

Central Street Bridge Replacement

Kleinfelder provided comprehensive engineering services for replacement of the Central Street Bridge, in conformance with the New Hampshire Department of Transportation (NHDOT) Municipal Bridge Aid Program. Kleinfelder also provided historical permitting services once the replacement bridge was found eligible for the National Register of Historic Places.

PROJECT RESULTS

The bridge provides a vital connection between the towns of Bristol and New Hampton. With realigned approaches, wider travel lanes, softened curves, and a wide sidewalk, the new bridge greatly increases vehicular and pedestrian safety—with minimal impact to adjacent properties and the natural setting. Furthermore, use of low-cost, durable materials minimizes maintenance costs for both municipalities.



REPLACING AN OLD, UNSAFE BRIDGE

The Central Street Bridge connects the towns of Bristol and New Hampton and crosses the Pemigewasset River at a width of approximately 240 feet. Three bridges had occupied the site since 1823, but the last structure—a one-span historic Parker truss completed in 1928—suffered heavy rust and was weakened by nearly a century's-worth of wear and tear. The approaches to the bridge were narrow and dangerous, and the bridge had a history of closing to traffic due to flooding.

INNOVATIVE, SUSTAINABLE DESIGN FOR THE COMMUNITY

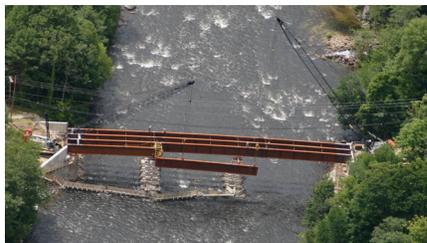
Kleinfelder worked with multiple project stakeholders from preliminary design through construction to replace the existing truss bridge with a one-span steel-plate girder bridge. The new high-strength weathering steel girders are eight foot deep and span 240 feet, making it the longest single-span bridge of its type in New Hampshire. The two-lane bridge has a width of 28 feet between curbs, and a six-foot-wide sidewalk. The new structure, supported on abutments up to 40 feet in height, is 10 feet higher over the river and specially reinforced to resist flood waters. The roadway alignment improvements extend for 1000 feet and include retaining walls and a footpath to a river, both constructed with granite stone blocks preserved from the abutments of the replaced historic bridge.

Location:

Bristol and New Hampton,
New Hampshire

Owner:

Towns of Bristol and New
Hampton, New Hampshire



Steel girders lowered into place



Two-lane bridge now 28' wide

