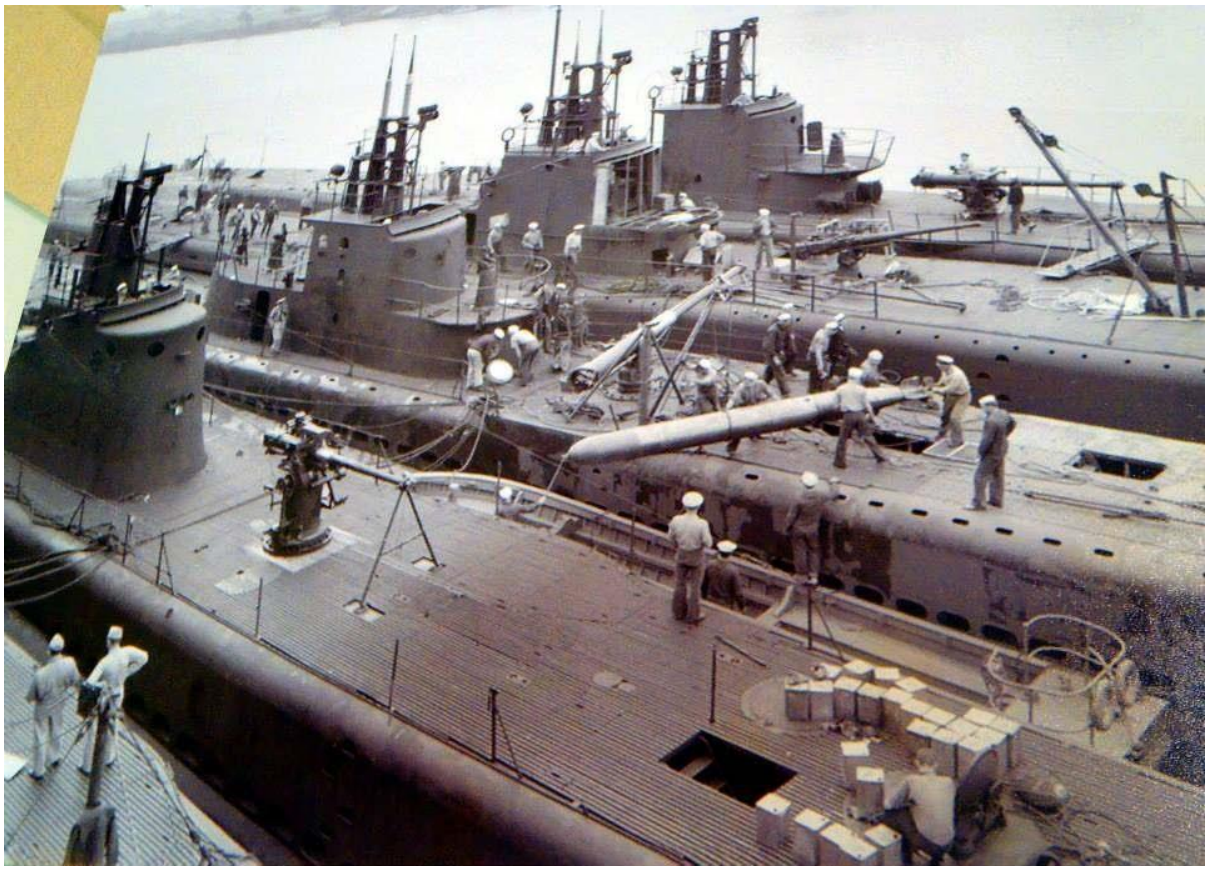
Ted's News
March 2022

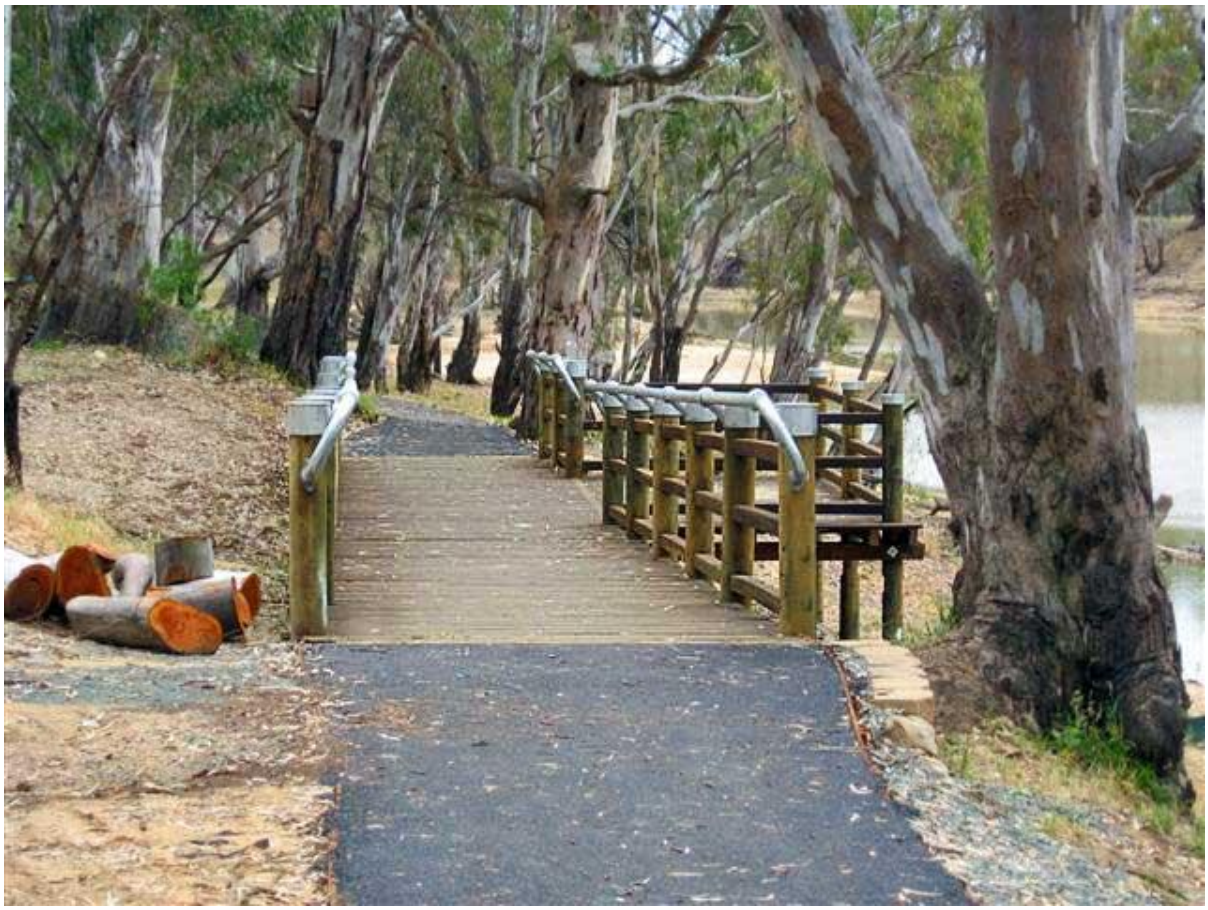
We Can be too Clever



Poor old Brisbane, pontoons and a boardwalk floating down the river one day, and then the proposed base for nuclear submarines the next! And this of course leads me directly into the subject of my hernia operation in November 2020. The surgeon, who had been poking around our family since 1988 said that the young surgeons think his methods are old-fashioned. His response is that he is more successful than them! Getting rid of the old tried and tested for the new is not always a good idea, improving it always is.

Neither debris floating down the river in 2022 nor submarines in Brisbane are new. During World War 2 Brisbane was the largest submarine base in the southern hemisphere. The above image was believed to have been taken at the submarine wharf at New Farm. The navy leased existing wharves in 1942 and they were dismantled in 2000. They did not go floating down the river! These wharves were built to be fit for purpose and the floods in the Brisbane river in the 1800's had probably been worse than the last lot and even 1974 which was prior to Wivenhoe Dam. They

knew what to expect and designed for it and all in timber. The floating pontoons have caused an environmental catastrophe according to the ABC and they have never been known to exaggerate.



Here is another flood-prone structure, this time one of mine, a bikeway built in the floodway in Deniliquin in NSW in 2020, The design and the supply came from Outdoor Structures Australia. I am advised that it is still in great shape. But it wasn't built to a price, like these pontoons that may have just floated off their piles when the water rose too high. What was built was what was needed. The posts are bigger and closer together and the bikeway rail became structural. But it is all old technology. More images here.

Lessons From the Inland Tsunami of 2011

My international readers may not be aware of the devastation on the east coast of Australia caused by a "rain bomb" which saw our valley receive a year's supply of rain in 3 days! The image above is of the Australian army helping the clean up in Grantham (and a special acknowledgment to the 2/14th light horse.) Bad as it was only days ago, the devastation of 2011 was worse when an Inland tsunami hit this small town with significant loss of life. This time Grantham was let off lightly compared to some communities.

