

Heritage Overlay No.: 066
Citation No.: 168
Place: Bridge Road Bridge

Other Names of Place: N/A
Location: Carrying Bridge Road over Toolern Creek, Melton South
Critical Dates: 1913 (Construction)
Existing Heritage Listings: None¹
Recommended Level of Significance: LOCAL



Statement of Significance:

The Bridge Road Bridge is an early (1913) and relatively intact example of a concrete girder bridge built by Sir John Monash for the Shire of Melton. It was built to provide railway station access to the new farming areas being opened by the break-up of the pastoral estates, in particular the Closer Settlement Board's Exford Estate. Its setting in a deep gully enhances its aesthetic significance.

¹ The bridge was identified as being of local heritage significance in a Monash University typological study of Sir John Monash concrete bridges: Lesley Alves, Alan Holgate, Geoff Taplin, *Monash Bridges Typological Study: Reinforced Concrete Bridges in Victoria, 1897-1917* (Monash University, Faculties of Engineering and Arts, second edition, September 1998)

The Bridge Road Bridge is aesthetically and technically significant at a LOCAL level (AHC F1). It is an early, moderately intact example of a reinforced concrete girder bridge in Victoria. It is a fine intact example of (later Sir) John Monash's functionalist approach to bridge-building in reinforced concrete as the most economical way of providing a permanent structure on country roads. It is dates to the formative period in concrete beam and slab construction, which became widespread in the 1910s and 20s.

The Bridge Road Bridge is historically significant at a LOCAL level (AHC A4, B2, H1). It was designed and built by prominent Australian John Monash, and the Reinforced Concrete & Monier Pipe Construction Company. The bridge is also significant as the major expression in Melton of the public works associated with the new farming era associated with the break-up of the Shire's vast pastoral estates, and in particular with the extensive work of the Closer Settlement Board. More generally the bridge is an excellent example, in period engineering style, of the early twentieth century policy of building bridges to connect farms with railway stations, and in particular the demand for such roads and bridges by the farmers on newly subdivided pastoral estates.

Overall, the Bridge Road Bridge is significant at a LOCAL level.

Description:

The bridge is a high, two span reinforced concrete girder bridge, carrying Bridge Road across a deep gully in Toolern Creek.

It has two slender, high piles, linked by a transom about half way up, and which sit on a strip footing. Its spans are each 9.14 metres long, and used three girders to make an overall width of 3.66 metres.²

The bridge slopes up from a northern approach with a long embankment to a high southern bank of the stream, which constitutes the abutment of the bridge.

In 1995 major repairs were carried out to the bridge, including the placement of a reinforced concrete overlay 80 millimetres thick on the deck, extensive patching of cracks, and the replacement of the old timber handrail with steel guardrails.³

History:

Contextual History: The Break Up of the Estates; and Sir John Monash

The Bridge Road bridge is the product of one of a major themes in Australia's history, the struggle between pastoralist interests and popular legislators for the land. It was a movement which reached its height in the 1860s Selection Acts which were a result of agitation by gold diggers to 'unlock the lands' dominated by the 'squatters'. The success of these Acts in distributing Victoria's unalienated Crown Lands was mixed, and by the 1890s popular discontent revived, this time calling for the repurchase of much of the good land which was being wasted as the 'sheep walks' on pastoral estates. These should be subdivided and redistributed as small farms in fulfilment of the 'yeoman ideal'. The Closer Settlement Act

² Alves *et al*, *op cit*, p. 116

³ *ibid*, p.117

under which this property was created was the realisation of this movement; it would be adapted and reincarnated after both the World Wars as Soldier Settler Acts.

By the end of the nineteenth century the next generation of farmers were surveying the pastoral properties that surrounded them, and changes were abroad. In 1897 the new owner of the Clarke empire, Sir Rupert Turner Havelock Clarke Bart had mused in Parliament about cutting up 40,000 acres of his estate to lease to dairy farmers. He was under some local pressure to make land available for farming, and declared he was keen not to ‘disappoint public expectations.’⁴ The 1898 Victorian Municipal Directory entry for Melton Shire made the first of a series of unprecedented reports on movements by big local landholders such as Rupert Clarke, Harry Werribee Staughton, and Harvey Patterson to sell and lease (often under the ‘share system’) large portions of their estates to small farmers and graziers.⁵

In the lead up to the sale of Clarke’s Rockbank and Deer Park estates a journal commentator made the interesting observation that as the 1860s Selection Acts had made unalienated Crown land available to farmers, it was by definition beyond the earlier developed lands, much of which remained in the hands of pastoralists. The break-up of the pastoral estates closer to the city would not only increase the agricultural produce and wealth of the State, but would help the railways to operate more profitably and reduce freight rates throughout the state. No longer would the produce of Wimmera or Upper Goulburn selectors have to be hauled by rail ‘through miles and miles of large estates in the South, where there were goods to pick up only in the shearing season.’⁶

State legislators fostered such sentiments and implemented changes. The Land Act 1898 had established the “closer settlement” branch of the Lands Department, but it was not until the Closer Settlement Act 1904 that the scheme really developed. This Act introduced the possibility of compulsory acquisition by the government, and increased five-fold the amount that the Closer Settlement Board could expend on repurchasing land. The scheme commenced operations in 1905.

