

Gateway UPGRADE NORTH

Overhead Motorway Gantries

FACT SHEET

February 2018

The Gateway Upgrade North project will improve motorists' safety, reduce congestion and improve travel time reliability, through a number of infrastructure improvements implemented on the network.

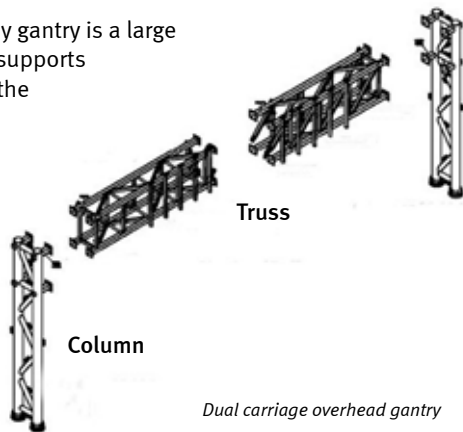
One such improvement is the inclusion of Intelligent Transport System (ITS) technology, which is being installed by way of overhead motorway gantries on the Gateway Motorway.

Nine major new overhead motorway gantries are being installed between Nudgee and Deagon as part of the upgrade.

What is an overhead motorway gantry?

An overhead motorway gantry is a large steel structure which supports heavy signage above the motorway.

The gantry consists of one or two vertical column segments, installed beside the motorway and the horizontal truss segment which sits above the motorway (see artist impression).



Signage is supported on the truss in clear view of motorists travelling on the road below.

Are there different types of overhead motorway gantries?

There are two types of gantries being installed on the Gateway Upgrade North project:

Single carriageway – consists of one column and one truss segment, extending only halfway across the width of the motorway. These structures are often referred to as half gantries.

Dual carriageway – consists of two columns; one installed on each side of the motorway to support each truss segment, allowing signage to extend across the full width of the motorway. These structures are often referred to as full gantries.

Refer to the map overleaf for information about the location of overhead motorway gantries being installed between Nudgee and Deagon.

What are overhead motorway gantries used for?

Overhead motorway gantries improve traffic flow on the motorway by communicating important and timely messages to motorists.

Gantries contain both static and dynamic electric signs which can be adjusted remotely to suit the necessary purpose. They can be used as **variable speed limit signs**, indicating the motorway's sign-posted speed limit, or as **lane control signs**, displaying important information such as a flashing red cross, to indicate a hazard in the lane ahead.

Some gantries also contain **variable message signs**, which can display important road safety messages to motorists, such as advising of congestion, hazards or weather impacts ahead on the network. These signs can be programmed to change, or can be changed remotely, to reflect current road conditions.

As well as being important signage structures, gantries often support additional ITS technology, such as **traffic monitoring systems, automatic number plate recognition software, CCTV and speed cameras**.

How are overhead motorway gantries installed?

Preparation for overhead motorway gantry construction starts underground, with the installation of large concrete support piles which are installed up to 28m deep into the ground beside the motorway. The support piles provide stability and strength to bear the weight of the overhead motorway gantry structure.

The gantries steel columns and trusses are fabricated at a facility in Logan, south of Brisbane, and transported by trucks to the project site.

A crane is used to lift each column into position on top of the underground pile. Following this, the truss is lifted and attached to the column. The column and truss are secured in place using structural grade bolts.

Site access and traffic movements must be carefully managed throughout the gantry installation process.

Access – in some areas gantries will be installed in locations where vehicular access is limited. In this instance, a dedicated vehicle access track is created for construction vehicles and machinery. Access tracks to some gantry structures will be maintained permanently, to facilitate future service maintenance.

Traffic management – to mitigate risks associated with installing gantries above live motorway traffic, much of the work will be undertaken at night when traffic volumes are lower and lane closures can be safely implemented.

During works to lift the columns and trusses into position, traffic controllers may hold traffic for periods of up to 15 minutes. Police will also be on site to assist and direct motorists.



