Rio Puerco Bridge

The Rio Puerco Bridge is listed on the National Register of Historic Places.

Source of the following photo and Overview is: https://www.nps.gov/places/rio-puerco-bridge.htm

NPS Photo courtesy of Rhys Martin

Overview of Rio Puerco Bridge

Heading west out of Albuquerque on Route 66, travelers can enjoy a scenic descent from Nine Mile Hill into the Rio Puerco Valley, where a Parker through truss bridge crosses the steeply eroded banks of the Rio Puerco River. The valley is the site of Laguna Pueblo, the home of Puebloans since the 1300s. Because the Rio Puerco is known for its violent flooding and severe erosion, the State Highway Department specifically chose a Parker through truss bridge design for the Rio Puerco Bridge to eliminate the need for a center pier and prevent washouts.

The Federal Government funded the bridge in 1933 as part of President Roosevelt's effort to use emergency monies for highway construction. Completed within a year, the bridge opened the Laguna Cutoff to transcontinental traffic. In 1937, the alignment officially became U.S. Route 66. The Kansas City Structural Steel Company conceived the structure, and F.D. Shufflebarger was in charge of constructing the bridge. The Rio Puerco Bridge has a 250 foot long span and is one of the longest single span steel truss bridges built in New Mexico.

The bridge consists of 10 panels measuring 25 feet in length, each with its top cord at a different angle, as is characteristic of Parker truss design bridges. The 25-foot wide deck is concrete with an asphalt surface and rests on steel stringers. This design was selected partially because it was commonly used during the late-1920s and 30s, but also because it was particularly suitable for this bridge, which needed to withstand a river capable of massive flooding that had washed away previous bridges along the Rio Puerco.

In 1957, the truss was remodeled, and the lower portal struts were removed and replaced by lighter struts that were inserted above to create a higher clearance. Metal guardrails were added to protect the truss members. This bridge served motorists on Route 66 for many years, and when I-40 was completed, the Rio Puerco Bridge became part of a frontage road across the Rio Puerco.

The structure was listed in the National Register of Historic Places in 1997. In 1999, the New Mexico State Highway and Transportation Department replaced it but preserved the historic bridge. Though currently closed to car traffic, the old bridge is open for people to walk across, allowing visitors a glimpse of the old Highway 66 slowly curving and dipping as it disappears into the vast New Mexico desert.

1. **Historic Significance:** The Statement of Significance in the National Register nomination reads: "Serving local traffic as a frontage road for 1-40 across the Rio Puerco, the former U.S. 66 bridge across the Rio Puerco is significant for its long association with highway transportation in New Mexico dating to the early 1930s. The longest single-span Parker through truss design bridge in New Mexico, it is also significant for embodying the design, materials and methods of construction associated with that bridge sub-type.

   When federal highways first received a systematic numbering in 1926, many of the roads included in the system in the western states were simply local roads spliced together to create a makeshift network of federal highways. Only in the late 1920s and 1930s did engineers have the resources to plan and construct more efficient, safer alignments. In New Mexico, the original alignment of U.S. 66 used local roads, following a circuitous alignment west of the Rio Grande. In the late 1920s, Albuquerque boosters advocated straightening

the alignment, shifting it to run due west from the city. In order to achieve this goal they succeeded in building a bridge across the Rio Grande at Old Town (1931) but still required a bridge at the Rio Puerco. After several years of lobbying the State Highway Commission, by the early 1930s they succeeded in their petition to have the so-called Laguna Cutoff placed on the federal road system and, thus the cutoff become eligible for federal matching funds. The Rio Puerco Bridge was included in federal funding in 1933 as part of the Roosevelt Administration's effort to use emergency monies for highway construction. The bridge was completed within the year, opening the Laguna Cutoff for transcontinental traffic. In 1937, the alignment officially became U.S. 66.

Although the waterflow in the Rio Puerco is often minimal, the river is capable of torrential flooding, a fact underscored by its severely eroded floodplain and river banks. In the early decades of the twentieth century prior to efforts at stabilizing rangelands within the river's drainage area, the river posed a major challenge to highway engineers, earning the reputation of being an “outlaw" river capable of "cloudburst” flooding that threatened bridges and roads. In the fall of 1929 the river inflicted its worst damage, washing away several bridges, including the bridge several miles downstream that then served U.S. 66. As a result, engineers determined to construct bridges that would withstand future floods.

The selection of the Parker through truss design at what four years later, would become the U.S. 66 crossing reflected the highway department's partiality to that design in many of its major projects of the late 1920s and 1930s. In order to compensate for the eroding floodplain and its unstable river banks susceptible to scouring during flooding, engineers designed a bridge employing unusually massive abutments built on deeply driven pilings. They then constructed a single 250-foot span capable of clearing the entire floodplain of the river. The BPR considered the bridge the longest single-span Parker through truss bridge in the Southwest. With its heavy steel members, the bridge appeared especially suited to handle the increasingly [sic] traffic flow along what was becoming a major east-west highway.

The setting of the bridge over the deep, eroded course of the Rio Puerco conveys a strong feeling of how truss bridges appeared along New Mexican highways prior to World War II. The polygonal upper chords of its superstructure appear in marked relief to the newer twin steel beam bridges of 1-40 which parallel it. When the section of the interstate at Rio Puerco was completed in the 1960s, the bridge and the former Route 66 alignment to the east became a part of the frontage road.

2. **Contributions:** Supported Route 66’s role in contributing to regional and national growth.
3. **Uniqueness:** See Uniqueness narrative for Route 66 as a whole in the Nomination Discussion section.
4. **Date of original construction:** Constructed in 1933 to 1934
   In 1957 the truss was remodeled
   1999 – bridge closed to traffic
5. **Names of key engineers:** Designed by Kansas City Structural Steel Company.
6. **Photographs:** Included above.
7. **Additional documentation**: National Register of Historic Places Registration Form. Available at: https://catalog.archives.gov/id/77845957
8. **References:**

"Long Steel Truss Bridge Being constructed in New Mexico." New Mexico, Vol. 11, No. 5 (May, 1933), p. 40.
Macy, G.D., State Highway Engineer, "New Mexico's Recovery Road Program." New Mexico, Vol 11, No. 7 (July, 1933), pp. 14-15, 44.
New Mexico State Highway Department. "Bridge Department Structure Report, Bridge No. 2530," April 1, 1940.

Location: 35 02 01.0 N 106 56 29.7 W

Local and vicinity maps: The Rio Puerco Bridge is located off of and parallel to Interstate 40 at exit 140 west of Albuquerque, NM. Visitors can walk across the bridge.