The regulations under the Act had only just been gazetted when, in May 1905, the Board purchased the 11,336 acre *Overnewton* estate. This was one of the Board’s earliest and largest purchases, and the first of several massive purchases by the Board between Keilor and Werribee. The *Exford* (purchased 1906) and then *Werribee Park* pastoral estates, both of which were much larger than *Overnewton*, were purchased and resold in quick succession.

This ‘break-up’ of the large estates coincided with major developments in farming in the late nineteenth and early twentieth century, as new science, technologies, fertilisers, transport and markets enabled huge productivity increases. With inventions such as the Babcock separator, the development of local co-operative creameries and butter factories, and advances in refrigeration creating new export markets, dairying in particular suddenly boomed.

And so the beginning of the twentieth century marked a major new era in the history of Melton. It saw the subdivision and sale of thousands of acres of the Clarke, Taylor, and Staughton pastoral empires, and after the First World War, of smaller pastoral estates such as *Melton Park* and *Green Hills*.

The Shire was transformed by the Closer Settlement and (to a much less extent) Soldier Settlement Acts of the early twentieth century. New roads were surveyed and ‘macadamised’,

⁴*Sunbury News*: 31/7/1897, 7/8/1897, 4/9/1897.

⁵ *Victorian Municipal Directory*, 1898, and following years.

⁶ ‘Alfalfa’, ‘Deer Park and Rockbank Estates’ (M&DHS, name of journal and date unknown, c.1907)

and the Bridge Road bridge was built. The establishment of new primary schools at places such as Sydenham West, Melton Park, Exford and Melton South reflect the emergence of whole new communities. Some of Melton's most historically celebrated residents, such as international trap shooter Hector Fraser, were amongst the new settlers. Other sons of the new farmers are commemorated on memorials of the world wars.

History of the Place

The bridge crosses Toolern Creek, the southern portion of which formed the boundary between Melton and Braybrook Shires until the 1920s. The land on the eastern side of the bridge was part of Harold Werribee Staughton's *Exford Estate*. In 1904 he sold most of the land to the Closer Settlement Board, keeping the homestead and 1500 acres.⁷

1907 the Closer Settlement Board advertised the sale of 54 allotments, mostly of about 150 acres, of the Exford Estate. The land to the east of the creek was withheld from the first sales earlier in the year, and advertised in November.⁸ Unlike other parts of the estate it had no existing 'homestead' on it. It was also a portion of the estate that had been cultivated in the past, and 'yielded good returns'. The Board marketed it as being 'suitable for the growth of cereals and for dairying', and that timber for fencing and firewood is available in the district. Most importantly, it advertised that:

'Good facilities for marketing produce now available. Both morning and evening trains to Melbourne stop to pick up milk etc at Melton.'⁹

The total area of this land east of the creek, in excess of 1500 acres, was divided into 11 allotments, averaging 138 acres each. Prices varied between £6.5 and £11.10 per acre, the more expensive allotments being generally nearer the creek, and smaller in size.¹⁰ It is not known whether all of the lots were sold in the 1907, or subsequent, sales.

In June 1912 Melton Shire President Alfred Minns wrote on behalf of the Council to the Shire of Braybrook requesting that it help build a bridge across Toolern Creek, previously accessed only by a ford. (Minns, a farmer, resided in Alfred Road on the northern side of the creek.¹¹) The ford crossing was difficult, and a safe and permanent crossing was required to provide to give farmers access to the Melton South Railway Station and township. The bridge served the new Closer Settler farmers, around Ferris and Alfred Road, and presumably some others who purchased parts of Clarke's former Rockbank estate on the east side of Mt Cottrell Road. While it served a limited number of farms it would save them much trouble, either in using the difficult ford, or to travelling to and from the bridge at Melton to access the nearby Melton South station.

Braybrook Council agreed to Minns' request. Its offer to contribute £100 compared with Melton's £50 is indicative of the importance of the railway: a bridge would enable traffic from Braybrook to 'be diverted to Melton Railway Station'.¹² The Melton Express called the

⁷ Starr, J, *Melton: Plains of Promise* (Shire of Melton, nd, c.1985), p.56

⁸ *The Weekly Times*, 23/3/1907, 16/11/1907

⁹ *ibid*, 16/11/1907

¹⁰ *ibid*

¹¹ Alves, *et al*, *op cit*, p.116. The Kororoit Parish Plan shows A.Minns as having purchased one of the Closer Settlement allotments (No.36) on the east side of the creek, immediately adjacent to the proposed bridge.

