

EastLink, VIC

CLIENT PB Hyder; CW-DC;
Thiess - John Holland Joint
Venture

YEAR 2005 - 2008

SCOPE OF WORK

- Geotechnical design
- Inspection and monitoring
- Site investigations



EastLink was the largest urban road project constructed in Victoria with a construction cost of \$2.5 billion. The six lane tollway forms a key component of Melbourne's arterial transport network.

EastLink is the 39km motorway in Melbourne's east, connecting the Eastern, Monash, Frankston and Peninsula Link freeways. Douglas Partners was the lead geotechnical consultant undertaking preliminary and detailed designs for the project together with inspection, monitoring and verification services.

The project links the Eastern Freeway in Mitcham with the Frankston Freeway in Melbourne's south-east. It included 39km of tolled motorway and 6km of bypass roads at Dandenong and Ringwood, twin three-lane 1.6km tunnels under Mullum Mullum Creek, and 103 major structures including 88 bridges.

Douglas Partners was the Lead Geotechnical Consultant appointed by the joint designers and subsequently to the joint contractors for the delivery phase. DP undertook the preliminary and detailed designs for the project, coupled with inspection, monitoring and verification services throughout the construction phase.

This included designs for bridge foundations supported on driven precast, bored and rock socketed piles, embankments on compressible soils, numerous soil nail walls, noise attenuation barriers, rock cuttings, subgrade characterisation for the main carriageway, proof design for all Eastlink pavements and pavement design for the Dandenong Southern Bypass. Interpretation of dynamic pile

load tests was also undertaken for rock socketed piles in weak siltstone, driven piles, and large diameter bored piles installed in mixed soils.

As one of the largest projects delivered by the private sector in Australia under the Victorian Government's Partnerships framework, the 39km motorway set a new benchmark for modern infrastructure. EastLink was delivered on budget and construction completed 5 months ahead of schedule. EastLink opened to traffic on 29 June 2008.

"To have been appointed as Lead Geotechnical Consultant by both the Designers and Contractors was a testament of their faith in Douglas Partners to provide practical solutions on a complex project."

Michael Broise - Principal

