New Grafton bridge project update

The NSW Government is funding the new $240 million Grafton bridge. This update outlines progress on the project and upcoming work.

The project team reached a significant milestone with the placing of the first concrete bridge segment over the Clarence River. The segments are installed from a barge on alternating sides of the bridge piers to balance the load.

Bridge work

The first bridge segments were installed in late June and early July. There are 176 segments to install in total which involves:

- moving the segments, weighing between 60-70 tonnes each, from the pre-cast yard onto a barge
- moving the barge into position alongside the pier
- lifting the segments into place with a crane where they are held in place with temporary supports
- tying reinforcement and pouring concrete “diaphragms” to permanently fix the segments in place
- “stressing” the segments by threading steel cable through and tightening to lock them together.

Once this process is complete for each pier, the spans between can be built. This is done by joining segments to the ones in place over the piers. They must be placed in pairs – with one added to each side - to balance the load.
This method of building is called a balanced cantilever. The segments continue to be placed until they reach out halfway to the next pier. Work then moves to the next pier.

This stage of connecting the piers will move much faster, with two to four segments expected to be lifted into place each day in full production.

This method of construction was selected for the new Grafton bridge because it allows large gaps between each pier (up to 74 metres) which helps to minimise flood impacts. It also means that the piers on the new and old bridges are aligned, making for easier navigation.

The 176 segments needed for the new bridge vary in shape and weight, with 18 different types of segments being poured in the Through Street pre-cast facility.

The last segments are expected to be installed in April-May next year, weather permitting, and the temporary jetty on the southern bank of the Clarence River will then be dismantled. The remaining piling work and pier construction for the new Grafton bridge is expected to be completed later this year.

**Kent Street pump station**

Work on the Kent Street pump station is expected to be complete in December. The outlet pipes to the pump station are now being built and remaining work to be completed in coming months includes installing the new pumps, switchboards, generator and inlet culvert.

**Pound Street rail bridge**

Piling for the new rail bridge is expected to be complete this month. This includes four piles 1.2 metres wide and up to 25 metres deep. The new 42-metre single span steel bridge will be built in Sydney and transported to site. Some minor assembly of the new bridge will be done on site. The existing concrete bridge will be demolished and the new bridge will be installed over a three day period to minimise impact on the rail network.

Panoramic view of the new Kent Street pump station site (north)
Out of hours work

The project team has been undertaking out of hours work over recent months to relocate utilities and services. The work outside of normal hours included:

• installing low voltage power conduit
• installing new power poles and lines in Grafton
• installing new water mains in South Grafton.

By doing this work outside of normal construction hours we were able to reduce the impacts on nearby businesses and TAFE. The project team will continue to seek feedback from impacted residents on any future out of hours works and thanks all of those affected to date for their patience and understanding.

Business Liaison Groups

The project team will meet with South Grafton businesses affected by road work in August. The meeting will offer an update on the proposed traffic arrangements and signage plans for this area during construction. The team will also present plans for traffic management on the Pacific Highway during holidays. Invitations will be sent to members via email. We welcome feedback and will continue to work with local businesses to ensure we are doing all we can to reduce construction impacts.

Local traffic changes

Grafton

Work to redevelop sections of Pound and Clarence streets is continuing. Changed traffic arrangements for Clarence Street will be put in place this month, with the existing two lanes of traffic being separated to allow work to continue in the centre of the road. The separation of traffic is necessary to manage the height differences in the new pavement.

This arrangement will be in place until October 2018, weather permitting, when traffic will become two-way on the residential side of Clarence Street.

This allows work to be completed on the TAFE side of Clarence Street in late 2018. The temporary traffic arrangements will also allow access to be maintained for residents and the TAFE while the new road is being built.

On Pound Street, work is continuing on the new pavement on the business side of the street before traffic is switched onto the new pavement later this year. Work will then start on the TAFE side of the street and is expected to be complete early next year, weather permitting.

South Grafton

The new roundabout at the intersection of Through and Iolanthe streets and the realignment of Butters Lane is nearly finished. This will allow the traffic to be diverted onto the Pacific Highway tie-in just north of Bunnings in coming weeks, weather permitting.

Traffic can then access the Iolanthe Street business precinct via the new intersection with the Pacific Highway. Following this, work will start on the redevelopment of the Iolanthe and Spring streets intersection.
Community group presentations and school tours

Since the previous project update in April, the project team has undertaken presentations or bridge tours for the:

- Grafton Senior Citizens Group attended by about 80 members
- North Coast Floodplain Forum, a group made up of the North Coast councils of Bellingen Shire, Coffs Harbour City, Clarence Valley, Richmond Valley, Byron Shire, Rous County, Lismore City, Kyogle, Kempsey Shire and the Tweed Shire as well as the State Emergency Service and Environment Protection Authority
- Grafton Chamber of Commerce attended by about 75 members
- University of the Third Age attended by about 30 members
- Grafton Garden Club attended by about 50 members
- Uniting Church morning social group attended by about 10 members
- St Joseph’s Primary School attended by about 40 Year 3 and 4 students and teachers
- Copmanhurst Public School attended by about 60 students and teachers.

If your group is interested in learning more about the project, please contact the Community Hotline to discuss.

Upcoming activities

Key construction activities planned for the next three months include:

- complete piling and pier construction
- continue placement of bridge segments
- complete utilities and services relocation
- continue drainage work
- continue manufacture of bridge segments
- complete construction of the Kent Street pump station
- continue upgrade of Pound and Clarence streets
- start the upgrade of Iolanthe and Spring streets
- start building the new Gwydir Highway roundabout
- continue construction of the southern and northern approach embankments
- complete the realigned Butters Lane
- complete and opening the new road behind Bunnings.

Where do I find out more information?

For more information about the project, please contact us:

- 1800 918 759 (toll free)
- graftonbridgecommunity@fultonhogan.com.au
- PO Box 546 Grafton, NSW 2460
- rms.nsw.gov.au/graftonbridge
- 131 450

If you need help understanding the information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 918 759.

Community information session

Members of the project team will be available to discuss the project at the car park at Bunnings on Saturday, 11 August from 9am – 12 noon. You will have the opportunity to get an update on construction activities and ask any questions about the progress of the bridge.