

The Darrah Bridge OVER BABOOSIC BROOK

Bridges to the Past

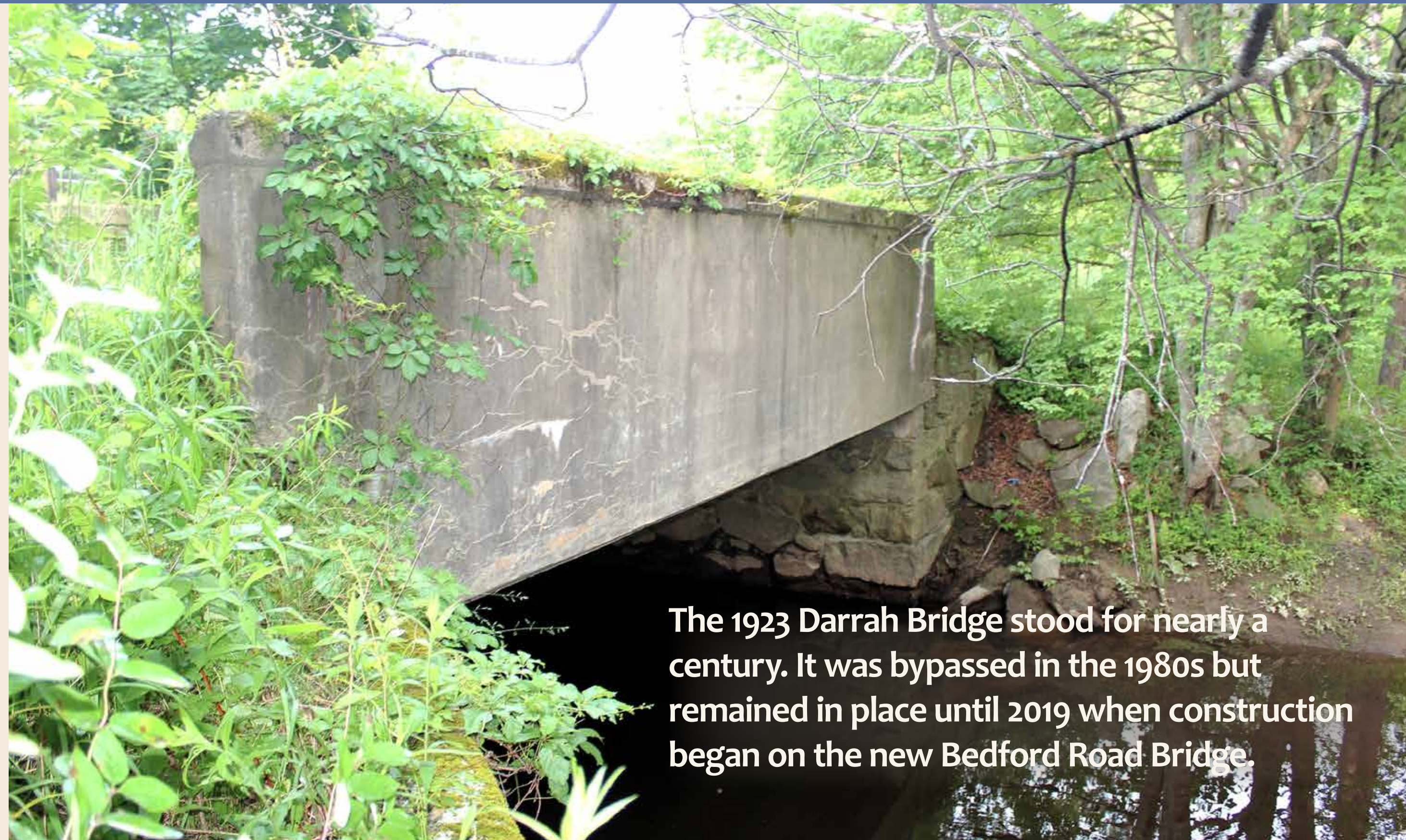
You can see the path of the road that crossed over the old Darrah Bridge, just upstream from where you are standing on the new Bedford Road Bridge, completed in 2020. The former Darrah Bridge was one of two matching bridges on Bedford Road built by the Town of Merrimack in 1923. The other, the Robbins Bridge, crossed Baboosic Brook about a mile northwest of here. They were both concrete-encased steel stringer bridges, one of the most widely-used bridge types of the early twentieth century. The contractors were Winslow & Cummings of Nashua. The partnership of stonemason Arthur F. Winslow and former road superintendent and blacksmith Ovid F. Cummings built roads and bridges in the region from the 1920s through the 1940s.



Robbins Bridge over Baboosic Brook before it was replaced in 2008. NorthEast Earth Mechanics

The Meandering Brook

The course of Baboosic Brook is so winding that there are nine road crossings within the Town of Merrimack. According to *Indian Place Names of New England*, Baboosic is a Native American word referring to a sluggish current (Huden 1962). The brook originates in Baboosic Lake on the Amherst town line and ends at the Souhegan River where it joins the Merrimack River.



The 1923 Darrah Bridge stood for nearly a century. It was bypassed in the 1980s but remained in place until 2019 when construction began on the new Bedford Road Bridge.