¹² *The Melton Express*, 15/3/1913.

proposed bridge crossing ‘a boon to many of the farmers on the Braybrook side and others of the travelling public.’¹³

Braybrook Council called a meeting of interested parties. The Closer Settlement Board, ‘always keen to encourage settlement of its estates, supported the work’.¹⁴ The Braybrook engineer was instructed to prepare plans and specifications for the bridge at the request of the Board. The Melton Council agreed to contribute £50 to the cost. John Monash’s Reinforced Concrete and Monier Pipe Construction Co. price was £442, above the Council estimate of £400, and the Company agreed to some omissions and a price of £412. The Board would not sanction the work without Melton Shire contributing the same as Braybrook, so Melton Shire contributed another £20, and £30 was collected from the local residents.¹⁵ Cr Minns had advised that he and three other local residents would find the difference in price to expedite matters.¹⁶

The Company was anxious to start before the onset of wet weather so construction began before the arrangements were finalised. Work began on 13th May.¹⁷ By time the contract was signed on 30th June the bridge was almost finished. The final inspection was made on 4th August 1913.¹⁸ Mr E Keating, contractor for the adjoining road had also made good progress with his work.¹⁹

After shear cracking in the concrete beams was identified in 1982 a 5 ton limit was imposed. A VicRoads inspection in 1993 recommended major repairs, which were carried out in 1995.²⁰

The Bridge Road Bridge gains significance through its association with designer and builder John (later Sir John) Monash. Monash (1865-1931) had a highly successful career in three distinct fields:- as the original Victorian holder of the rights to use the patent of the innovatory Monier system of concrete engineering; as a famous general in the Great War; and as the inaugural general manager of the new State Electricity Commission of Victoria, which launched the Yallourn generation plant and township. With partner Anderson he contributed to the design of Victoria’s early concrete arch bridges, notably the Morell Bridge across the Yarra, and the Fyansford Bridge across the Moorabool River. Anderson left the partnership, and in 1905 Monash formed the Reinforced Concrete and Monier Pipe Construction Co. Ltd., which continued his monopoly of the Monier patents, and dominated the concrete construction industry. In the 1920s Monash was ‘broadly accepted, not just in Victoria, as the greatest living Australian’, and was knighted for his services.²¹

Thematic Context / Comparative Analysis:

Shire of Melton Historical Themes: Transport; Farming

Known comparable examples:

¹³ *The Melton Express*, 17/5/1913.

¹⁴ Alves, *et al*, *op cit*, p.117.

¹⁵ *ibid*

¹⁶ *The Melton Express*, 24/5/1913

¹⁷ *The Melton Express*, 17/5/1913.

¹⁸ Alves, *et al*, *op cit*, p.117

¹⁹ *The Melton Express*, 12/7/1913

²⁰ Alves, *et al*, *op cit*, p.117

²¹ Serle, G, in *Australian Dictionary of Biography*, Vol 10, pp 543-9.

The most comparable bridge in Melton Shire in terms of being an earlier example of a reinforced concrete girder bridge is the bridge over the Toolern Creek at Melton (Melton Stage One Heritage Study Site No.215), which would appear to be later (likely 1920s) and is not known to have any association with Monash.

While Monash pioneered the building of reinforced concrete bridges in Victoria from 1897, it was not until 1905-06 that he began building reinforced concrete girder bridges. The Bridge Road Bridge is then an early example of Monash's bridges which was identified in the Monash University typological study as being of local heritage significance. Examples in the adjacent City of Hume are the Gellies Bridge (1907) and the Holden Bridge (1910) with which it compares in design, and integrity.²²

Condition:

Good

Integrity:

Moderately intact

Although the bridge's integrity has been reduced by strengthening of its deck and replacement of its timber handrails with steel guardrails, its essential form and detailing are preserved.

Recommendations:

Recommended for inclusion in the Melton Planning Scheme Heritage Overlay

Recommended Heritage Overlay Schedule Controls:

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|-------------------------------|-----------|
| External Paint Controls: | <i>No</i> |
| Internal Alteration Controls: | <i>No</i> |
| Tree Controls: | <i>No</i> |
| Outbuildings and/or Fences: | <i>No</i> |

Other Recommendations:

- If it can no longer be made trafficable by sympathetic repairs and modifications, all options should be explored to retain the redundant bridge, *in situ*, and providing it with a pedestrian or other new use. If a new bridge is to be built beside or near it, it is important that it not be too close, or (particularly) too high, so as to overwhelm the new bridge or impede reasonable views of it.

²² Alves, *et al*, *op cit*, pp.116, 117; David Moloney and Vicki Johnson, 'City of Hume: Heritage Study of the Former Shire of Bulla District, 1998' ('Holden Bridge', Volume 5)