

## BAYLES BRIDGE NO.1 & 2



BAYLES BRIDGE NO.1  
& 2 SOHE 2008



1 bayles river bridge ntv



bayles1 bridge plan

### Location

OVER YALLOCK CREEK, KOO-WEE-RUP-LONGWARRY ROAD BAYLES, CARDINIA SHIRE

### Municipality

CARDINIA SHIRE

### Level of significance

Registered

### Victorian Heritage Register (VHR) Number

H1852

## **Heritage Overlay Numbers**

HO141

## **VHR Registration**

November 18, 1999

## **Heritage Listing**

Victorian Heritage Register

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## **Statement of Significance**

Last updated on - September 3, 1999

What is significant?

The 'twin' timber-and-steel bridges popularly known as Bayles Bridge, built in 1950, consists of two adjacent bridges over Yallock Creek and No.4 Yallock Drain, on the Koo-Wee-Rup to Longwarry Road. The bridges cross two major drainage channels of a complex drainage network in typical Koo-Wee-Rup Swamp terrain. They are situated adjacent to a proclaimed fauna reserve for swamp wildlife, just outside the little township of Bayles. The bridges are constructed of rolled-steel joists on timber piers, with standard CRB longitudinal-timber decks and side rails. The bridges are of seven spans (64.6 metres long) and eight spans (74 metres long), with individual steel joist spans of just over 9 metres. They have several increasingly uncommon structural features, being the steel crossheads on the timber piles, and the rare dual layers of timber decking, transverse below and longitudinal above.

How is it significant?

The Bayles Bridges are of historical and scientific (technical) significance to the State of Victoria.

Why is it significant?

They are of historical significance as the largest and most impressive bridges associated with Victoria's most important swamp reclamation project. The bridges were a State, rather than a municipal project, carried out by the Country Roads Board in conjunction with the State Rivers and Water Supply Commission. The farming land reclaimed from the Koo-Wee-Rup supplied much of Victoria's rapidly-growing metropolitan population with dairy and market garden produce by the mid twentieth century. The bridges were part of the infrastructure works carried out on the swamp during the period of post-war reconstruction.

They are of scientific (technical) significance as bridges designed by the CRB, in co-operation with the SR&WSC, specifically for swamp conditions. Timber piers were preferred to concrete because they performed better in unstable swamp subsoils, but in such perpetually-damp contexts steel joists and crossheads ensured a longer working life for heavy-duty timber decks. Such substantial swamp bridges constructed largely of timber, with steel girders topped by dual layers of timber decking (transverse and longitudinal), are becoming rare in Victoria. They are also amongst the last major timber bridges to be constructed in Victoria, with prefabricated concrete structures predominating thereafter. The bridges are also amongst the largest timber bridge in Victoria. Each of the bridges ranks in size among the top 10% of timber road bridges of their type in Victoria. Combined, their number of spans, and total length, are exceptional. They are the largest and most impressive of the timber bridges built on the Koo-Wee-Rup Swamp.

## **Permit Exemptions**

**General Exemptions:**

General exemptions apply to all places and objects included in the Victorian Heritage Register (VHR). General exemptions have been designed to allow everyday activities, maintenance and changes to your property, which don't harm its cultural heritage significance, to proceed without the need to obtain approvals under the Heritage Act 2017.

**Places of worship:** In some circumstances, you can alter a place of worship to accommodate religious practices without a permit, but you must **notify** the Executive Director of Heritage Victoria before you start the works or activities at least 20 business days before the works or activities are to commence.

**Subdivision/consolidation:** Permit exemptions exist for some subdivisions and consolidations. If the subdivision or consolidation is in accordance with a planning permit granted under Part 4 of the *Planning and Environment Act 1987* and the application for the planning permit was referred to the Executive Director of Heritage Victoria as a determining referral authority, a permit is not required.

Specific exemptions may also apply to your registered place or object. If applicable, these are listed below. Specific exemptions are tailored to the conservation and management needs of an individual registered place or object and set out works and activities that are exempt from the requirements of a permit. Specific exemptions prevail if they conflict with general exemptions.

Find out more about heritage permit exemptions [here](#).

