



Rockhampton Ring Road

Enhancing safety, connectivity, and flood resilience for Central Queensland.

Key benefits for the community



Improves safety



Reduces travel time



Improves network efficiency



Improves flood immunity

Project overview

Construction is well underway on 16 new bridges as part of the 14.7 kilometre Rockhampton Ring Road, a Bruce Highway Upgrade Program project jointly funded by the Australian and Queensland governments. The project will transform the city's road network, creating a western link from the Capricorn Highway to the Rockhampton-Yeppoon Road intersection.

The ring road will significantly improve access to key destinations, including Rockhampton Airport, Rockhampton Hospital, and major defence, education, industrial, and leisure precincts. It will enhance safety, reduce congestion, improve freight efficiency, and provide vital flood-resilient infrastructure to support growth and improve reliability for road users across Central Queensland.

A major feature of the project is the construction of 18 bridges including:

- bridges over Lion Creek and Limestone Creek, completed in 2025
- a high-level connection ramp from the Capricorn Highway
- six bridges and five overpasses across the floodplain from the Capricorn Highway to the Fitzroy River
- a critical third crossing of the Fitzroy River between Pink Lily and Parkhurst
- three overpasses from the river to the Yeppoon Road intersection.

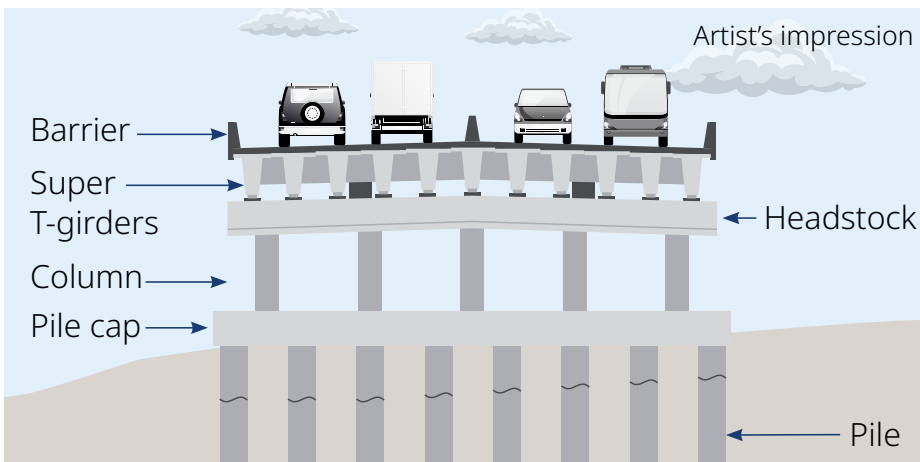
These bridges have been carefully designed to suit the region's unique site conditions and floodplain environment.



Concrete components on bridges

Super T-girder bridge cross-section

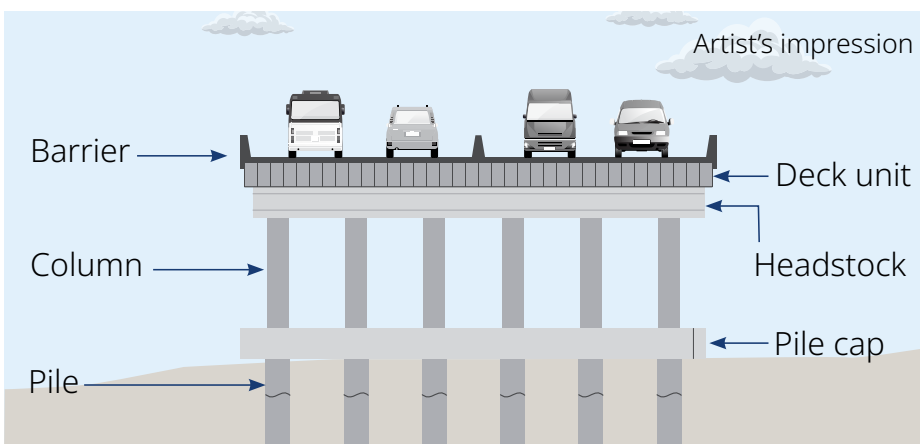
Example: Limestone Creek bridge



Bridges on the Rockhampton Ring Road have been designed with uniformity in mind, optimising construction outcomes and ensuring consistency with the Yeppen South bridge. This includes the use of Super T-girders, deck units, or box girders. Each component has unique characteristics that make it suitable for different bridge designs.

