



May 2017

Start of piling work for bridge foundations on Woolgoolga to Ballina Pacific Highway upgrade - Glenugie to Maclean

The Australian and NSW governments are jointly funding the \$4.36 billion Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services Pacific Highway Office and Pacific Complete are working together to deliver the project.

Roads and Maritime has awarded the piling contract for the Woolgoolga to Ballina upgrade to Advanced Foundation Solutions (Australia) Pty Ltd. Piling work will start on Monday 29 May in areas between Glenugie and Maclean and continue for 18 months, weather permitting.

What is piling?

Piling is a method used to create a stable foundation for bridges, structures and buildings. Piling transfers the weight of the structure deeper into the ground. Piles are large columns generally made from reinforced concrete or steel.

The majority of bridges between Glenugie and Ballina will have bored piles which are associated with smaller levels of noise and vibration than driven piles. We have included some pictures and a map to explain our work and the locations.

All material for the piling, including concrete, will be delivered to the required location via trucks and semi-trailers. Overall there is expected to be more than 900 deliveries of materials for this work. The expected concrete agitator truck deliveries per day are about 30 for Glenugie to Maclean.

As much as possible, materials will be moved within the project boundary to reduce the number of construction vehicles on local roads. To ensure we are ready for piling work to start we have built access and haulage roads and improved several intersections along the project.

Access points for heavy vehicles

Access points for heavy vehicles in the Glenugie to Maclean section include:

- McIntyres Lane
- Gallaghers Lane
- Norleys Lane off Pacific Highway (1.1 kilometres south of Gallaghers Lane)
- Byrons Lane
- Construction access road off Pacific Highway (450 metres north of Sheehys Lane)
- Sheehys Lane
- Coldstream Road
- Property access road off Coldstream Road (3.5 kilometres south of Pacific Highway)
- Crowleys Road off Coldstream Road (1.9 kilometres south of Pacific Highway)
- Campbells Place
- Somervale Road
- Bostock Road
- Firth Heinz Road
- Mitchell Road

- Tucabia Tyndale Road
- Quarry access road off Tucabia Tyndale Road (200 metres north of Jade Crescent)
- Wooli Road
- Avenue Road
- Old Six Mile Lane.

What is involved?

There will be more than 1150 piles – driven and bored – for bridges between Glenugie and Ballina.

There are about 170 bridges being built as part of the Woolgoolga to Ballina upgrade to improve access and flood immunity. There will be 52 bridges built between Devils Pulpit and Richmond River. The depth and time for piling in each area will depend on ground conditions, the size of the bridges and numbers of piles needed. Piling work will include:

- Surveying and flagging work areas and installing environmental controls
- Building platforms for piling rigs
- Installing piles and pile caps.

Constructing a pile into the ground can typically take between one and two days to complete depending on the length and size. Piles vary in length depending on the ground conditions and are driven or bored into the ground using a combination of cranes, piling rigs and vibrating and percussion hammers.

Driven piling involves vibrating and/or hammering steel tubes into the ground.







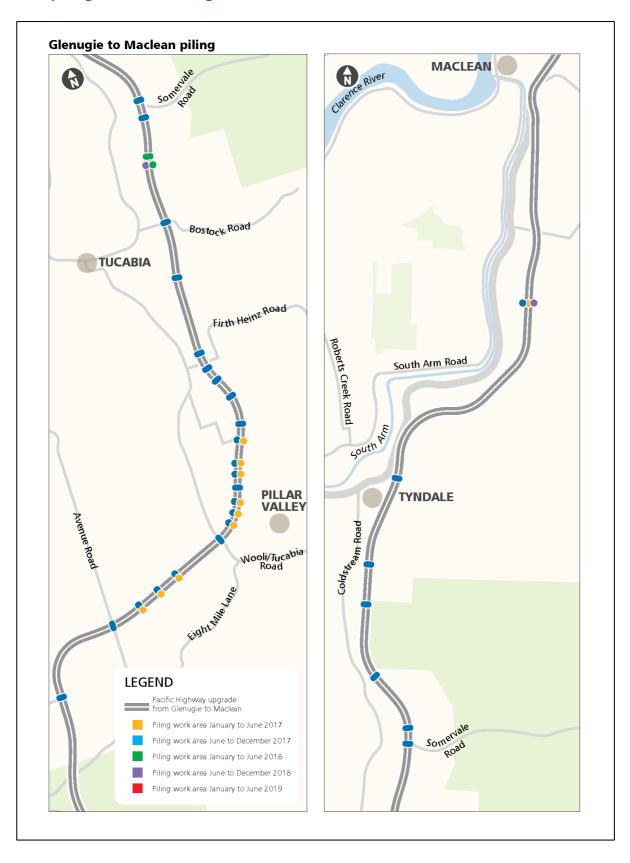
Bored piling involves boring a circular hole in the ground, installing steel reinforcement and filling the bore hole with concrete to form a pile.







Where is piling work occurring?



Locations and timeframes for piling work are indicative and may change due to program requirements and weather conditions. We will continue to keep the community updated on this work.

How will the work affect you?

Our work will be noisy at times and may cause some disturbance. Piling can create increased noise and vibration levels and it is likely you will be able to hear piling activities if they are near your property. We will carry out noise and vibration monitoring throughout this work. We will also carry out noise mitigation to minimise the impact of our work, where possible, including the use of respite periods.

We do not expect piling to have an impact on buildings around our work area, however driven piling can create vibrations. As part of the driven piling activities, all properties within 500 metres of vibration work are offered a property condition survey.

This survey is carried out before driven piling starts and involves an inspection of the interior and exterior of the property, including any external structures such as sheds, driveways, pathways, swimming pools, dams, fences and retaining walls.

In the unlikely event that damage does occur, the survey can help demonstrate if this was a result of activities in the area. Most of the property conditions surveys for the upgrade have already been completed and a copy of the survey provided to landowners.

Traffic changes

There will be temporary traffic changes to ensure safety of road users while piling rigs and equipment move to site, this may affect travel times. Please keep to speed limits and follow signs and traffic controllers' directions.

For the latest traffic updates, you can call 132 701, visit livetraffic.com or download the Live Traffic NSW App.

We apologise for any inconvenience and thank you for your patience during this important work.

Work hours

Typically work will be carried out during the project's approved construction hours, which are **from Monday to Friday between 7am and 6pm** and **on Saturday between 8am and 5pm**.

In areas where residents live more than 200 metres from the work area, extended work hours are allowed from Monday to Friday between 6am and 7pm. Nearby residents will be notified at least five working days in advance of any activities scheduled outside of these working hours.

For more information

If you have any questions, please call the Woolgoolga to Ballina project toll free line on 1800 778 900 (dial 1), email W2B@pacificcomplete.com.au or visit the project website rms.nsw.gov.au/W2B.



If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 778 900.