### **Specific Exemptions:**

#### **General Conditions:**

1. All exempted plans and alterations are to be carried out in a manner which prevents damage to the fabric of the registered place or object.
2. Should it become apparent during further inspection or the carrying out of alterations that original or previously hidden or inaccessible details of the place or object are revealed which relate to the significance of the place or object, then the exemption covering such alteration shall cease and the Executive Director shall be notified as soon as possible.
3. If there is a conservation policy or plan approved by the Executive Director, all works shall be in accordance with it.
4. Nothing in this declaration prevents the Executive Director from amending or rescinding all or any of the permit exemptions.
5. Nothing in this declaration exempts owners or their agents from the responsibility to seek relevant planning or building permits from the responsible authority where applicable.

#### **Specific Provisions/Exemptions**

1. No permit is required for routine maintenance or minor repairs which replace like with like.

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|-------------------------|-------------------|
| Construction dates      | 1950,             |
| Heritage Act Categories | Registered place, |
| Hermes Number           | 5987              |
| Property Number         |                   |

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## History

### Contextual History:History of Place:

Built in 1950 over Yallock Creek and a big swamp drain immediately adjacent, these two bridges were a product of a new agreement reached in that year between the State Rivers and Water Supply Commission and the Country Roads Board, relating to crossing places where CRB roads crossed State Rivers drainage channels.

The drainage and agricultural settlement of the Koo-wee-rup Swamp constitutes Victoria's most significant long-term swamp-reclamation achievement. During the late-nineteenth and early-twentieth centuries much of these old wetlands was converted into dairy and potato farms, sometimes through the agency of Village Settlements or Soldier Settlements. Originally, the vast swamp had posed a serious communications problem for travellers between Melbourne and Gippsland. It covered 100,000 acres between Tooradin and Bunyip, being fed from the waters of numerous local creeks and rivers. The first swamp drains date back to the 1860s, but swamp land-owners introduced much more systematic drainage schemes in the last quarter of the nineteenth century.

The Railways Acts of 1881 and 1884 ('Octopus Acts'), and construction of the Great Southern Railway through the swamplands towards Port Albert, involved the State Government directly in swamp-drainage schemes and an official Swamp Board was set up in 1896. The Great Southern Railway had been painfully built through the swamp by mid-1889, and the first official works to construct a Main Drain were undertaken in the early 1890s. The impact of devastating economic depression in 1893 led to further works projects there for Melbourne's unemployed, and to the creation of Village Settlements in an attempt to provide basic sustenance to impoverished families.

By the 1920s, Victoria's Water Commission expressed pride in the advanced state of its drainage works in the Koo-wee-rup area. The Victorian Year Book for 1927-8 summarized the situation. 'The Commission has under construction a comprehensive scheme of works for the reclamation of the extensive swamps in West Gippsland, known as Koo-wee-rup and Cardinia, and for the protection from periodical flooding of the surrounding low-lying lands, aggregating in all 100,000 acres. These areas have been constituted Flood Protection Districts under the provisions of the Water Acts. The construction of the huge main drains, feeders and subsidiary works has reached the stage that provides the landholders affected with protection from all but abnormal floods, and flood protection charges have been levied accordingly'. Abnormal floods of the early 1930s would never-the-less cause much damage to those earlier works.

The Country Roads Board was involved in constructing bridges through the Koo-wee-rup Swamp as early as 1925 when two all-timber bridges were built: one was on what was then called the Main Coast Road and the other on the Koo-wee-rup to Pakenham Road. All-timber construction was then chosen for two main reasons. Firstly, the insecurity of bridge foundations made timber piers technically preferable to concrete piers, and secondly the uncertainties relating to future drainage works in the area suggested the use of more-flexible timber structures rather than 'permanent' and relatively inflexible concrete bridges.

It is unclear exactly when that earlier CRB-style of traditional timber-beam construction of swamp-land bridges was abandoned, in favour of the use of rolled-steel joists with timber piers and timber decks. Such construction techniques were increasingly favoured by the CRB from the mid-1930s, when it became increasingly difficult to obtain sufficient quantities of large timber stringers. It has been suggested that the current pattern of drains and bridges largely reflects works carried out after major district floods in 1934. The type of rolled-steel-joist and timber bridge currently found scattered across the swamplands certainly reflects standard CRB bridge-construction practice of the later 1930s and the 1950s, and the State Rivers authority co-operated with CRB engineers on bridge design for the swamplands. Timber beams were particularly vulnerable to premature decay in moist swamp situations; steel joists alleviated that problem from the mid-1930s.

