

HERITAGE CITATION REPORT

name: Kanagulk Timber Trestle Railway Bridge
Address: Glenelg River Floodplain off Natimuk - Hamilton Road, south of Walcott Rd KANAGULK
Place Type: Railway Bridge/ Viaduct
Citation Date: 2022



**Recommended
Heritage Protection** **VHR -**

 HI -

 PS
 Yes

Integrity

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Intact sections of trestle bridge remain. Remnant bridge clearly marks the former carriageway of the Natimuk-East – Hamilton rail line.

History and Historical Context

Rail reached Horsham in 1879 following the extension of the railway line from Ballarat via Ararat and Stawell. The line's arrival marked an important milestone in the development of the Wimmera, effectively opening up the district to closer settlement, resulting in population growth and increased agricultural production.

The West Wimmera Railway League formed in the early 1880s to lobby the Department of Railways for a spur line from the Horsham railhead to southern and western Wimmera districts. The league, primarily comprising district selectors and Natimuk business interests, proposed that the line would serve a catchment of 300 farmers, who collectively produced 260,000 bushels of grain per year. The league argued that the line would promote further settlement and increased cultivation of land previously used for grazing. It argued that 'the produce of a 320-acre farm (of cropping) would bring more revenue to the railways than the produce of 20,000 acres devoted to wool-growing'. [1]

Without access to a local railhead farmers incurred a fee of sixpence per bushel for the transportation of grain to the Horsham terminal. This cost had a significant negative impact on profit margins, considering that between 1879 and 1888 the price of wheat halved from four shillings down to two shillings per bushel.[2]

The poor condition of the road network provided further incentive to lobby for a railway line. One correspondent to the *Horsham Times* described the state of the Horsham to Noradjuha road as 'almost impassable' explaining that 'the best way to travel this road now would be in a boat'. [3]

Finally, in 1884 the *Railway Act* (also known as Duncan Gillies' 'Octopus Act') authorized the construction of the 20 mile 'Horsham to Natimuk' spur line. Controversially, the line stopped short of Natimuk and diverged southward at Natimuk East (one and a half miles from the township proper) before terminating at Noradjuha.

Contractors, Downie and Barnfield won the tender to construct the line for £46,264, which included a large timber-trestle rail-over-river bridge spanning the Wimmera River and its flood plain near Quantong. W. Blackwood was awarded tenders to construct a goods shed and platform at both the Natimuk East and Noradjuha sidings. The station building at Noradjuha was constructed by Parker and Vickers.[4] The line opened to traffic on the 25 August 1887.

Further lobbying resulted in the Department of Railways commissioning a survey for a 28 mile extension from East Natimuk to Goroke in 1888. In 1890 the line to Natimuk was opened and the extension west to Goroke was completed in 1894.

Horsham – Hamilton Branch Line

Both the Hamilton and Portland Railway Leagues were supporters of the Horsham to Noradjuha spur line and were keen to see the line extended to the south. Indeed, since the early 1880s each had campaigned for a railway line that would see Wimmera grain transported directly to the deep-sea Port of Portland. The route of this proposed north-south link, however, was hotly contested. Naturally, the Hamilton league championed a line that passed through Hamilton, via Cavendish to tap into the timber and wool-growing areas of the Wannon and Southern Grampians. Meanwhile, the Portland league lobbied to by-pass Hamilton in favour of Casterton, with the addition of a spur line that crossed the South Australian border at Mt Gambier.

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Over a period spanning two decades, the Department of Railways investigated a number of possible routes. Ultimately, the concept of a single through-line was abandoned and the Hamilton – East Natimuk spur line was to be knitted together ‘piece by piece’ over a period of eight years. The first piece was the 11 mile Noradjuha – Toolondo line, which opened in 1912. It was followed by the 16 mile Hamilton – Cavandish line, completed in 1915.

