

A Brief History
of the
Roundhouse and Turntable
at
Chama, New Mexico

With Recommendations for Reconstruction

Researched and Written
for
Friends of the Cumbres & Toltec Scenic Railroad, Inc.
by
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January 12, 1998

Before 1946 the Chama roundhouse and turntable facilities appeared very similar to those at Durango. The photocopy at Tab G shows the Durango configuration in 1955. It looks much the same today, in fact the roundhouse now has fourteen stalls, it had only ten in 1955. The Durango workload remained high in the 1940's and 1950's, due to the oil fields on the Farmington Branch and the tourism on the Silverton Branch, while the engine work at Chama diminished. This allowed the Durango facility to remain intact while the Chama facility was downsized. However, the past twenty-five years of steadily increasing traffic on the C&TSRR has created the need to rebuild the engine facilities to meet the maintenance requirements of the railroad. The C&TSRR now operates as many steam locomotives as the Durango and Silverton, over longer routes and steeper grades. The current C&TSRR operator is considering further increases in service and extension of the operating season. While these expansions will further enhance the operating status of the C&TSRR and bring additional tourist dollars to the region, they will also increase the burden on the already overtaxed engine facilities. It is also noteworthy that when the Durango roundhouse burned in 1989, the owner, recognizing the need for adequate engine maintenance facilities, quickly rebuilt it and added several more stalls.

The turntable at Chama was basically identical to the one currently in Durango, a sixty-five foot Detroit Iron Bridge model (assuming the Chama turntable came from Palmer Lake, see discussion below)⁴. At Tab H is a D&RGWRR drawing for the installation of the sixty-five foot turntable at Durango, note that it has a handwritten annotation that states "Chama turntable installed in similar manner except for timber lining wall". The photograph at Tab I shows the timber lining wall which was used in the sixty-five foot turntable at Chama, the photocopy at Tab J shows the concrete lining wall used at Durango.

The Durango turntable was installed in 1924, the Chama turntable in 1925. The Durango turntable was transferred from Alamosa, it is reasonable to assume the Chama turntable was also transferred from another location. In 1923 there were only four sixty-five foot turntables on the system: Alamosa, La Veta, Palmer Lake and Canon City⁵. The Durango turntable came from Alamosa⁶, and the Canon City⁷ and La Veta⁸ turntables remained in place until 1938, thus the Chama turntable probably came from Palmer Lake (there is no reference in the Building Records to the removal of the turntable from Palmer Lake; however, there is an entry for 1923 which states the Tatlow Turntable Tractor was retired⁹).

Chama has been the site of a significant locomotive maintenance facility for the narrow gauge railroad since the Denver and Rio Grande Railway laid rails into the village in 1881. Its strategic location at the base of the four percent grade over Cumbres Pass required a large number of locomotives to be constantly available to assist trains over the pass throughout the year, and to push the rotary snow plows needed to keep the line open during the long winters on the pass. The large number of locomotives stabled at Chama in turn created the need for a major engine servicing facility. The photograph at Tab A, taken in 1908, illustrates the activity at the Chama engine facility; there are at least seven locomotives steamed up and huddled around the turntable and roundhouse. The track plans at Tabs B, C and D, which date from 1900, 1919 and 1941 respectively, show the extensive complex of buildings and tracks that were necessary throughout the years for the operation of this important engine facility.

Chama's original wood-frame six-stall roundhouse was built in 1882, and a fifty-foot Keystone deck girder turntable was installed at the same time¹. The wooden roundhouse burned and was replaced by a brick nine-stall roundhouse in 1899, and in 1925 the fifty-foot turntable was replaced by a sixty-five foot deck girder turntable². The photograph at Tab E, taken in 1939, shows the complete roundhouse and turntable at the Chama engine facility.

The improved reliability and increased power of the newer generation of locomotives reduced the need for engine facilities at Chama. In December 1945 the D&RGWRR approved Authority For Expenditure (AFE) T-9905 for the removal of the turntable and reduction of the roundhouse to two engine stalls. At this time the four most easterly stalls were removed and the tracks leading to the next three easterly stalls were pulled up, thus leaving tracks only to the two most westerly stalls. The turntable was removed and the pit filled in, turnouts were installed over the old pit to provide access to the two remaining engine stalls and to the ready track along the west side of the roundhouse. The track diagram at Tab F, which was attached to AFE T-9905, shows the changes at that time (the original shows the deletions in red, they show as very dark lines on this copy, new tracks were marked in yellow, they show somewhat thicker than other lines on this copy). After 1954 the three easterly stalls were removed, leaving the two stalls that stand today³. It is important to note that other aspects of the major engine facility at Chama remain intact to this day. The twin-spouted water tank, unique to Chama, the sand house, and the large coal tower have all been recently

repaired and restored to handle the increased engine servicing loads at Chama.

