

The Long Run Bridge carries County Route 32/3 over Long Run in Brooke County. The bridge was built in 1913 by the Luten Bridge Company. The bridge is eligible under Criterion C of the National Register of Historic Places for displaying significant architectural treatments, demonstrating important engineering design or technology, and its association with Daniel Luten.

Long Run Bridge is a two span concrete arch bridge supported by concrete abutments and a concrete pier. The bridge is 105 feet long and has a 13.4 foot roadway width. The bridge has concrete parapets with incised rectangular panels and a decorative pier nose. The bridge is in poor condition with serious deficiencies. The arch ring and the concrete on the arch ring is extremely deteriorated. The abutments and wing walls also show significant deterioration and cracking. A portion of the parapet wall is missing.



## Long Run Bridge History

Daniel B. Luten received numerous patents for concrete arch bridge designs in the early 1900s. Luten often gave other bridge builders permission to construct bridges using his design for a fee. The National Bridge Company was founded in 1902 by Daniel Luten and renamed Luten Bridge Company in 1920. Branch offices were established along the eastern United States and the company was known for its numerous concrete arch bridge designs (Ficker, 2003 and KCI, 2015).

Concrete deck arch bridges were typically constructed in West Virginia between 1900 and 1951. The arch is elliptical with the bottom of the arch receiving most of the load. Concrete arches are located throughout West Virginia and were very popular between 1910 and the 1930s. They are similar to masonry arches but were cheaper to build. These bridges “act in compression and require steel reinforcement. The arch rib and spandrel columns are reinforced with longitudinal steel held by lateral ties” (KCI, 2015).

**Location:** Carries County Route 32/3 over Long Run

**Type:** Two Span Concrete Arch Bridge

**Length:** 105 feet

**Year constructed:** 1913

**Contractor:** Luten Bridge Company



## what **Historical Services Unit** does

- Research and Write Historic Reports
- Determine National Register Eligibility
- Determine Historic Boundaries
- Determine Effects to Historic Properties
- Mitigate Adverse Effects to Historic Properties
- Complete Historic Documentations for Specific Historic Properties
- Historic Turnpike Research and Analysis
- Coordinate with Federal, State, and Local Resource Agencies
- Conduct Public Workshops for Specific Bridge and Highway Projects

## contactus

Division of Highways  
Engineering Division  
Environmental Section  
1334 Smith Street  
Charleston, WV 25301  
Sondra Mullins  
Historical Services Unit Leader  
304.558.9487  
sondra.l.mullins@wv.gov



long run  
**bridge**  
*wrooke county*