Statement of Heritage Significance

St. Louis (Grand Trunk Pacific Railway) Bridge
St. Louis



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Cover Photo: The St. Louis (former Grand Trunk Pacific Railway) Bridge over the South Saskatchewan River, looking upstream. Note the shorter truss section which was designed for a possible future navigational lift span. (R. Herrington; September 19, 2007).

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STATEMENT OF SIGNIFICANCE

The St. Louis (former Grand Trunk Pacific Railway) Bridge is located adjacent to the Village of St. Louis, approximately 30km south of Prince Albert. The structure, which crosses the South Saskatchewan River, was completed in early 1915. It consists of five Parker steel trusses and a shorter Pratt truss near the centre of the structure. Traffic attachments were added to each side of the bridge in 1928.

HERITAGE VALUE

The heritage value of the bridge lies in its status as a distinctive feature and an important community landmark. With a total span of 1250 feet, the multiple steel truss St. Louis Bridge is an impressive and picturesque feature of the landscape. The addition of traffic attachments to the bridge in 1928 resulted in this becoming the only traffic bridge over the South Saskatchewan River downstream from Saskatoon. This event expedited the improvement of the highway from St. Louis to Prince Albert over the next two years, as well as the completion of the road between Macdowall and Prince Albert. Both highways brought tourists to the new Prince Albert National Park, which had been opened officially on August 28, 1928 by Prime Minister W.L. Mackenzie King. Except for the addition of the traffic attachments in 1928 and the removal of the railway tracks in the 1980s, the structure remains largely unchanged since its completion in 1915.

The heritage value of the bridge lies in its association with the Grand Trunk Pacific Railway. The company was incorporated in 1903 as part of a transcontinental railway system. A northern branch line to Prince Albert from the main line at Young was started in 1906. Although the line would not reach St. Louis until 1913, and Prince Albert in 1917, the citizens of Prince Albert were optimistic that this northern city would become a major transportation and economic centre within a few years and the “Gateway to the North”. Competition in Western Canada from both the Canadian Pacific Railway and Canadian Northern Railway, as well as high construction costs, the demands of wartime, and the lack of a viable system of branch lines, forced the Grand Trunk Pacific into receivership in 1919. The operations of the Grand Trunk, the Grand Trunk Pacific, and the National Transcontinental Railway merged with those of the nationalized Canadian Northern Railway to form the Canadian National Railways, which later became Canadian National.

The heritage value of the structure also resides in its engineering technology. While the Parker steel through trusses were typical of railway bridge construction during this time, the smaller central through truss span was designed so that it could be transformed into a vertical lift span should this be required for future navigation on the Saskatchewan River

system. When large steamboats disappeared from Saskatchewan's rivers shortly after this bridge was constructed, this eliminated the need for bridges to include moveable spans in their design.

CHARACTER-DEFINING ELEMENTS

The heritage value of the St. Louis Bridge resides in the following character-defining elements:

- those elements which speak to its status as a landmark in the community, including its form and massing and its location on its original site;
- those elements that reflect the property's engineering technology, such as the Parker steel trusses, central Pratt truss, side roadway attachments, and the reinforced concrete piers and abutments.

ADDITIONAL INFORMATION

A. Historical Significance

The Grand Trunk Pacific (GTP) Railway was incorporated in 1903 as a subsidiary of the Grand Trunk Railway of Canada. As part of the government-sponsored transcontinental system, the GTP main line, which was constructed between 1906 and 1914, ran from Winnipeg via Melville, Edmonton, and Jasper to Prince Rupert, British Columbia. Competition in Western Canada from both the Canadian Pacific Railway and Canadian Northern Railway, as well as high construction costs, the exigencies of wartime financing,[1] and the lack of a viable system of branch lines, forced the Grand Trunk Pacific into receivership in 1919. The operations of the Grand Trunk, the Grand Trunk Pacific, and the National Transcontinental Railway merged with those of the nationalized Canadian Northern Railway to form the Canadian National Railways, which later became Canadian National.