The regular annual increases in traffic on the Cumbres & Toltec Scenic Railroad are stressing the Chama engine facility past its limits. The C&TSRR operates six steam locomotives and one diesel throughout the operating season. The current engine house can house only two engines (four without tenders), which limits the railroad's capacity to service and repair engines. It also results in operating equipment being stored outdoors throughout the harsh mountain winters. This exposure hastens deterioration of both external and internal parts of the engines, increasing maintenance costs and efforts. The steam locomotives are the lifeblood of the railroad, they cannot be replaced and every effort must be taken to prolong their life. The railroad needs to reconstitute its engine servicing facility at Chama to meet the storage, service and repair needs of the complete roster of locomotives. Of primary urgency are installation of a turntable and expansion of the roundhouse.

The need to reincorporate a roundhouse and turntable back into the Chama facility was recognized by the first C&TSRR operator, Scenic Railways, Inc., in the 1972 Master Plan for Development which they published on December 29, 1972. Under both the Maintenance Facility Requirement and Essential Reconstruction sections of that plan, Scenic Railways addressed the need to rebuild these facilities.

From the Maintenance Facility Requirement section, page 9:

Although there is a need for a larger facility than exists, it will not be nearly of the magnitude of the former D&RGW facility at Alamosa. A building the size of the Silverton Train roundhouse now in Durango will be sufficient.

From the Essential Reconstruction section, page 12:

For many patrons of the C&TS, the experience will be the only exposure they will ever have to the facilities and procedures of steam railroading. To the historically sensitive person there is one major flaw in the plant of the present C&TS. Although it will never show up in the patronage figures for the railroad, we believe that correction of this flaw would be worthwhile. It would make our patron's visit to this old steam railroad complete:

We should have a turntable and roundhouse.

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Two stalls of the Chama roundhouse are still extant. D&RGWRR drawings of the complete nine-stall roundhouse are included herein at Tab K. Note that the floor plan for the roundhouse also shows its relationship to the original fifty-foot Keystone turntable. Although no similar drawings have been found that show the sixty-five foot turntable, it is reasonable to assume it was placed in the exact location of the fifty-foot table, to keep the radius of the roundhouse lead tracks intact.

As shown above, the Chama engine facility requires significant upgrading to ensure safe and reliable service to the public. Restoration of these structures would also greatly enhance the aesthetic and historic educational value of the property, and would significantly strengthen its appeal to tourists and railfans. The first priority should be the installation of a turntable which is comparable in size and style to the sixty-five foot turntable which operated in Chama after 1925. The sixty-five foot turntable was a deck girder turntable, thus the use of a gallows-type turntable would be a significant historical deviation (photocopies at Tab L illustrate turntables of various lengths used by the D&RGRR and D&RGWRR, note they are all deck girder type). The length should be as close to sixty-five feet as possible for historical, operational and aesthetic purposes.

The Burlington Northern Railroad recently donated a deck girder turntable from a site in St. Francis, Kansas, to the Colorado Railroad Museum in Golden. It is very similar in size and appearance to the turntable needed for Chama. There is another unused Burlington Northern deck girder turntable at Oberlin, Kansas, which is sixty-eight feet, six inches long. This is an opportunity which should be fully and quickly pursued.

Restoration of the roundhouse to its original 1899 configuration should follow installation of the turntable. The two-stall engine house which was built in the 1970's would remain in place, with track leads into it from the west (south) end. This arrangement would provide covered work and storage areas for all seven operable locomotives and would allow the operator and the Friends organization to better protect, service and restore other equipment such as the rotary plows.

¹ D&RGRRCo Building Record, Fourth Division, La Veta to...Silverton & Farmington; Chama Station and Miscellaneous Buildings, p 170

² *ibid.*, p 172

³ Narrow Gauge Workbook Series, v 14, Chama; Mike Blazek; List of building and structure inventory, item 17.

⁴ D&RGRRCo Building Record, First Division, Denver to Trinidad... to Salida... to La Veta; Palmer Lake Station and Miscellaneous Buildings, p 74.

⁵ Official Roster of the Denver and Rio Grande Western Railroad System, Number 11, April 1, 1923.

⁶ D&RGRRCo Building Record, Fourth Division, La Veta to...Silverton & Farmington; Alamosa Station and Miscellaneous Buildings, p 58.

⁷ D&RGRRCo Building Record, First Division, Denver to Trinidad... to Salida... to La Veta; Canon City Station and Miscellaneous Buildings, p 216.

⁸ D&RGRRCo Building Record, First Division, Denver to Trinidad... to Salida... to La Veta; La Veta Station and Miscellaneous Buildings, p 372.

⁹ D&RGRRCo Building Record, First Division, Denver to Trinidad... to Salida... to La Veta; Palmer Lake Station and Miscellaneous Buildings, p 76.