
Victoria Bridge

Location

Barkers Road KEW, BOROONDARA CITY

Municipality

BOROONDARA CITY

Level of significance

Included in Heritage Overlay

Victorian Heritage Register (VHR) Number

H0374

Heritage Overlay Numbers

HO480

Heritage Listing

Boroondara City

Statement of Significance

Last updated on -

Victoria Bridge is a riveted and welded steel Warren truss bridge over the Yarra River completed in 1884 to a design by Fraser & Chase following a controversial design competition held in 1880. Funds for the bridge's construction were provided by the councils of Collingwood, Hawthorn, Kew and Richmond. The contract was awarded to Mr P. Platt. Charles Rowand was officially appointed Supervising Engineer in 1883. The winning design was based on the theoretical work of William Charles Kernot (1845-1909) who campaigned for economy in public works design and the application of scientific principles in engineering. Fraser & Chase, students of Kernot at the University of Melbourne and junior engineers in the Railway Construction Board and the Public Works Department, were criticised as not having sufficient experience to carry out the design which as a consequence was subject to intense scrutiny by more "practical" engineers. The design and materials reflected Kernot's concerns about economy and cost effectiveness. The utilitarian engineering evident in bridges on this part of the Yarra contrasts with the aesthetic design of bridges along the Yarra closer to the city.

The bridge was widened in 1890 by the addition of a third line of truss on new piers on the up stream side to carry horse trams. Work commenced in 1914 to convert the horse tramway to an electric tramway by the Prahran &

Malvern Tramways Trust, part of the Trust's extension of its tramway into the eastern suburbs between 1913-18. In 1915 the bridge was further strengthened to accommodate the extra weight of electric trams and widened by the addition of two six feet cantilever footpaths. During this period the Prahran & Malvern Tramways Trust erected two ornamental gantries over the roadway to support overhead wires for the electric tramway.

Further widening and reconditioning of the bridge took place in 1933, including the addition of four new welded trusses, two intermediate and two on the outside. The latter were supported on new cantilevered truss cross beams attached to the top of the piers.

Victoria Bridge has seven lines of simply supported deck type Warren truss spans with upper sub-system bracing. The two original spans and third additional 1890 span are of riveted and bolted construction, between these and on the outside of the riveted spans are four welded steel trusses which match the earlier trusses. The deck is reinforced concrete on RSJ cross girders added in 1933. There are four piers comprising three riveted steel cylinders and a downstream angled brace on its own dwarf pier.

Each overhead tram gantry comprises A-framed steel uprights on either side of the road and a lightly curved main cross member of steel T section. The internal corners are decorated with curved steel strap to form spandrels which are in filled with decorative circles and curlicues. The decorative acroterion of steel strap originally at the centre point of the cross member has been lost. Electric lights have been attached to the gantries.

How is it significant?

Victoria Bridge is of historical, scientific (technical) and aesthetic significance to the State of Victoria.

Why is it significant?

Victoria Bridge is of historical significance as an important link in Melbourne's transport routes, its construction making Victoria Street/Barkers Road one of the principal east west routes in Melbourne. The bridge is of historical significance as a rare example of a joint facility initiated by four councils and reflects the importance of the bridge in facilitating travel and commerce between the industrial inner suburbs and the more affluent eastern suburbs. The utilitarian design and use of materials reflects budgetary constraints and the involvement of diverse councils.

Victoria Bridge is of historical significance for its association with the early history of the tramway system in Melbourne. The 1890 and 1915 modifications of the bridge and the ornamental overhead tramway gantries reflect the development of the tramway system. The gantries are of historical significance for their association with the formative decades of electric tramway development in Melbourne. They have an association with the Prahran & Malvern Tramways Trust, which grew to be the largest of such municipal trusts in Melbourne initially comprising Prahran and Malvern councils and later enlarged to include St Kilda, Caulfield, Kew and Hawthorn before its absorption by the Melbourne and Metropolitan Tramway Board in 1920.

Victoria Bridge is of scientific (technical) significance as one of a small group of riveted truss bridges in Victoria and the first to overtly apply engineering theory to truss design. Its design has associations with the contemporary debate on the relative values of theoretical and practical engineering and reflects developments in the engineering discipline.

The ornamental tramway overhead gantries are of aesthetic significance for their sophisticated early 20th century ornamental design, now relatively rare. As street furniture they demonstrate the high standard of infrastructure adopted by the Prahran & Malvern Tramways Trust.

Heritage Study/Consultant	Boroondara - City of Kew Urban Conservation Study, Pru Sanderson Design Pty Ltd, 1988;
Hermes Number	149581
Property Number	

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online <http://planningschemes.dpcd.vic.gov.au/>