In July, 1906 the Grand Trunk Pacific Company had secured a charter to build a branch line to Prince Albert from Young on its main line.[2] Unfortunately, by 1910 only 25 miles of this branch line had been constructed.[3] This had been extended north to Wakaw by the end of 1912 and the bed graded to the edge of Prince Albert.[4] The line finally reached St. Louis in 1913.[5] A significant structure was required to cross the South Saskatchewan River at St. Louis before the GTP could extend its line into Prince Albert.

In the early years, the only means of crossing the river during the summer months was by ferry. The first ferry operated about a mile upstream from the village of St. Louis shortly after the Northwest Conflict of 1885 and continued to operate until traffic attachments were added to the St. Louis railway bridge in 1928.[6] The interruptions in ferry service throughout the year due to river conditions "did much to prevent the St. Louis road becoming one of the main arteries of traffic between northern and southern Saskatchewan."[7]

A petition was circulated in the vicinity of Prince Albert in July 1910 and subsequently presented to the provincial government requesting that the structure be a combined railway and traffic bridge. Several comparative estimates were made throughout 1910 for a railway-only bridge versus a combined bridge.

Considerable discussion took place between the railway company engineers and the Assistant Chief Engineer of the Department of Public Works during 1910 regarding the viability and cost estimates for traffic attachments. The government strongly advised that the bridge should have a 12-foot roadway attachment on each side of the bridge, similar to the arrangement with the CNoR Bridge at Prince Albert which had been completed in 1909. The company was promoting one 15-foot roadway which, they claimed, would allow two teams of horses to pass each other. The disagreement resulted in the bridge being constructed as a railway bridge only.

While no precise official opening date has been determined from archival information, the bridge was completed in April, 1915. It is not known when the first train crossed the bridge although the line to Prince Albert apparently was not completed until May, 1917 when the ceremonial last spike was driven on May 17.[8]

In spite of the GTPs lack of support, area residents and merchants persisted in their request to allow traffic to use the railway bridge. In late 1919, the Prince Albert Board of Trade enquired of the GTP[9] whether traffic roadways could be attached to the bridge. They were informed that the design had anticipated the addition of these roadways at some point in the future. In spite of the Board being vocal, no further discussions were held for several years. This issue surfaced again in 1922 when local residents requested to use the bridge for vehicular traffic. The railway company emphatically turned down this request citing this as a most dangerous proposition.

The issue arose again in 1926 when the province offered to plank the bridge deck to make it suitable for vehicles to cross when no trains were present, and to install any necessary protective devices. The company, by then the Canadian National Railways, once again stated that the existing bridge was for rail traffic only.[10] The CNR did, however, open the door by expressing a willingness to discuss with the province a reasonable proposal for installing roadways along the sides of the bridge. In January 1927, the CNR conceded that the bridge had been designed to attach two roadways. They were prepared to undertake this work on the condition that, should the 100-foot fixed span need to be converted in the future to a lift span, the province would assume the expense of this conversion. The province agreed to this proposed arrangement in June, 1927. Dominion Bridge completed the work on the roadway attachments in March, 1928.

The roadway surface was an innovative design, composed of twenty-foot long steel plates, one-quarter of an inch thick and two-feet wide on three inch thick creosoted fir planks. The highway addition was opened officially on May 9, 1928.[11] A simple ceremony was held at the bridge with the Minister of Public Works severing the ribbons at the north entrance to the bridge and the General Manager of the CNR's Western Region doing likewise at the south entrance.[12] A well-attended banquet was held that evening in the Empress Hotel in Prince Albert.

