

Saint Paul Street Bridge Brockville – 214 Years of Service

Bridge refurbishment and relining is a viable alternative that helps Municipalities and Highway Departments extend budgets and minimize the inconvenience and delays of demolition and new construction. The City of Brockville has quietly kept the St. Paul Street Bridge at Buell's Creek in service for over 200 years through innovative engineering.

My involvement with the bridge took place in 1978 when it took its present form. The bridge was then servicing the Imperial Oil storage facility, which was purchased by the City that year. The new City Engineer, Gord Watts (deceased) had the task of bringing the bridge, a stone arch of eight metre span, up to the current highway standards. He employed consultant, Jake Thomas (deceased) of Gananoque, to design a solution that would meet the City's budget. The answer was to slip-line a structural plate corrugated steel arch, inside the original bridge, grout the space between the old and new arches and form concrete headwalls over the existing stone. The work was completed in a matter of days by Welter Construction of Kingston without even drawing the attention of the local press or disturbing what is today recognized as a site of industrial archeological significance.

I returned to the site this year as part of a CSPI project to review the long performance of corrugated steel structures. What I found was a structure in excellent condition with many more years of service left. More significantly, I found, where the oil depot had been, a beautiful park, with mature trees, historical stone buildings and millworks. Historical signage told the story of the site that was settled in 1784 by United Empire Loyalists. The signs included an aerial rendering of the town, dated 1873 that showed the bridge in its original glory.

With help from the Brockville Museum, the City of Brockville Engineering Department and local historian Doug Grant, I was able to piece together the history of the bridge



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From information available, it would appear that the original bridge was built just west of today's structure, to service Daniel Jones Sawmill (circa 1790) and the Back Pond Gristmill, built at the bridge a few years later. Very little is recorded except that Nehemiah Seaman, whose stone house is still standing nearby, fell to his death from the bridge during an ice storm in March 1830. A Town map, drawn in March of 1833 suggests that the bridge may have suffered a similar fate as Nehemiah, as it slipped under the icy waters of Buell's Creek. In an effort to gain more power for the expanding mills, the creek, now a millpond, was much deeper and wider than the original bridge could manage.



In 1836 Robert Shepherd, a stone mason by trade, bought and operated the mills. In 1852 with the help of his brothers and father, who were also masons, built the Shepherd Mill. As masons, they would be familiar with stone arch construction and it is presumed that they rebuilt the St Paul Street Bridge and built the Kingston Road Bridge (circa 1840) as both crossed their millpond. The bridges are earthen causeways with a central stone arch. They are clearly visible in an 1873 aerial rendering.

By 1884 the mills fell into disuse and the CPR railway bought the land as a coal transfer, storage facility and spur line. The millpond was drained to make way for the rails. Black Brothers of Brockville were contracted to build an iron bridge to carry St. Paul Street up and over the tracks. According to Brockville Public Works archives, "Their purpose was putting up as fine a bridge as they can as an advertisement for this new branch of their business." The Town Architect and designer, O.E.Liston, indicated that the contract price of \$1,800 is very cheap. Further good news was that while the new bridge was being built, in piggyback fashion above the Buell's Creek Arch, traffic flow could be maintained. Draining the millpond

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had exposed the piers for the old bridge where Nehamia Seaman had drowned 54 years earlier, making an economical temporary detour bridge possible.

As coal changed to oil, and railways gave way to trucks and the St. Lawrence Seaway, ownership and land use changed at the Brockville docks. The St. Paul Street Bridge was there to see it all. Its last renovation took place in 1983 when the 99 year old wrought iron railway bridge was demolished, leaving only a beautiful park and the 164 year old arch over Buell's Creek, that I had the pleasure to help preserve with Corrugated Steel Pipe 26 years ago.

