other

   Name of repository:  Limon Heritage Museum

Historic Resources Survey Number (if assigned):  _5LN.579_____________

10. Geographical Data

   Acreage of Property  ___less than one_____________

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates

Datum if other than WGS84: __________

(enter coordinates to 6 decimal places)

1. Latitude:  Longitude:

2. Latitude:  Longitude:

3. Latitude:  Longitude:

4. Latitude:  Longitude:
Rock Island Snow Plow No. 95580  Lincoln County, Colorado
Name of Property                   County and State

Or

UTM References
Datum (indicated on USGS map):

☐ NAD 1927 or ☑ NAD 1983

1. Zone: 13 Easting: 613381 Northing: 4346514
2. Zone: Easting: Northing:
3. Zone: Easting: Northing:
4. Zone: Easting: Northing:

Verbal Boundary Description (Describe the boundaries of the property.)

The boundary is comprised of the Rock Island Snow Plow No. 95580 that is 38’-4 ¾” long, 11’-0” wide, and 15’-4 ½” high. The plow sits on track south of the Limon Heritage Museum’s Exhibit Building at 701 1st Street.

Boundary Justification (Explain why the boundaries were selected.)

The selected boundary applies to the movable structure of the snow plow itself.

11. Form Prepared By

name/title: Mary Andersen and Vivian Lowe
organization: Limon Heritage Society
street & number: P.O. Box 341, 701 First Street
city or town: Limon state: CO zip code: 80828
e-mail: limonmuseum@hotmail.com
telephone: 719-740-0782
date: September 28, 2017
12. Additional Documentation
Submit the following items with the completed form:

- **Maps:** A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

**Photographs**
Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn’t need to be labeled on every photograph.

**Photo Log**

Name of Property: Rock Island Snow Plow No. 95580  
City or Vicinity: Limon  
County: Lincoln  
State: Colorado  
Photographer: Teresa Bauman  
Date Photographed: April 2017  
Description of Photograph(s) and number, include description of view indicating direction of camera:

1. Front (A end) of Snow Plow No. 95580, Facing West  
2. Front Right Corner, Facing Northwest  
3. Right Side View, Facing North  
4. Rear Right Corner, Facing Northeast  
5. Rear (B end) of snow plow, Facing East  
6. Rear Left Corner, Facing Southeast  
7. Left Side View, Facing South  
8. Front Left Corner, Facing Southwest
Historic Photo Log


HP5. Snow Plow No.95580 (then 900016) at Limon Heritage Museum, ca. 2008

Historic Photos


HP3 – An example of a semi-Vanderbilt tender that expanded the base of the cylindrical original tank with sloping sides down to the frame. From Ed Wojtas, “Rock Island’s Very Own Tenders,” Trains: The Magazine of Railroading, July 1969, p. 46.

HP5. Snow Plow No. 95580 (then 900016) at Limon Heritage Museum, ca. 2008.

Rock Island Snow Plow No. 95580

Location: Limon, Lincoln County
Rock Island Snow Plow No. 95580
Name of Property

Lincoln County, Colorado
County and State