Up to six individual lines were eventually linked to form a chain that extended from Horsham to Portland and comprised the former local branch lines of Horsham – Noradjuha; Noradjuha – Toolondo; Toolondo – Kanagulk; Kanagulk – Balmoral; Balmoral – Cavandish; and Cavandish – Hamilton.

A series of large rail bridges were constructed across the Glenelg and Wannon Rivers. Two timber-trestle rail-over-river bridges were erected on the Toolondo-Kanagulk line in 1917, spanning the broad Glenelg River floodplain, south of the Kanagulk rail siding. At Cavandish, a composite timber-and-steel bridge was erected across the Wannon River in 1920.[5]

Completion of the through-line had been hindered by war-time material and labor shortages and was eventually opened to traffic in November 1920, although a mixed goods and passenger service had operated on localized sections of line from the turn of the 20th century.

The *Horsham Times* reported that by January 1927 the Horsham Station was dispatching two grain trains carrying forty trucks daily to the Port of Portland. It noted that grain destined for Portland was being collected from rail sidings in the northern Wimmera region from Dimboola, Pimpinio, Antwerp, Kiata, Kaniva, Serviceton, Lillimur, Jeparit and Sailsbury, and in the south from Noradjuha and Kanagulk.[6]

The passing of the *Grain Elevators Act* in 1934 and the creation of the Victorian Grain Elevators Board (GEB) resulted in a network of reinforced concrete silos established at rail sidings throughout the Wimmera, Mallee and Western Districts. Wimmera grain, previously transported to the Port of Portland via the Hamilton – East Natimuk line, was re-directed to a purpose built export terminal at Geelong. The GEB bulk storage facilities provided a single point of receipt, storage and distribution and replaced the stockpiling of individual jute wheat bags (which were susceptible to rot and rodent infestation) at country rail sidings. Two concrete silos were established on the Horsham – Carpolac branch line in 1939 (a 65,000 bushel capacity silo complex at Vectis and an 110,000 capacity complex at Natimuk).

Bulk handling facilities were eventually established on the Hamilton – East Natimuk line in 1951 when a corrugated iron 47,000 bushel capacity wheat bulk head was erected at Noradjuha. A ‘Behlen Bin’ imported by the GEB from the USA was erected adjacent for the 1960-61 harvest. These facilities were established as the result of lobbying by the local branch of the Victorian Wheat and Woolgrower’s Association and constructed by local farmers. However, as with all Wimmera GEB bulk handling facilities, grain collected at Noradjuha was transported to the Geelong export terminal on the main western line (via Horsham).

From 1920 a thrice-weekly passenger service ran between Horsham and Balmoral, and between Balmoral and Hamilton. There was no through connection between Horsham and Hamilton as the separate services operated on differing days and both terminated at Balmoral. The Horsham – Balmoral passenger service ceased operation in 1951. The Balmoral – Hamilton service stopped in 1955. The railway freight and mixed goods service, which had been reduced significantly with the re-direction of grain trucks to Geelong in 1939, ceased with the closure of the Hamilton – East Natimuk line in July 1979.[7]

Kanagulk Railway Bridge

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The 31 span timber-trestle rail-over-river bridge was erected on the Toolondo-Kanagulk Railway Line in 1917, south of the Kanagulk rail siding.

The following information is based on the National Trust's citation, Victorian Heritage Database report 70056:

The timber-trestle railway bridges over the Glenelg River floodplain were built in 1917, as the most significant engineering works on the short Toolondo-Kanagulk Railway.

Two bridges were constructed across the Glenelg River floodplain immediately south of Kanagulk and officially opened to train traffic on 17 December 1917, as the major engineering works on the Toolondo-Kanagulk line of just over ten miles in length.

From 1920 they functioned for a few years as important components in the north-south through-line carrying Mallee and Wimmera wheat to Portland via Hamilton. However, for most of their lives they carried passenger trains between Balmoral and Horsham.