Some poor politician was berated for saying that some homes simply should not be rebuilt. But he is right. We have been building houses where our grandparents wouldn't pitch a tent as has been said. The response to the Grantham tragedy in 2011 shows what can be done when there is a will. A new community on high grown was built and the first house was completed within a year and roads and sewerage and landscaping were all done.

Timber landscaping, which I supplied, was a critical part of making the new Grantham work. It was seen as better than steel or plastic for a traumatised community. Here is an article on what is possible when there is a will by the government and bureaucratic planners are not allowed to cause delays. The end result could not be better.

Shelter Shed Designs

Click here for information on twelve tried and vested shelter designs that can be purchased from me.

End and Edge Clearances of Bolts

My mantra has always been, "Only trust your mother." Designs must never leave anything to the imagination and that includes where bolts are placed. This image is from a long suspension bridge.

The masts are well done but the inspector must have been asleep when he allowed these trusses through. There is virtually no edge clearance and insufficient end clearance on half of the bolts. Looks like the webs were cut too short also but they are all the same. But to be fair, the bridge is working and the timber is weathering well and the trusses are very lightly loaded in practice. The load is being carried by the cables. (I supplied the round timber and Muckerts Sawmill the sawn. We used to take it turn about to win the quality timber awards for Queensland.), But better attention to detail would have helped further enhance the life of the truss.

Click here for more images of the bridge

But in other cases, the end clearance is very critical. I manufactured many shelters under contract similar to the one shown above to a client's plan. Good, simple, honest aesthetics and very suitable for national parks. But these post supports are not lightly loaded during a storm and one bolt is only 25mm from the end! Sadly, I have misplaced the image of one of these shelters that simply toppled over during a strong wind due to there being inadequate end clearance on the bolts. This design was replaced with steel legs that went directly in the concrete and this has its own problems.

Read more about this in my guide *Timber Joints* which has information about extra considerations on weather-exposed joints.

Index to Past Issues

If you are a new reader or just want to find details on a particular topic such as 150x150 mm posts - here is a link to an index to articles back to 2015.

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