

# Modern Cane Railways of Queensland

*Carl Millington's presentation at the Modelling the Railways of Queensland Convention, 2004*

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## Part 4: Bridges

Of the many styles and types of bridges to be found throughout Queensland's sugar tramways the most common is the wooden trestle. As technology changed and new materials such as steel and concrete for high stress areas became available, bridge designs changed. Riveted steel beams, box sections, lattice, welded steel beams and pre-stressed concrete were used to make bridge spans and supports.

There are many examples where all types of bridge construction have been used on the one bridge. A good example of this is Bingera Mill's bridge over Currajong Creek at Wallaville (below).

Another type of bridge is the lift span, where a central span is raised by a pulley system to allow watercraft to pass underneath. Only two examples exist of this type, both on Moreton Mill's tramway.

To save money several mills bought old steel bridge spans from the Government railways and used to replace old wooden trestles. Bingera and Fairymead

Mills in the Bundaberg area have several bridge spans made from old QR turntables.

Not all tramway bridges carry just tramway traffic. Some bridges are dual purpose with combined road/rail, where the tracks are laid in the center or to one side of the bridge.

Where sugar mills took over former Queensland Rail formations the existing bridges were simply re-gauged.

The design of a bridge may come down to the forces that are applied to it, for example floodwaters and debris cover several tramway bridges in the wet season. An example of this is the bridge over the Barron River on the Mulgrave Mill system. Invicta Mill at Giru removes the spans from their bridge over the Haughton River each slack so they don't get damaged.

The longest bridge to be found is Macknade mill's 294 metre steel and concrete constructed bridge over the Herbert River.





Photo previous page: Currajong Creek bridge, Wallaville, Bingera Mill system.



Lift bridge, Maroochy River, Moreton Mill system



Turntable span bridge, Avondale, Fairymead Mill system





Dual use road/rail bridge, Moreton Mill system



Galletti's bridge, Liverpool Creek, Silkwood, Sth Johnstone Mill system





Timber trestle, Messmate range, Marian Mill system



Herbert River bridge, Victoria Mill system





Miskin Creek bridge, South Johnstone Mill system



Russell River bridge, Babinda Mill system