Today, only one big timber railway bridge survives at this Glenelg River crossing, its partner having been accidentally destroyed by fire during a seasonal burn-off. The Kanagulk Bridge over the Glenelg River floodplain remains the sole surviving significant all-timber bridge on the historic Hamilton – East Natimuk Railway.

[1] *Argus*, Saturday 17 January 1885, pg. 29.

[2] *Argus*, Saturday 29 March 1884, pg. 10

[3] *Horsham Times*, Friday 20 August 1886, pg. 2

[4] *Gazette* 106, Friday, November 4th 1887, pg 3191

[5] Chambers, D. *Wooden Wonders*, Flemington, pg. 63.

[6] *Horsham Times*, Tuesday 25 January 1927, pg 4.

[7] Turton, K. W., *The Portland Railway*, Melbourne. 1968, p. 161 – 162.

Description

Physical Description

Located: 37°08'54.2"S 141°51'13.9"E

Approx 150 metres long section of timber trestle bridge, the bridge stands at a maximum approximately 6 metres out of the water of the Glenelg River. Earth embankments are still evident to either side of the bridge. The bridge spans the river and floodplains adjacent.

Trestles – 31 extant in intact section, with an unusual mix 5m and 6.6m spacings between each. All are numbered. Trestles constructed from redgum trunk section pairs of posts (one straight, one angled per leg), with

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timber cross braces and ties between. Tops are finished with a pair of bearers, notched to posts. Carriageway is timber in construction, with main longitudinal timber bearers and timber decking planks laid perpendicular to bearers. Deck is finished with ballast metal gravel/ dirt mix, barely contained by remnant timber edge beams. A single cantilevered timber 'safety' platform remains to the side of the bridge – in poor condition.

Remnant trestle bridge was one of two such bridges across the Glenelg River. The second bridge was burnt down in a burnoff bushfire .

Physical Condition

Average condition – timberwork. Ballast and timber gutter rails missing. All weathered, minor corrosion evident to steel fixings. Two trestles dropped in part at north end, where they stand in the water. Earth atop the deck is holding moisture and increasing loads on the bridge. No vehicular or foot traffic allowed on the bridge in 2022. Quantong bridge is in better physical condition.

Australian Heritage Commission Criteria

Relevant HERCON Criteria

Criterion A: Importance to the course, or pattern, of our cultural or natural history. (supported expansion and increased agricultural production in the Shire after laying in 1917. The railway allowed the economic, easy and reliable transport of grain and wool from farms to market and port).

Criterion B: Possession of uncommon, rare or endangered aspects of our cultural or natural history. (rare, as one of two surviving complete sections of trestle rail bridge in the Shire – only other trestle bridge is at Quantong – 1887)

–Criterion D: Importance in demonstrating the principal characteristics of a class of cultural or natural places or environments. (as a class consisting of rail trestle bridges, the remaining bridge section is intact and demonstrates construction type, use of local materials and innovative engineering skill required to successfully bridge river areas; (illustrates railway engineering technology of the early 20th Century – trestles are numbered for maintenance, spans suit loads imposed, engineered to avoid flooding and span river, timber safety platforms to sides still extant)

Criterion F: Importance in demonstrating a high degree of creative or technical achievement at a particular period. (composed of an unusual combination of standard Victorian Railways fifteen feet and twenty feet timber-beam spans. Its features such as the original all-timber safety platform are now very rare–)

Comparative Analysis

Trestle rail bridge, Quantong, Hermes no. 186214: Horsham-Carpolac railway line – passes over the Wimmera River – similar condition, length and construction type – comparable, but much earlier in construction.

Examples in other municipalities:

Stony Creek rail bridge, Nowa Nowa, Hermes no. 67978: 1916 construction, 27 span, 276m long, 18.6 m high bridge. – comparable, similar date in construction. Higher than Kanagulk bridge.

Trestle / steel bridge, Panther Place, Eltham, Hermes no. 66300: 1902 trestle bridge – mix of timber and steel – low rise, but still in service today.

