

45 Union Village Covered Bridge

Thetford, Vermont



Located in Union Village in the Town of Thetford, Vermont, the 1867 Union Village Covered Bridge spans the Ompompanoosuc River and is the longest bridge supported by multiple timber kingpost trusses to survive in Vermont. The single-lane bridge, whose builder remains unknown, was designed with a diagonal stiffening brace extending the length of each truss, rising from the floor at each portal to the top of the center kingpost.

The kingpost truss, said to be the oldest and simplest of trusses, is also called a "Latin truss." Two laminated stringers are tie-bolted to the underside of the floor beams for reinforcement; each stringer comprises a number of shorter timbers which have been tie-bolted together. Iron rods extend diagonally between the bottom chords to serve as lower lateral braces. Short sections of steel angle stock now fulfill the function of knee braces between alternate kingposts and the top beams.

The abutments were built originally of irregular stone laid dry. Subsequently the east abutment has been faced with concrete and the west abutment capped. The bridge is 113 feet long at floor level. The ends of the side walls flare outward so that the gable ends overhang the floor five feet at each portal. The bridge is 19 feet wide and has a 15 foot roadway. The wood floor, which consists of planks laid on edge parallel to the trusses, begins six feet inside the east portal and two-and-a-half feet inside the west portal; the approaches are paved. On the exterior, the heavy timbers bolted together to form the trusses (and side walls) of the bridge and are covered with unpainted flush boards hung vertically. Similar siding protects the ends of the trusses immediately inside the portals. Three large rectangular windows have been cut in each side wall. The gable ends are also sheathed with unpainted flush boards hung vertically. The medium-pitch gable roof is now covered with corrugated metal sheeting.

The Union Village Covered Bridge was listed on the National Register of Historical Sites in September 1974.

Sources:

Henry, Hugh H. "Union Village Covered Bridge." *Connecticut River Joint Commission, Inc.* Connecticut River Joint Commission, Inc., January 17, 1974. Web. Accessed, February 25, 2013, S. Mendonca. <http://www.crtc.org/heritage/V13-19.htm>

Wikipedia contributors. "King post." *Wikipedia, The Free Encyclopedia*. Wikipedia, The Free Encyclopedia, April 12 2013. Web. Accessed, 17 May. 2013, L. Morrow. https://en.wikipedia.org/wiki/King_post

Bickel, Hank. "Vermont Covered Bridges." *Covered Bridges of the Northeast USA*, February 20, 2008. Web. Accessed May 17, 2013, L. Morrow. http://www.coveredbridgesite.com/vt/union_village.html