Deck unit bridge cross-section

Example: Lion Creek bridge

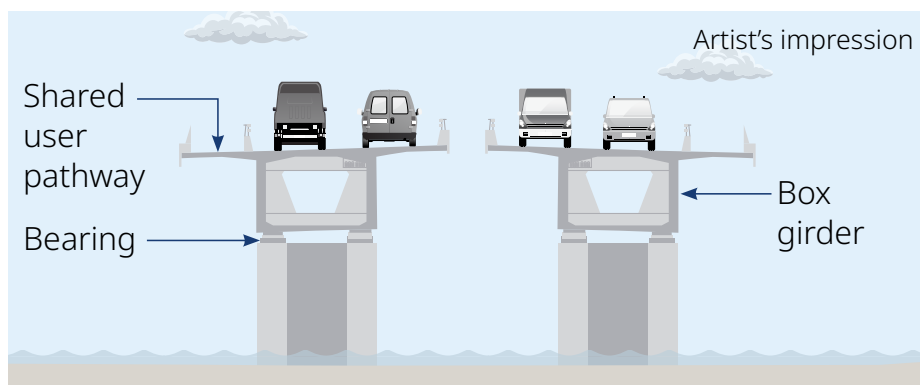


Super T-girders are longer in length and have a greater standard depth. They are used for bridges where the spans are greater than 25 metres long.

Deck units are shorter in length compared to Super T-girders and will be used to construct four overpasses. They have a shallower depth and are more economical for shorter spans.

Box girder bridge cross-section

Example: Third Fitzroy River crossing



Box girder segments will be used to construct the third Fitzroy River crossing. Using box segments in the construction of the bridge allows for spans over 80 metres to be factored into the construction design, which accommodates the needs of primary river users.

Bridge design

All bridges are designed to meet technical standards with key features including:

- capacity to support future traffic volumes
- a 100-year design life
- Q100 flood immunity (equivalent to a one-in-one-hundred-year flood).

Three foundation types

Precast concrete octagonal piles – precast pre-stressed octagonal concrete piles driven directly into the ground using a pile driver. This is the main piling method that will be adopted on the southern alignment.

Cast in place piles – reinforced concrete piles contained in open-ended steel liners. The liners are hammer-driven to the required foundation level and filled with reinforced concrete.

Driven steel tubes – these piles are thick-walled steel tubes that are driven to a founding level and partially excavated. The void is filled with reinforced concrete pile shafts.

Crossing the Fitzroy River

The third crossing over the Fitzroy River will stretch 435 metres between Pink Lily and Parkhurst, constructed using a precast segmental design and balanced cantilever construction.

More than 300 concrete box girder segments will be locally manufactured and lifted into place by large cranes to form a seamless structure. This method reduces the number of piers in the river and enables efficient construction.

There are only a handful of bridges like it in Australia, including the Second Gateway Bridge, Hunter Expressway viaducts, Sydney Metro’s Western Sydney viaduct, and the new Bridgewater Bridge in Hobart.

How bridges are built

At each bridge site, you will notice:

- access roads being built to deliver heavy equipment and bridge components
- temporary work platforms to support heavy machinery and bridge materials in areas with soft ground conditions
- piling rigs being mobilised
- traffic controls or detours in place during installation of large bridge components.

