

CASE STUDY

GATEWAY UPGRADE NORTH PROJECT,  
BRISBANE QUEENSLAND

PLATIPUS MECHANICAL EARTH ANCHORING SYSTEM



CONTRACTOR	Lend Lease Engineering Pty Ltd
CLIENT	Department of Transport and Main Roads
ENGINEER	Geoinventions Consulting Services
LOCATION	Gateway Motorway between Nudgee and Bracken Ridge, South East, Queensland
SYSTEM USED	Platipus Earth Anchoring System – Temporary Works

ADVANCED  
GEOSYNTHETIC  
SOLUTIONS™

The Gateway Upgrade North project involves upgrading 11.3km of the Gateway Motorway to six lanes between Nudgee and Bracken Ridge. The project will deliver important safety and efficiency improvements for the 83,000 vehicles that travel on the motorway each day.

The project is jointly funded by the Australian and Queensland Governments and delivery is being managed by the Department of Transport and Main Roads and Transurban Queensland. Lend Lease Engineering Pty Ltd has been appointed to design and construct the project.

Major construction started in early 2016 and is due for completion in 2018.

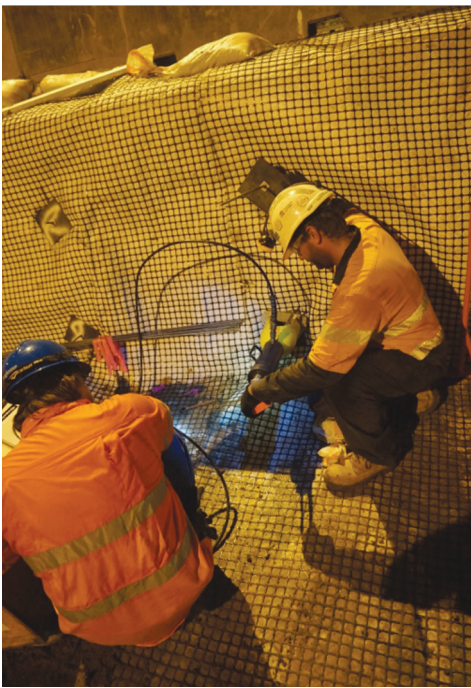
Temporary Works Design

As part of a comprehensive temporary works package solution for the widening of bridges at Sandgate Road and the Bicentennial Road interchange, Geoinventions Consulting Services designed and stabilised steep slope embankments/abutments of up to 3 metres in height to support the Gateway Motorway. The temporary abutments allowed the construction of a working platform to facilitate the implementation of permanent piling works.

The Platipus Earth Anchoring System was chosen as the solution to stabilise the temporary abutments and comprised of driving Platipus S6 and S8 Stealth Anchor Systems to depths of 3 metres.

The Platipus system provided the following main features and benefits

- Buildability and ease of installation – effective and efficient temporary works installation with up to 6 anchor systems being installed and tested per hour
- Relatively low noise level and disruption during night time construction
- No sheet pile design, installation or removal was required
- Total (supply and install) cost savings over traditional solutions



PHONE 07 3067 3631 | INFO@CIRTEX.COM.AU | WWW.CIRTEX.COM.AU

