

MEDIA RELEASE

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Airport Link project celebrates first TBM tunnel breakthrough

'Rocky', the first of two massive Tunnel Boring Machines (TBMs) working on the Airport Link project, has broken through into the enormous 23 metre wide purpose built cavern deep underground at Wooloowin, marking the half way point of its 2.5 kilometre journey to Lutwyche.

Thiess John Holland Project Director Gordon Ralph congratulated Rocky's tunnelling team on this significant milestone.

"It's incredible to think that only 12 months ago this machine was being delivered to site in pieces after its arrival to Brisbane from Germany," Mr Ralph said.

Since its launch from Kalinga Park in July, Australia's largest TBM has already excavated over 1,200 metres of tunnel.

"The tunnelling teams have achieved good progress, with the TBMs travelling at a rate of up to 110 metres a week underneath streets and parklands between Clayfield and Wooloowin," he said.

To date over nine kilometres of tunnelling has been completed across the project - combined Rocky and Sandy alone have excavated more than 2.2 kilometres, excavating the tunnels and lining them with concrete segments as they go.

Over 300,000 cubic metres of spoil has been generated by the TBMs and transported to Nudgee Road via a two kilometre overland conveyor, eliminating more than 30,000 spoil truck movements from local streets in Clayfield.

A total of 11,000 pre-cast concrete segments have been used so far to make up the rings that form the tunnel lining, each weighing approximately seven tonnes.

"Inside the excavated tunnels, back-up work has commenced to construct the smoke ducts and tunnel cross passages. When this work is complete, focus will move to the installation of ventilation fans, traffic management devices and tunnel safety systems," Mr Ralph said.

"The project's second TBM, Sandy, is expected to break through into the Kedron caverns next month, with the TBMs scheduled to complete their 2.5 kilometre journey by the middle of the year," he said.

"Once tunnelling is complete the cutterheads for the massive Tunnel Boring Machines will be buried underneath the tunnels they have created.

"The two TBMs were custom built for the Airport Link project and this solution will reduce the complexity involved in removing the cutterheads, while avoiding the need for additional surface work in the Lutwyche area.

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"The last 180 metres of each machine, containing the back-up gantries and conveyor belts, will be removed after the front ends are concreted into the burial pits.

"Construction commenced last month on the two burial pits which are 14.5 metres wide and 16.5 metres deep."

With over 70% of the project complete, significant work is still to be completed before this critical piece of infrastructure for South East Queensland can open to traffic in mid-2012.

15 million hours have been worked and the projects have surpassed their expected peak employment bringing the jobs total to 3,600. The projects are expected to create 12,000 direct and indirect jobs.

When Airport Link opens in mid-2012 it will be the first major motorway connecting Brisbane city with the airport and northern suburbs.

It will improve travel times, providing six new lanes for drivers between Bowen Hills and Kedron and four new lanes between Kedron and Toombul.

The project, which is being designed and constructed by Thiess John Holland, along with the Northern Busway (Windsor to Kedron) and the Airport Roundabout Upgrade, is part of a massive \$4.8 billion infrastructure investment on Brisbane's Northside.

Airport Link TBM - Fast Facts

- Model: Earth Pressure Balance
- Cutterhead diameter: 12.48 metres (largest machines ever used in Australia)
- Weight: 3,600 tonnes
- Length: 195 metres long, slightly longer than Suncorp Stadium playing field
- Cost: \$45 Million and took 12 months to build and a further 3 months to assemble at Toombul.
- Cutterhead contains up to 80 x 17 inch cutters made of hardened steel
- Approx. 22 workers to operate a TBM
- Travels up to 55m below the surface
- Equipped to install full-circle concrete tunnel lining during excavation

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