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Trestle bridge, Puffing Billy, Belgrave, Hermes no. 66906: 1889 in construction – comparable (curved) but earlier in construction.

Trestle bridge, Springdallah Creek, Hermes no. 31671: 1880s – early bridge – inc steel beans under carriageway.

Statement of Significance

What is significant?

The elements of heritage value of the 1917 Kanagulk timber trestle railway bridge over the Glenelg River include:

- . 160m long section of timber trestle bridge, safety platform to side and the form of the earth embankments each side – to at least a length of 50m each.
- . All timber sections of trestles, bracing and carriageway deck. Engineering numbering of posts of particular note.

How is it significant?

The 1917 Kanagulk timber trestle railway bridge is of historic and technical significance and of rarity value to Horsham Rural City.

Why is it significant?

The 1917 Kanagulk timber trestle railway bridge, is:

. of local historic significance, as remnant evidence of the 1917 Natimuk East – Hamilton railway line. Once laid, the railway facilitated the economic and rapid transport of grain from farms to ports – resulting in increased agricultural activity, prosperity and substantial expansion of agricultural development of the Shire in the early 20th century. Towns such as Natimuk, Toolondo, and Noradjuha developed along the railway line, providing stations, silos (mid 20thC) and fuel/ water for trains. (Criterion A)

. of local significance as rare, surviving evidence of past railway routes through the Shire and as a rare, intact example of timber trestle bridge construction within the Shire. (Criterion B)

. of local technical significance, as an illustration of a particular class of Victorian Railways timber railway trestle bridges of the 1910s period – exhibiting early 20th Century railway engineering skill and innovation in the use of local materials in construction, engineering skill in spanning and modifying the local terrain and waterways. It is composed of an unusual combination of standard Victorian Railways –timber trestles at 5 and 6.6 metre centres, supporting a timber and ballast carriageway for trains, and retains the original all-timber safety platform which is now very rare. (Criteria D and F)

Recommendations 2022

External Paint Controls

No

Internal Alteration Controls

No

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Tree Controls	No
Fences & Outbuildings	No
Prohibited uses may be permitted	No
Incorporated Plan	-
Aboriginal Heritage Place	No

References

Literature title: The Argus Newspaper

Literature type: General Reference

Literature author:

Literature publisher:

Literature year:

Literature title: A story of Horsham : a municipal century

Literature type: General Reference

Literature author: Brooke, Brian. & Finch, Alan

Literature publisher: City of Horsham

Literature year: 1982

Literature title: Wooden Wonders Victoria's Timber Bridges

Literature type: General Reference

Literature author: Don Chambers

Literature publisher: Hyland House Publishing for the National Trust of Australia (Victoria)

Literature year: 2006

Literature title: Horsham Times Newspaper

Literature type: General Reference

Literature author:

Literature publisher:

Literature year:

Literature title: The Portland Railway

Literature type: General Reference

Literature author: Turton, Keith, W

Literature publisher: Australian Railway Historical Society Melbourne

Literature year: 1968

Literature title: Victorian Railways Report: of the board of land and works for the year ending 30th June 1888

Literature type: General Reference

Literature author: Victorian Railways

Literature publisher:

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Literature year: 1888

Literature title: Report from the Parliamentary Standing Committee on Railways on the Cavendish to Toolondo Railway, 3rd December 1913

Literature type: General Reference

Literature author: Victorian Railways

Literature publisher:

Literature year: 1913

Literature title: Victorian Heritage Database, citation report 70056

Literature type: Heritage Area Study

Literature author:

Literature publisher:

Literature year:

Literature title: Victoria Government Gazette, number 106, Friday, November 4th 1887

Literature type: General Reference

Literature author:

Literature publisher:

Literature year: 1887

This information is provided for guidance only and does not supersede official documents, particularly the planning scheme. Planning controls should be verified by checking the relevant municipal planning scheme.