Roads and Maritime Services has started the next major stage of restoration works on the Barham Koondrook Bridge over the Murray River. The stage will involve completing work on the NSW side approach span as part of a $10 million project. The work is being jointly funded by the NSW and Victorian Governments.

**Background**

Built in 1904, the single-lane Barham Koondrook Bridge with its two-span de Burgh truss is one of the oldest lift-span bridges on the Murray River.

It joins the two Murray River towns of Barham (NSW) and Koondrook (Victoria) and is used by the local communities as well as traffic travelling to and from southern NSW and Victoria.

Barham Koondrook Bridge is listed on the NSW State Heritage Register and is one of 26 significant timber bridges identified for conservation as part of Roads and Maritime’s new strategy for the sustainable conservation of heritage timber truss bridges, ‘Timber Truss Road Bridges – A Strategic Approach to Conservation’.

Roads and Maritime is upgrading the bridge as part of a $10 million project, which will include replacing the abutments, trusses, timber piers and the deck.

The current stage follows the liftspan restoration work carried out on the bridge in 2012. The work involved the installation of mechanical components and bearings, and new steel wire ropes.

**Benefits of project**

Barham Koondrook Bridge is iconic in the region and, in line with the Timber Truss Bridges Heritage Strategy, must be retained.

This current stage of restoration will ensure Roads and Maritime continues to meet current vehicle loads and volumes, as well as the growing needs of the local and travelling community into the future.

**Community consultation**

In 2012, during the liftspan restoration work, Roads and Maritime developed a database of affected stakeholders which was used to distribute traffic alerts, media releases and email updates as required.

Roads and Maritime made a further commitment to engage residents during the initial planning stages of this phase of work to discuss how potential impacts could be minimised.

Public meetings have been held in March, April and November at the Barham District Services Club to discuss the project, the planned work schedule and to gauge feedback on preferred days for bridge closures.

Attendees were also asked if they wished to be included on a new database which will be used to distribute information to stakeholders.

All information provided by the public is considered when finalising work schedules.
What's happening now

Piling work commenced in August 2013 however was delayed due to rising river levels.
Pier one piling work will be finished before Christmas.
A screen has been installed around the work site. Featuring drawings from Koondrook Public School pupils and entrants in the Barham Koondrook Tourism Group Photographic Competition, it provides a visually appealing surround of the work site.

What happens next?

After the piling work is completed, work will start on the bridge foundations to eventually replace pier one.
Work will then continue to replace the deck on the NSW side approach span.
This stage of work is expected to be completed by May 2014.

Bridge closures

High river levels have changed the construction program. Further bridge closures will be required in 2014 in order for the planned work to be completed.
Roads and Maritime is currently consulting with key stakeholders and the community about its proposed work schedule for 2014, including closure dates.
If you would like to provide feedback to the project team to be considered as part of planning for the next stage of works, please contact the Bridges Works Manager.

Further information

For further information please contact the

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Questions and answers

Roads and Maritime attended community meetings in Barham in March, April and November 2013. Answers to frequently asked community questions are provided below.

**How long will the repair work take in total?**

The current work will take about a year. At this stage Roads and Maritime plans to carry out restoration work on the bridge until 2016/17. This may change and depends on available funding in future years.

**How much would it cost to build a new bridge?**

Barham Koondrook Bridge is a heritage listed structure and must be retained. No studies have been carried out by Roads and Maritime to replace the bridge, including costings.

**Are the existing liftspan cast iron cylinder piers in poor condition?**

The existing liftspan cast iron piers are inspected every three to four years. They were inspected on 4 June 2012 and were rated as being in fair condition. They do not need to be replaced for a considerable time.

**Can a temporary bridge with a liftspan or turntable swing be installed to minimise disruption to the community while repair work is carried out?**

Yes, it is possible. Roads and Maritime is investigating the option of a temporary crossing for future bridge works. However, the use of a temporary crossing for the current stage of works is not possible due to funding limitations.

**Can the site office be relocated?**

The current site is the most preferred position as it allows Roads and Maritime staff to closely monitor all aspects of work at the bridge site. Moving the office would result in additional costs and delays. Roads and Maritime improved the visual amenity of the site compound by installing a printed screen around the area.

