Month & Year of Topic Topic Written & Spoken
Presenters

November 2004 **History of Oatley Como Bridge** Alec Leach

	OATLEY HERITAGE GROUP
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	TOPIC: A Condensed History of
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A condensed history of Oatley - Como Bridges.



Presented to the Oatley Heritage Group. Thursday 25th November 2004 Compiled by Alec Leach.

Volumes have been written on the Oatley - Como Rail Bridges, this report has been compiled so that the non train buffs may find it of interest. It may just create a spark for future generations to delve further into the interesting heart of the bridges.

As the Rail Bridge spans from Oatley to Como, it has been decided to now call it the Oatley – Como Rail Bridge. A Como Rail Bridge or Georges River Rail Bridge is meaningless.

The original "Georges River Rail Bridge", (Oatley – Como Rail Bridge) was officially opened on the 26th December 1885 as a temporary measure. This allowed trains to travel from the City to the National Park during the holiday period. The bridge was closed on 4th January 1886 until official load tests could be completed.







Taken from a Silva's Provisions Calendar Approx. 1950

This was carried out on the 19th January 1886. The test consisted of three goods locomotives coupled, totaling 198 tons. 6cwt, 3qts. *In fact they were three of the heaviest locomotives of the day*. The Locos were applied at rest on each span and then run backwards and forwards across the bridge at speeds of about 25mph (40km/h).

The bridge stood the test and a regular train service began soon afterwards.

In fact a W. B. Wade when writing his report on the test, stated on the 20th January 1886. "The bridge looks very well and is a first class job."

The bridge is of the lattice girder type, made from wrought iron. The horizontal girder members are U –shaped, joined by criss-cross vertical sections. A common type of rail bridge construction in that era, which were constructed mainly between 1871 and 1888.

The bridge stands on five pairs of piers, fourteen feet apart, supplied by Stockton Forge Co. They are iron cylinders, 11ft (3.35 M) diameter, each filled with concrete.

These piers range from 70ft (21M) to 114ft (34.7M) to bedrock

An unusual feature is the stone abutment on the northern bank.

The total bridge span is 954ft. (290.8M), made up of six spans each of 159ft (48.5M)

The bridge is thirty five feet above the water level

It weighed nearly 1113 tons and cost sixty six thousand, one hundred and thirty six pounds, two shillings and one penny (\$132,272) to build.

Design work was by John Whitton, Colonial Engineer, 1857 until 1890.

The Contractors were Messrs. C. & E. Miller.

Initial work was undertaken by Cochrane & Co, in Middlesborough England and was shipped to Sydney in 1884. The structure was off loaded at Darling Harbour, transported by horse drawn trolleys to the Cooks River, then transferred to punts to be towed by steam tugs across Botany Bay and up the Georges River to the work site at Como.

The single rail line was inadequate; so in 1890 the line was duplicated from Hurstville to the northern side of the bridge and then onto Sutherland in 1891. The bridge was only designed for a single track and soon became a bottleneck. On 26th February 1894, what is known as a gauntlet track was opened across the bridge. The four lines merge beside one another, and then open back to a duplicated track after negotiating the bridge. This reduced wear on the rails and switching mechanism.

Como Station: showing the Gauntlet rail track.

Electrification was extended on the 16th August 1926, in doing so the overhead arches had to be raised.

An interesting snippet from the Programme on the opening of the new Oatley – Como Rail Bridge, goes on to say when marvelling about its then 87 years service.

"That only once has figured in an untoward incident. This was when a small steamship, the s.s. *Erina* was chartered to convey a load of building material for the erection of a residence at Neverfail Bay, a small inlet on the northern side of Como Bridge. As the bay was completely silted up the only suitable berth was in the deep water immediately against the bridge's northern abutment. As the vessel was unloading, a rising tide forced its long funnel through an open space between sleepers. The smoke

belching from it caused an observant ganger to believe the bridge was on fire. Nothing could be done to disengage the funnel until the tide went down."

The bridge was a vital link to the South Coast and in particular a main source of transporting steel from the Steel Works at Port Kembla, during both World War I and War II. It was under constant surveillance by the military. Firstly to ward off potential sabotage and in the event of an invasion, it would be blown up. The bridge was charged with explosives ready for such a catastrophe.

The original bridge was always a bottleneck and in the late 1960's it was decided to build a new one. Work commenced in April 1969



Aprrox. Early 1970 Work underway on the new Dual rail bridge

The new "Como" (Oatley – Como) Bridge was erected 75ft (22.9M) up stream from the original bridge. It is mainly constructed of pre - stressed concrete box girders.

Designed by Donavan H. Lee and Partners.