The two substantial adjacent CRB bridges at Bayles date from the immediate post-World-War 2 period, having been built in 1950. Although the exact date of construction of other existing swamplands bridges of similar type (but smaller dimensions) is not known, it appears that some (at least) were rebuilt in the years immediately after World War 2. In those post-war years the CRB up-graded its standard 1930s designs for steel-joist and timber bridges, to cater for increasing numbers of semi-trailer transports then appearing on Victoria's roads. In more recent years, many of the older timber swamp bridges have been replaced by concrete structures. This has been standard practice throughout western Gippsland, where numerous heavy milk tankers have put great pressures

on traditional timber-topped bridges. Surviving examples of such bridges in the Koo-wee-rup area are among the last extant road bridges in nearer Gippsland to be built predominantly of timber.

The sprawling city of Melbourne was very dependent on vegetable and milk supplies from these fertile old swamplands in the years around, and during, the Second World War. Construction of this pair of big bridges at Bayles in 1950 was therefore integral to Victoria's post-war reconstruction plans, and they constitute a significant reminder of a very important era in the development of Victoria's road-transport infrastructure.

Historically, the importance of these representative swamp bridges is considerable. Without such big swamp drains and their essential bridge crossings, little swampland settlements like Bayles could never have been created and local farming communities could not flourish.

## **Assessment Against Criteria**

### **Criterion A.**

The historical importance, association with or relationship to Victoria's history of the place or object.

The twin bridges are of historical significance as the largest and most impressive bridges associated with Victoria's most important swamp reclamation project.

The bridges are significant as a State, rather than a municipal project. They are the most significant examples of Country Roads Board swampland bridges built in conjunction with the State Rivers and Water Supply Commission.

The bridges were part of the infrastructure works carried out on the swamp during the period of post-war reconstruction.

The bridges have been an integral part of the infrastructure of the Koo-Wee-Rup Swamp reclamation, which created dairy and market garden areas that played a major role in feeding Victoria's rapidly-growing metropolitan population by the mid twentieth century.

### **Criterion B.**

The importance of a place or object in demonstrating rarity or uniqueness.

The bridges are increasingly rare remaining examples of timber bridges built in swampland because of the more suitable qualities of timber for foundations. Other features of these swamp bridges include the use of steel beams and crossheads, and the now rare dual deck, transverse below and longitudinal above.

The bridges are amongst the largest timber bridges in Victoria, each ranking among the top 10% of timber road bridges of their type in Victoria. Combined, their number of spans, and total length, are exceptional. They are the largest and most impressive of the timber bridges built on the Koo-Wee-Rup Swamp.

### **Criterion C.**

The place or object's potential to educate, illustrate or provide further scientific investigation in relation to Victoria's cultural heritage.

### **Criterion D.**

The importance of a place or object in exhibiting the principal characteristics or the representative nature of a place or object as part of a class or type of places or objects.

The bridges are the best representative historical examples of CRB bridge engineering for swamp situations. They are large and well-situated examples of a rapidly-diminishing type of swamplands steel-and-timber bridge design.

Criterion E.

The importance of a place or object in exhibiting good design or aesthetic characteristics and/or in exhibiting a richness, diversity or unusual integration of features.

Criterion F.

The importance of a place or object in demonstrating or being associated with scientific or technical innovations or achievements.

Criterion G.

The importance of a place or object in demonstrating social or cultural associations.

Criterion H.

Any other matter which the Council considers relevant to the demonstration of cultural heritage significance.

They are of aesthetic significance as utilitarian timber and steel structures, designed specifically for a major swampland context, which fit in very well with their low-lying rural physical environment. The once-broad wetlands have generally been transformed into fertile green agricultural land, but along the big drains with their fauna reserve for water birds something of the strange beauty of the original Koo-Wee-Rup wetlands is preserved. The aesthetic and social values of the bridges are enhanced by their close proximity to a fauna reserve for swampland wild-life.

## Extent of Registration

All the bridges marked B1 and B2, including the abutments and land five metres either side of the bridges and their abutments, as marked on Diagram Number 1852 held by the Executive Director, being part of the land described as government road (Koo-Wee-Rup - Longwarry Rd) Parish of Yallock

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*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/>*