Upon the time of the opening of the bridge to vehicles in 1928, the St. Louis Bridge became the only traffic bridge downstream from Saskatoon. This event expedited the completion of the highway from St. Louis to Prince Albert over the next two years, as well as the completion of the Macdowall highway to Prince Albert. The Hon. T.C. Davis pressed for these roads "in view of the Prince Albert National Park[13] and stressed the necessity of having highways from every direction in order to bring the tourists to the new park."[14]

In 1983, the railway track across the bridge was abandoned and the tracks subsequently removed. The former railway deck was planked for vehicular traffic and the road attachments temporarily closed. Normal traffic now once again uses the wings while heavier and wider vehicles use the old railway central section.

B. Engineering Significance

The St. Louis Bridge is 1250 feet in total length and is comprised of six steel truss spans. From south to north these spans are: 200, 250, 100, 250, 250, and 200 feet. All are Parker trusses except the central 100-foot span, which is a standard Pratt truss. The design of this bridge is similar to the steel truss "Traffic Bridge" in Saskatoon (completed in 1907) and the bridge constructed over the North Saskatchewan River at Battleford in 1909.

The firm of John Gunn and Sons Ltd. of Winnipeg constructed the concrete foundations, piers and abutments, which were completed by early November, 1914. The steel superstructure was provided by the Canadian Bridge Company of Walkerville (now Windsor), Ontario. Erection of steel commenced in February, 1915 and was completed on April 1, 1915. These prominent contractors also were responsible for Saskatoon's Traffic Bridge.

The 100-foot central span was designed so that it could be transformed into a vertical lift span should this be required for future river navigation. This capability was requested by the Department of Public Works, although the GTP pointed out at the time that "the river is blocked by fixed spans on either side of this location [the 1907 Traffic Bridge upstream at Saskatoon and the 1905 Canadian Northern Railway Bridge downstream near Fenton]…[and that the GTP is] …led to believe that the territory interested in the construction of our railroad…feel satisfied that the design of fixed spans as we are contemplating will be approved by the Department of Public Works, as these local interests do not consider it necessary to provide open spans."[15] The province agreed with the GTP's position to have all fixed spans but noted that when Public Works were "constructing the Saskatoon [Traffic] bridge, the Dominion Government called our attention to the fact that the South Saskatchewan River was a navigable stream, and all future bridge [sic] should be provided with a swing span in order to anticipate the river being navigable in the future."[16] This may explain why the Canadian Northern Railway Bridge at Prince Albert was constructed in 1909 with a central swing span rather than a vertical lift span.

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[1] Most of the financial backers were from England.
[2] Abrams, Gary W.D., Prince Albert: The First Century, 1866-1966, Modern Press, 1966, p.145.
[3] Abrams, Gary W.D., Prince Albert: The First Century, 1866-1966, Modern Press, 1966, p.149.
[4] Abrams, Gary W.D., Prince Albert: The First Century, 1866-1966, Modern Press, 1966, p.177.
[5] Abrams, Gary W.D., Prince Albert: The First Century, 1866-1966, Modern Press, 1966, p.216.
[6] http://www.villageofstlouis.com/index_files/page0001.html
[7] History in Print: St. Louis and District, 1924-1952, St. Louis Historical Society, 2005, p.20.
[8] *Prince Albert Daily Herald*, May 18, 1917, p.6.
[9] The operations of the GTP had been taken over by the federal government on October 10, 1919.
[10] Memo dated May 31, 1926 from the President of the CNR to the Minister of Municipal Affairs on file 227-45-13 at Bridge Services, Saskatchewan Highways and Transportation, Regina.
[11] *Prince Albert Times*, May 10, 1928, p.1.
[12] *Prince Albert Times*, May 10, 1928, p.1.

[13] The park had been declared a National Park on March 24, 1927 and had its official opening on August 10, 1928.
[14] *Prince Albert Times*, March 11, 1928.
[15] Saskatchewan Sessional Paper No. 30, Session 1912, December 8, 1910 (Saskatchewan Archives Board, Regina).
[16] Saskatchewan Sessional Paper No. 30, Session 1912, November 29, 1911 (Saskatchewan Archives Board, Regina).