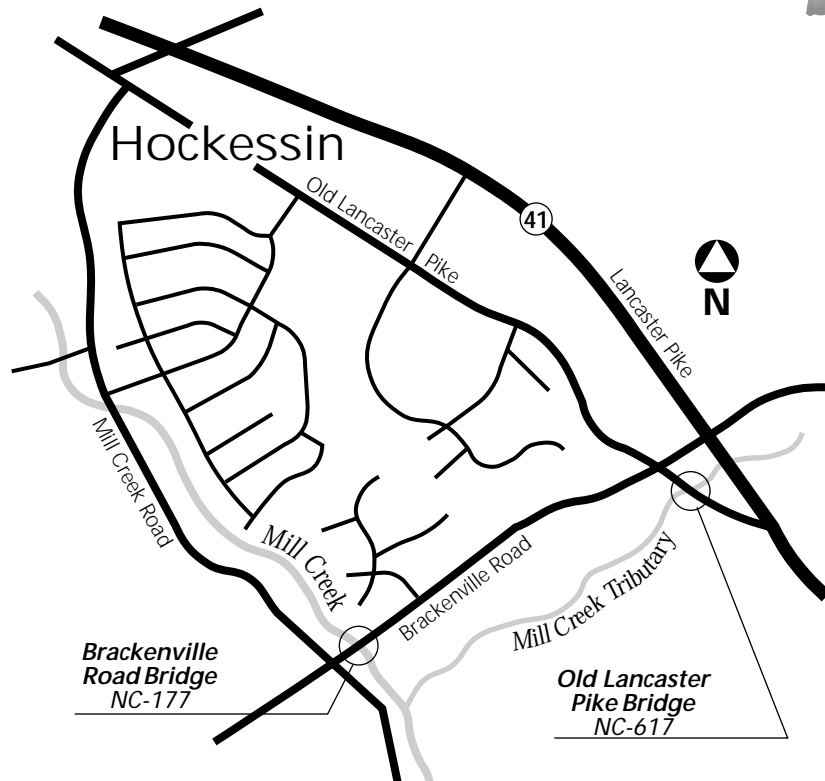


Stone Arch Bridges



The only known surviving bridge from Delaware's turnpike era is the ca. 1808-11 Old Lancaster Pike over Mill Creek Tributary bridge (State Bridge NC-617).



Old Lancaster Pike over Mill Creek Tributary bridge. Arch ring detail showing rubble granite spandrel walls and voussoirs, (State Bridge NC-617).

Old Lancaster Pike (Road 300) over Mill Creek Tributary

State Bridge NC-617

Southeast of Hockessin, New Castle County

Designer/Builder: Unknown

ca. 1808-1811

The Old Lancaster Pike bridge is Delaware's oldest stone arch highway bridge and the only surviving bridge associated with the state's early 19th century

turnpike era. It is a skewed, 12'-long span carrying two lanes of traffic on a 26'-wide deck. The bridge has rubble granite spandrel walls and rusticated voussoirs. The parapets are finished with concrete caps that replace the original stone capstones. No original plans or drawings are on file at the Delaware Department of Transportation, but field investigation indicates that the bridge was widened in kind to both sides

B&O Railroad's Brandywine Viaduct

Delaware's most visually impressive stone arch bridge is the 1909-1910 Brandywine Viaduct built by the Baltimore & Ohio Railroad over Brandywine Creek in Wilmington. The seven-span bridge is slightly less than 1,000' long and rises over 110' above the creek. The bridge was built as the railroad's replacement of an 1888 iron deck truss bridge, which had proven inadequate to heavier locomotives. Although the B&O could have chosen to build another steel truss bridge, or a reinforced concrete bridge, there were few bridge types that spoke to permanency and stability as well as a stone arch, even if stone construction was very costly. The stone arch bridge was built on a slightly downstream alignment of the older truss bridge.

The Brandywine Viaduct is a testimony to the economic might and competitive spirit of America's railroads during their golden age. Two rival railroads that competed for dominance of major eastern markets were the Pennsylvania Railroad and the B&O Railroad. In 1902, the Pennsylvania Railroad embarked on a major program to rebuild its line, replacing many iron bridges with trademark stone arch bridges, such as the viaduct adjacent to its train station in downtown Wilmington. The rival B&O felt obliged to follow suit, and also built several stone arch bridges.



The B&O Railroad's Brandywine Viaduct, photographed shortly after it opened in 1910. In the background is the 1888 iron truss bridge it bypassed. In the foreground is a pedestrian suspension bridge that was used by workers walking to and from the mills that then lined the Brandywine Creek.

Historians of the B&O Railroad have often criticized its management for expending capital on a line that never proved exceptionally profitable, depleted the B&O treasury, and left it financially vulnerable.

The iron truss bridge abandoned by the railroad in 1910 was transferred to the City of Wilmington, which converted the bridge for use by pedestrians and motorized vehicles. The state highway department built a road from the eastern end of the truss bridge to the Concord Pike in 1933. The road, which made a more direct connection between the Trolley Square section of Wilmington and the expanding North Wilmington suburbs, was called the Augustine Cutoff, and the truss bridge has since been known as the Augustine Cutoff bridge. The deck truss superstructure was replaced by DelDOT in 1980. ■

by approximately 5', probably near the turn of the century. The nucleus of the stone arch span is believed to date to the construction of the 1808 to 1811 Newport-Gap Turnpike, later known as the Lancaster Pike.

The Newport-Gap Turnpike was the first turnpike chartered by the Delaware General Assembly, authorized on January 30, 1808. The route ran from Newport to Gap Tavern in Lancaster County, Pennsylvania, to link with the Philadelphia & Lancaster Turnpike, constructed in 1793. The Newport-Gap Turnpike provided an important commercial link between the farms of Lancaster County, Pennsylvania and the ports of Wilmington and Newport. Access to these ports and overseas markets stimulated the trade economy of both areas. This section of the turnpike remained the main road from Wilmington to Lancaster until the late 1940s, when it was bypassed by a realignment of State Route 41.