**Why is the majority of work being carried out in the Spring, which is traditionally the heaviest rain period?**

In-stream piling work was to be finished in the winter months and early spring, when the river is historically at its lowest level. Unfortunately river levels have risen quicker than expected and delayed this work. Roads and Maritime has used a different building process to continue building a wall called a cofferdam around pier one. The cofferdam creates a dry work area for the bridge piling work to be carried out. By continuing to build the cofferdam the current restoration work has only been delayed by two months.

**Will pedestrian access be available while the work is carried out?**

A scaffolding walkway has been installed adjacent to the bridge for pedestrians to cross the river. The walkway is wide enough for motorised scooters and wheel chairs.

**Will the concrete deck impact on the heritage significance of the bridge?**

The NSW Heritage Office has reviewed and approved the proposed abutment and deck replacement work. The bridge’s most significant heritage features are the timber truss spans and the liftspan. The current works do not involve these spans. The reason Roads and Maritime is replacing the timber span with a composite steel and concrete span is to reduce ongoing maintenance costs, minimise community disruption while maintenance work is carried out and to improve the service life of the span.
What is Roads and Maritime doing to minimise the impact of bridge closures on local businesses?

Roads and Maritime continues to investigate the option of a temporary crossing for future Barham Koondrook Bridge works.

Roads and Maritime appreciates that any work on the Barham Koondrook Bridge that disrupts traffic movements between Barham and Koondrook will have an impact on the community and local businesses. Roads and Maritime has consulted the community to receive feedback on possible closure options and has used this information to plan its schedule of works. However, the nature of the work does mean that bridge closures are necessary.

How will Roads and Maritime inform the community about the work it is doing?

For the cost of a local call, a 24-hour telephone number, 1300 NSW VIC (1300 679 842), provides information on progress of the work and upcoming closure dates.

Roads and Maritime sends regular emails to the community using its stakeholder database.

Fixed signs have been erected in Barham and Koondrook advising of upcoming closure dates. Electronic message signs will also be used when required.

Letters will be sent to residents to provide updates about the project.

Closure dates will be included on the Barham Koondrook Bridge website at www.rms.nsw.gov.au

Barham is a tourist town on weekends with the tourists mainly coming from Victoria. How will a decision be made about installing a temporary crossing for future works?

The decision to install a temporary crossing for future stages of work will be based on project cost, project duration, environmental impact and the community cost of closures and detours. Roads and Maritime is continuing to investigate options for a temporary crossing.

Why have all the closures occurred on weekends when tourists visit our town?

Roads and Maritime asked for feedback about preferred days and times for bridge closures during consultation earlier in 2013. From the feedback we received, Sunday was the first preference and Saturday the second preference. Therefore bridge closures for 2013 were planned for weekends. Roads and Maritime encourages business owners and community members to continue providing feedback about preferred days and times for bridge closures while we plan work for 2014.

Can B-doubles use Gonn Crossing when Barham Bridge is closed?

Roads and Maritime requested a permit from Gannawarra Shire Council and VicRoads to allow B-doubles on Murrabit Road during the bridge closures in October and November 2013. This meant Roads and Maritime could detour all traffic, including B-doubles, over Gonn Crossing. This avoids B-doubles detouring via Swan Hill, a 218km trip. Roads and Maritime will ask VicRoads for an extension of this permit during closures in 2014.

River levels are causing problems with boats. Will we continue to have access under the bridge?

The liftspan is operational. Roads and Maritime is not blocking the main channel under the liftspan.

Would weather conditions affect the work?

Yes, weather may stop work and delay any bridge closures if the conditions are severe.

Will the bridge carry heavier loads for the next 50 years?

No, the bridge will continue to carry standard semi trailers and B-doubles but cannot handle higher loads. After this work, the bridge will continue to be inspected and maintained as required to keep it serviceable.

When will the next stage of work start?

This current stage of work is expected to be completed by May 2014. The next stage of work will be off site and involves prefabricating the timber trusses. Actual work on the bridge may not occur until mid 2015.

Will the site compound go?

This will need to be considered. Roads and Maritime will ensure the site is tidied and any buildings or machinery moved away where possible.