Lane Cove River Bridge (1940) – some potted research

Many of us kayakers are very familiar with the Lane Cove River Bridge (the 'Epping' Bridge), which provides the base for our Time Trial starts, finishes and a sometimes cosy shelter for the timekeepers. Almost certainly, you have had time to ponder about the history of this bridge, and to marvel at its fine concrete lines. The commentary below is aimed to address this gap in your knowledge, allowing you to better concentrate on the Time Trials.

Previous articles have covered the early industrial history of this area. To recap - the factory at Duck Corner preceded the Lane Cove River Bridge by some 60 years. In fact Epping Road in our vicinity is a relatively late addition to the landscape with Mowbray Road being the more significant road up until the Bridge was constructed.

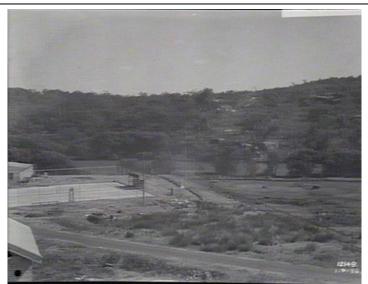
1 The St Leonards to Epping rail link (1889)

For those with a sense of déjà vu – around the time of the establishment of the North Shore (rail) Line in 1890 there was already a proposal to link St Leonards with Epping via rail:

"The north shore rail line from Hornsby to St Leonards opened on 1 January 1890 and was extended to Milsons Point in May 1893. In 1927 testing for the introduction of electric trains began and by 1928 a full-time electric service was operating on the line. Another rail line, linking St Leonards with the Epping/Eastwood area through North Ryde was proposed from 1889, and despite Acts of Parliament authorising construction in 1927 and 1930, the plan was dropped in favour of a road link... Source: http://dictionaryofsydney.org/entry/lane_cove

2 Main Road 373

No doubt with an engineer or two in charge of road namings, the road we currently know as Epping Road originally had the somewhat uninspiring



Above: Bridge site Sep 1938, looking west across Lane Cove River. Road alignment is in centre of photo over the river and up the hill towards Epping. Current LCRK car park is at right of image Source: Reproduction rights owned by the State Library of NSW http://acms.sl.nsw.gov.au

designation of Main Road 373. After planning/construction commenced and no doubt with some involvement from those looking after PR (that'd be Marketing?), it became the "Epping – St Leonards Main Road", then the Spooner Highway (correct - a politician!) and finally Epping road.

...When plans for the promised St Leonards to Epping/Eastwood railway were abandoned after the 1930s Depression, public unrest was apparent. Many had subdivided land and moved into the district on the promise of the new railway. In 1936 the Member for Ryde, Eric Sydney Spooner, promised 'a first class concrete road' instead. In 1938 construction began and in 1939 a new bridge built across the Lane Cove River completed the link to Epping, through North Ryde. Originally known as Spooner Highway, it is now Epping Road".

Source: http://dictionaryofsydney.org/entry/lane_cove

"Residential development of Lane Cove began in earnest throughout the 1920s. By that time areas to the north-west were developing as residential districts around the rail line between Epping and Hornsby, so that direct access to these districts became increasingly important. In 1925 a



Above: Bridge Site September 1938 – looking from Timekeepers postion to opposite bank and intended road alignment up the hill alongside the power pole. Source: Government Printing Office 32362. Copyright State Library of NSW. <u>http://acms.sl.nsw.gov.au</u>

Parliamentary Standing Committee investigated a proposed rail link between Epping and St Leonards, but this did not proceed. Over a decade later, in 1936, the Cabinet endorsed a proposal for a road link. The road was to follow the lines of some existing roads, and required several new deviations, including the section of road on which the Lane Cove River Bridge is located, which lay slightly south of the existing Lucknow Road as it approached the River from the west, then ascended the spur to cross Stringy Bark Creek and meet the existing Moore Street at Lane Cove. Epping Road was originally known as the Epping-St. Leonards Main Road. Terrys Creek, Shrimptons Creek, Lane Cove River and Stringy Bark Creek were all to be crossed with newly constructed bridges. The Lane Cove River Bridge was to be provided with two footways which were designed, by the Department of Main Roads, so that when the anticipated widening of the road became necessary, new cantilevered footways could then be added. The design also took into consideration continued navigability of the river. (Main Roads, November 1938, pp 14-18; Main Roads, February 1940, pp. 57-60; Johnson, 1994, p. 70)

Source: http://www.environment.nsw.gov.au

3 Construction and Technical Description

The contract to build the Lane Cove River bridge was awarded to Monier Industries Ltd. and was completed for a final sum of 14,651 pounds. The reinforced concrete beam bridge over the Lane Cove River on Epping Road was one of over 1,000 bridges built by the Department of Main Roads between 1925 and 1940. During that period the Department's engineers adapted existing standards of bridge design to meet the requirements of improved motor vehicle performance - they were generally wider than previous designs with an improved load capacity. Source: http://www.environment.nsw.gov.au

Designer/Maker: DMR

Builder/Maker: Monier Industries Limited of Sydney

Physical description: A three beam reinforced concrete structure, this bridge has two main spans plus cantilever approach spans. It crosses the tidal Lane Cove River, and has mangroves both upstream and down (mixed with long term industrial developments). The main beams have soffits parallel with the deck which curve down at the piers. Each main span has three intermediate cross girders, with additional cross girders at the piers. The piers are framed from art-deco styled columns and headstocks. At the end piers the deck is supported on rocker bearings to allow for expansion, and the deck is unsupported at the abutments. On the upstream side of the original bridge, the crossing has been widened by the addition of a structure using prestressed concrete trapezoidal box girders. This new structure matches the existing at the middle pier but has longer spans, producing an overall longer bridge. Between the old and new structures, the original bridge has been widened by extending its intermediate cross girders to support utilities and a central median. The downstream side of the original bridge has also been widened in like fashion to support the walkway.