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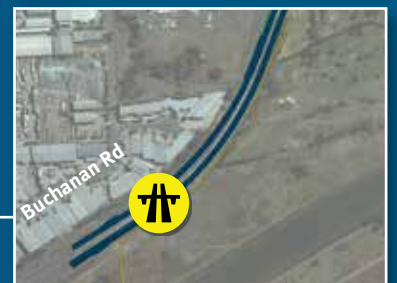
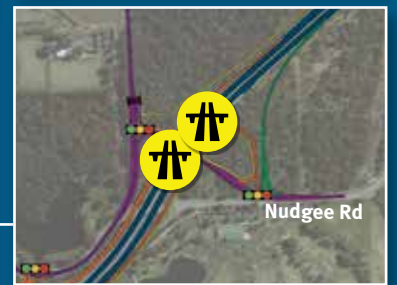
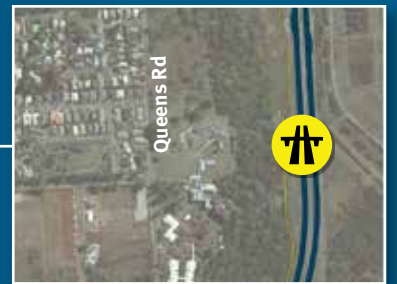
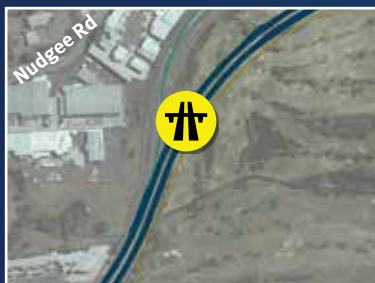
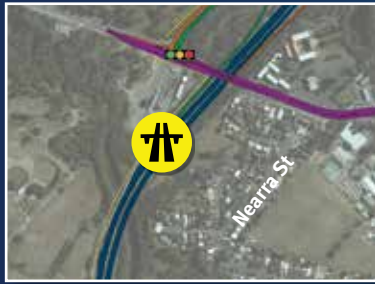
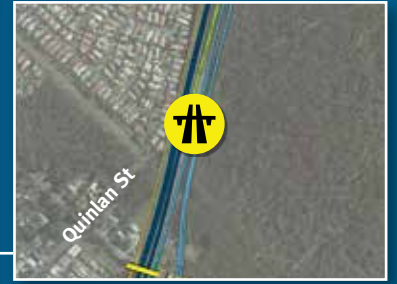
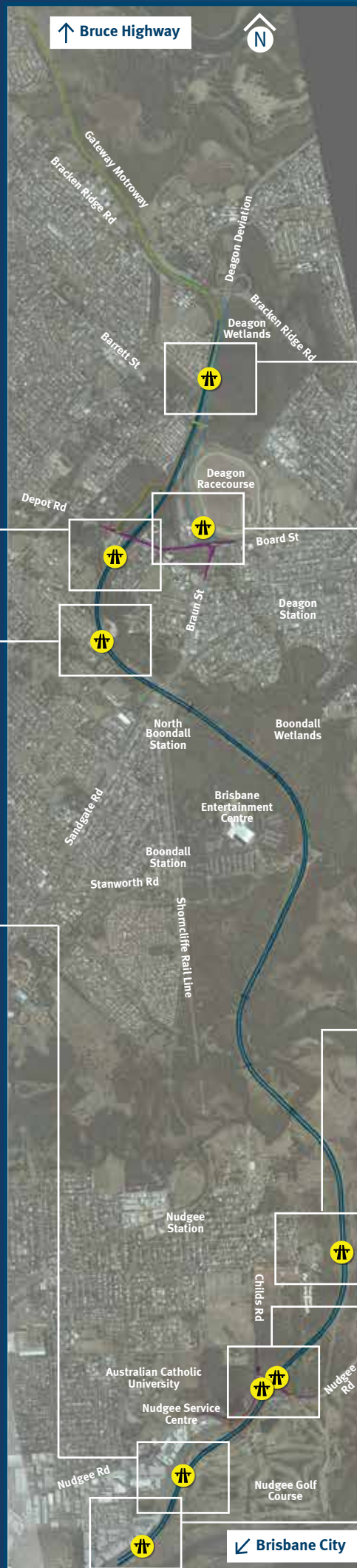
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Queensland Government



Above: overhead gantry



Contact details

The project team is committed to working with the community to better understand your views and ensure the successful delivery of the Gateway Upgrade North project.

You can contact the project team via:

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