BEMENT COVERED BRIDGE REHABILITATION

Bradford, New Hampshire





The Bement Covered Bridge, constructed in 1854, is a 71' long structure that spans the West Branch of Warner River. It is a Long Truss structure, patented in 1830 by Colonel Stephen H. Long of Hopkinton, New Hampshire. The Bement Covered Bridge is listed on the National Register of Historic Places and owned by the Town of Bradford.

The need for the project was due to the structurally deficient condition of superstructure and substructure elements, including significant concerns regarding the overall stability of the north abutment that consists of dry laid stone.

The purpose of the project was to provide a structurally safe bridge by upgrading the live load carrying capacity to a weight limit of 6 tons while minimizing environmental impacts, construction duration and project costs.

The rehabilitation work involved replacement of non-original members, the replacement "in-kind" of other members that may or may not be original but were rotted or damaged to the extent that they lacked historical integrity, and the addition of reversible structural reinforcing members. All work was conducted in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties by not altering any aspects of the property's historic integrity or characterdefining features that make it eligible for the National Register.





FUNDING

COMPLEXITY



Our design team kept historic integrity by repairing over **60** locations of wood with wood epoxy.

UNIQUENESS

The bridge was moved upstream to allow abutment reconstruction. Simple wood blocking and



The majority of the funding for the project was provided by the National Historic Covered Bridge Preservation Program. The project was administered through the NHDOT Local Public Agency program.

reversible knee braces were added to brace the top chord and minimize member removal.