List of bridges (south to north)

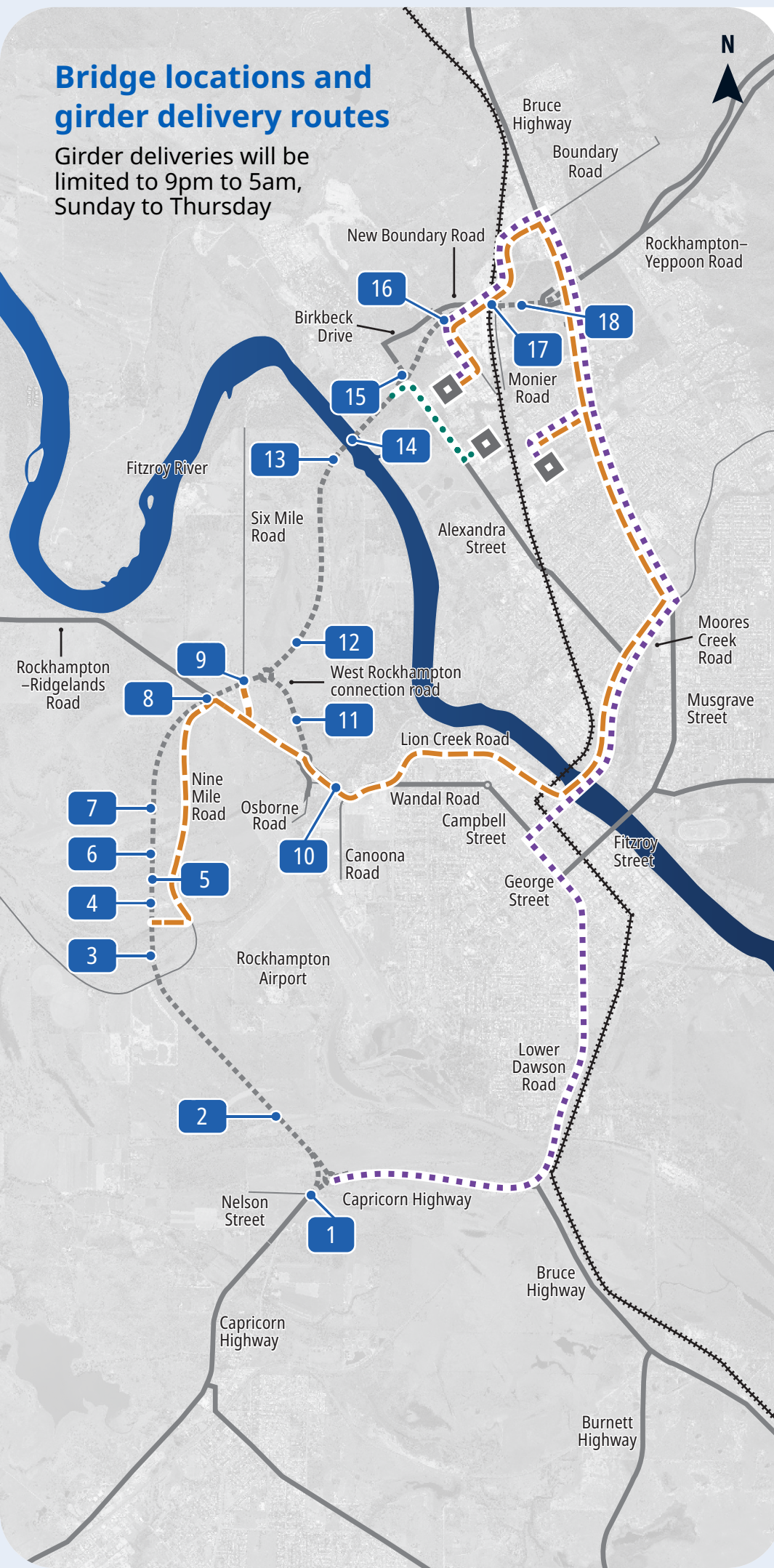
Bridge	Name	Length (metres)
1	Capricorn Highway connector	841
2	Floodplain bridge	985
3	Nine Mile Road overpass	677
4	Lotus Lagoon bridge 1	67
5	Lotus Lagoon bridge 2	67
6	Lotus Lagoon bridge 3	67
7	Floodplain bridge	407
8	Ridgelands Road overpass	542
9	Six Mile Road overpass	33
10	Lion Creek bridge*^	69
11	Milner Road overpass^	441
12	Pink Lily Lagoon bridge	370
13	Edmistone Road overpass	22
14	Fitzroy River bridge	435
15	Alexandra Street overpass	50
16	McLaughlin Street overpass	25
17	Monier Road overpass	67
18	Limestone Creek bridge*	214