Work was undertaken by John Holland. A casting work site was established on the northern side after the future rail path had been excavated.

It has six sets of piers, concrete on driven piles, coincide with the old bridge.

There are seven spans, 159ft (48.5M) apart.

Testing was carried out on the 26th April 1972, a special train was assembled with giant wagons loaded with steel rails. It was then tested at each of the seven spans under a load of 709 tons.

The bridge was opened on Monday 27th November 1972, by the then Minister for Transport, Hon.M..A..Morris, MLA. It had been partially in service in the previous week. The up line (to Sydney) on the 19th November and the down line on Sunday 26th November.





Although there have never been any derailments on the actual bridges, there have been two close by. The first was in 1957? A couple of hundred metres on the northern side of the bridge. A loaded goods train derailed, concertinated the carriages and spilt its load of steel.

The second was on the new section of line in 198?, on the southern approaches to the bridge. It was an electric suburban train. It has been said that the noise as it was careering out of control was horrific. It came to rest against the railing of the new bridge. Metres from what would have been a disastrous catastrophe.

The old bridge lay dormant for years. It was evident that services including the water pipe line from Woronora to Penshurst which was installed in 1935 could not be diverted. The pipe line consists of a 48" diameter line at either end of the bridge being split into two 24" lines running on either side for weight distribution.

Nine years after the opening of the dual line bridge Apart from the rails being removed, the bridge lay dormant.

There was controversy over the outcome of the bridge; a Political Party strongly advocated it be turned into a road bridge, whilst the locals actively proposed the construction of a cycleway. When the National Trust and the Institution of Engineers became interested the project began to progress. It became a combined venture amongst both Kogarah and Sutherland Councils, the then Sydney Water Board and the State Rail Authority. The Federal Government provided the Lions share of the \$470,000 cost.

The cycleway starts at Myra Place, Oatley to Cremona Road, Como. When entering the cycleway from Myra Place the sign says a distance of 910 metres to the bridge. It makes use of a section of the rail corridor from Oatley, having about 8ft (2.5M) wide asphalt path, with a chain wire link fence separating the railway line. It became a reality in 1985.



Today the old bridge has a constant stream of cyclists, joggers and walkers using it. Oatley folk make use of it at the weekends to frequent the Coffee Shops around the Marina or to have lunch at the renewed historic Hotel further along the road, which was originally built in 1878.



The cycleway / walkway is popular.
Particularly at weekends.



Mural
Bus Shelter, Oatley Pd., near railway station.

In 1998 the Community of Oatley, lead by Gerti Stewart, brightened the Bus Shelter in Oatley Parade, Oatley, near Oatley Station by painting a Mural. The focal point of the Mural being the old "Oatley – Como" Rail Bridge.

Acknowledgments: Australian Historical Railway Society – Appreciation for the assistance given to an amateur.

State Records. Kingswood

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References: All Stations to Como – St. George Historical Society

The Railway News, October 1972.

Historical Notes on Illawarra Line. Public Transport Commission of N.S.W.

Archives Section.

Bridges Down Under – Don Fraser.

Railway History in Illawarra N.S.W. - C.C. Singleton.

Railway Structures of Significance (City & Suburbs) - National Trust.

Cycleways Along Railway Corridors. – N.S.W. Dept. of Transport.

Colonial Engineer. John Whitton 1819 - 1898

and the Building of Australian Railways. - Robert Lee

Programme: "Como" (Oatley – Como) Bridge, November 27,1972...

Sydney's Forgotten Illawarra Railways - John Oakes.

[The above book, in my opion is an interesting book for non train buffs]

Attachment.

Charles Small's account of his fathers involvement with Oatley - Como bridge during World War1.

This is an account of Charles Small's fathers involvement with the Oatley - Como Bridge. Written by Charles.

Charles was born on the 3rd November 1920 in No 50 Waratah Street Oatley, he has lived in Oatley all his life, now residing at number 52 Lansdowne Parade with his wife Betty.

"My father, Charles James Small, at the outbreak of War, 1914, held a commission as a 2nd Lieut. In the N.S.W. Scottish Rifles (later the 30th Batt.) &, as a reservist, was called up immediately.

He was No. 9 on the list of Officers applying to join the A.I.F. but was not accepted as it was thought he would be of better service training others.

Whilst waiting for his permanent posting, which turned out to be Bathurst, his first job as O.C. the detachment guarding the Bridge. Apparently, even in those days, the powers that be were very concerned about sabotage.

I don't know if there was a guard mounted on the Bridge in WW11 but I crossed the Hawkesbury Bridge several times during that period to & from N.Q. & P.N.G. & it was certainly guarded then."

Signed C.M. Small.