Source: <u>http://www.environment.nsw.gov.au</u>



Above: Bridge under construction Feb 1939 - looking west across the Lane Cove River. Duck corner factory at left – LCRK car park at right.

Source: Government Printing Office – 25678. Image copyright State Library of NSW <u>http://acms.sl.nsw.gov.au</u>



Above: Epping Bridge under construction Feb 1939– looking east across the river to Timekeepers Position. Factory at Duck Corner on the right with corn mill boiler house, coal bunker, garage and tennis courts.

Source: Government Printing Office – 25679. Image copyright State Library of NSW <u>http://acms.sl.nsw.gov.au</u> or <u>http://www.environment.nsw.gov.au</u>



Above: Epping Bridge Construction - looking West towards Epping.

Source: Government Printing Office 1939 – ex Trove

NEW EPPING ROAD To Be Opened To-day.

The road from Epping to Lane Cove, to be opened this afternoon by the Minister for Works and Local Government, Mr. Martin. was substituted for an earlier proposal of a railway from Epping to St. Leonards. In 1925 the Public Works Committee in-

quired into the railway proposal, and later recommended a double-track electric line, at a cost of £929,315, exclusive of land resump-tions and compensation. The construction tions and compensation. The construction of the railway, it was urged, would help in the development of a desirable residential area, shorten the travelling distance to Sydney, and relieve congestion on the main suburban line. I: was estimated that the operation of this proposed line would result in an annual loss of not less than £60,000 The railway project was not proceeded with, in spite of persistent local agitation, and in 1936 the Cabinet authorised the construction of a road, which was considered the best

of a road, which was considered the best practicable provision for the development of the area.

The road, from Epping to its junction with the Pacific Highway, is nearly seven miles in length.

Source: SMH 3 Feb 1940

NEW HIGHWAY.

Linking St. Leonards and Epping.

The new highway from Epping to St. Leonards, which will be opened for traffic this month, has a length of six and a quarter miles to its junction with the Pacific Highway, near the Lane Cove Fire Station.

It traverses the municipalities of Eastwood. Ryde, Willoughby and Lane Cove, opening up elevated residential arcas on both sides of the Lane Cove River.

Buses will run between Epping and Wynyard.

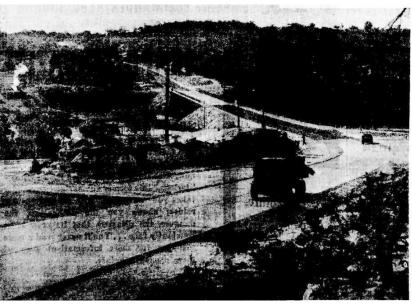
The route was selected primarily to provide direct connection between Epping and St. Leonards, instead of a proposed railway line, which was considered by the Public Works Committee in 1925, and subsequently recom-mended, at an estimated cost of £929,315, ex-

clusive of land and compensation. The line was not proceeded with, and in 1936 Cabinet authorised the construction of the road.

Bridges, in concrete, were built over Terry's Creek, Shrimpton's Creek, the Lane Cove River, and Stringybark Creek. Bridging the Lane Cove River cost £14,249. There are three spans in this structure, which has a total length of 242 feet, carrying a 30ft road-w:- and two 6ft footways.--The complete scheme provides for road widths of 84ft and 132ft respectively, allow-

ing traffic at 50 miles an hour.

Source: SMH 3 Jan 1940





Above: Aerial view of Epping Bridge in 1943. The bridge is ~3 years old, no kayaks in sight, a nice waste plume flowing from the factory into the River, and traffic looks a breeze (WWII is on at the time....) Source: SIX 1943 maps (images copyright)

4 Road Widening – and the Lane Cove Tunnel

In what by todays' standards looks remarkably like forward planning – Epping Road was widened in the late 1960's including extra lanes (and extra bridge) added to the original bridge. Next time you're timekeeping – see if you can spot the original 1940 Bridge – vs the additions from 1967-70 (it shouldn't be hard!).

Epping road was widened to six lanes in 1967-70 to relieve congestion in the area caused by road traffic associated with the large number of industrial concerns in the area and the recently established Television Channel 10 and Macquarie University. (RTA File 254. 1506;1) Source: http://www.environment.nsw.gov.au

These enhancements appear to have been sufficient to adapt to the installation of the Lane Cove Tunnel which opened in 2007 – perhaps facilitated by the corresponding shutting down of lanes/capacity on Epping Road through to Lane Cove.



Above: The underside of Epping Bridge – decorated by someone with some flare, and some paint... Source: Image by member Maya Gibson

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