* Completed in 2025

^ Leading to the Rockhampton Ring Road alignment

Bridge locations and girder delivery routes

Girder deliveries will be limited to 9pm to 5am, Sunday to Thursday



Legend



Bridge



Precast yard



Girder and pile delivery from precast yard in Parkhurst



Girder and pile delivery route to Ridglands Road



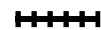
Girder and pile delivery route to Capricorn Highway



Rockhampton Ring Road



Roads



North Coast Line

How concrete components are made

Concrete components are precast offsite in Rockhampton. Once manufactured, they are transported to site and lifted into place.

- **Super T-girders** are made in precast concrete facilities by placing high-strength steel reinforcement and tendons into a mould, which is then filled with concrete. After a controlled curing process and the concrete reaching strength, the tendons are tensioned, creating pre-stressed concrete.
- **Deck units** for bridges are made as precast concrete beams, often pre-stressed. They are manufactured by pouring concrete into moulds and allowing it to cure, with internal lifting anchors and often cast-in features for connections to other bridge components. The process includes casting the concrete around steel reinforcement and pre-stressing tendons to give the units strength.
- **Concrete box girders** are made by prefabricating segments off-site. Segments are match-cast so they perfectly fit the adjacent segment. They have shear key connection points for alignment during installation. They are shaped around a void to reduce weight and materials.

Delivery of concrete components

The project will make, move, and lift manufactured concrete components to different sites within the project footprint. These will be transported from three precast yards in North Rockhampton using oversize and overmass (OSOM)

vehicles on the road network, escorted by pilot vehicles. The project team is committed to minimising impacts by scheduling OSOM vehicle deliveries at night between 9pm and 5am, Sunday to Thursday.

Concrete components



976 precast Super T-girders up to 34 metres long



162 deck units up to 25 metres long



312 box girder segments



2,419 piles up to 40 metres long

Key features of the upgrade



3.4 million tonnes of earthworks



633,682 tonnes of rock and gravel



279,264 tonnes of pavement



481,546 tonnes of bitumen

What to expect

This large-scale project includes 17.4 kilometres of new roadway, including 14.7 kilometres of ring road alignment. The majority of the alignment is located through greenfield sites, with local and state-controlled roads being used for construction transport.

During construction, road users can expect:

- traffic changes with detours, lane closures, and reduced speed limits
- increased heavy vehicle movements with frequent truck deliveries and transport of large bridge components
- noise generated by piling activities and other construction works.

How we're minimising disruption

To reduce the impact on residents, businesses, and motorists:

- piling activities are limited to occur between 6am to 6pm, Monday to Saturday
- traffic management measures will be in place to maintain two-way traffic flow where possible
- oversize overmass vehicle deliveries will be limited to 9pm to 5am, Sunday to Thursday
- advance notice of construction works will be provided to help you plan ahead.

Construction hours

Day works: 6am to 6pm, Monday to Saturday.

Night works: Sunday to Thursday, after 6pm.

Stay up to date

For more information and to register for project and construction updates:

- @ rockhamptonringroad@tmr.qld.gov.au
- 📞 07 4931 1500 (9am - 5pm, Monday to Friday)

Bielby-BMD Joint Venture (North including Fitzroy River bridge)

- @ rrr-north@rockyjb.com.au
- 📞 1800 772 272

Acciona-Fulton Hogan Joint Venture (South)

- @ enquiries@rrrsouth.com.au
- 📞 1800 531 855

If you require translation or support services to access project documentation, please contact the project team on 07 4931 1500 (9am - 5pm, Monday to Friday).



For more information,
scan the QR code.

www.tmr.qld.gov.au/rockhamptonringroad