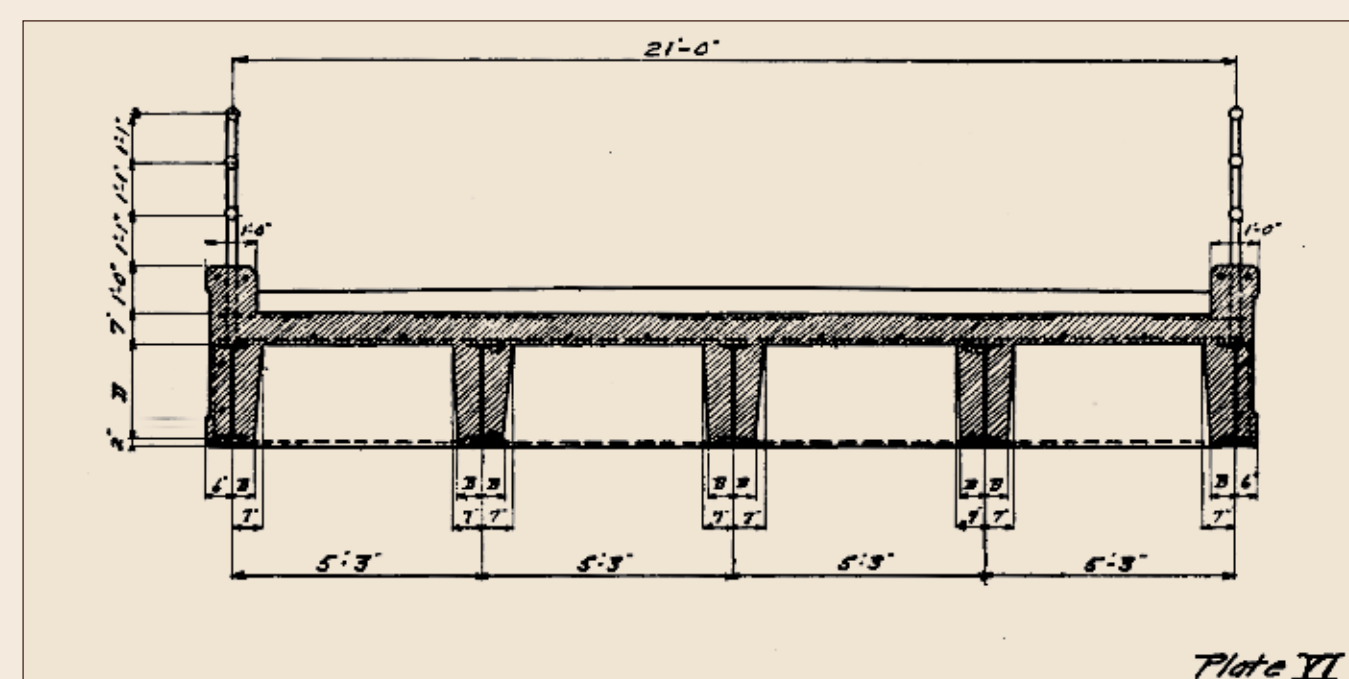
Dependable Design

The concrete encased steel, multiple girder bridge type was promoted by highway departments and engineering manuals of the early 1900s, as an easy and economical replacement for traditional timber stringer bridges.

The Darrah Bridge, as well as the Robbins Bridge, exemplified the type with parallel beams, cast-in-place reinforced concrete deck and concrete railings. Concrete protected the metal from corrosion and reduced maintenance. Advances in manufacturing made rolled steel I-beams widely available and new motorized heavy construction equipment was used to move them into place.



Darrah Bridge underside with concrete encasing the metal girders



Drawing of "I-Beams Encased in Concrete with Slab Floor" Storrs and Storrs 1918



1858 Walling Map of Merrimack shows Darrah and Kittredge houses east of the Darrah Bridge site. The Robbins Bridge crossing is also visible in the upper left, with the Robbins home and sawmill nearby.

Country Crossings

The crossing was named for the nearest homeowners, Abner Chase Darrah (1810-1891) and his wife Sarah, whose farm was on the corner of Pearson Road where Lilac Court is now. There has been a bridge here since the early 1700s when Bedford Road was the main road to Reed's Ferry river crossing. Most of the old farmhouses are gone, including those of the Kittredge family whose brickyard was near Reeds Ferry Elementary School. (Their bricks were shipped down the Merrimack River by canal boat to build the mills in Lowell.)

Paving the Way

At the beginning of the twentieth century, New Hampshire's dirt roads were muddy and rutted. Improved roads were needed for the trucks that were replacing the horses and wagons hauling the farmers' goods to market; and for the cars bringing tourists to the lakes and mountains. Wooden bridges were deemed unsafe for the new heavier vehicles. The first state law regulating bridge loads was enacted in 1915. Local road agents relied on standardized plans for new bridge designs developed by engineers, such as father and son John W. and Edward D. Storrs, the state's first bridge design firm. They published Storrs: A Handbook for the Use of Those Interested in the Construction of Short Span Bridges in 1918.



John William Storrs (1858-1942), highway and bridge engineer pictured in *One Thousand New Hampshire Notables*. Metcalf 1919

This interpretive panel was produced in cooperation with the New Hampshire Department of Transportation and New Hampshire Division of Historical Resources, as mitigation under Section 106 of the National Historic Preservation Act for the removal of the historic Darrah Bridge. Text by Preservation Company, 2020.