

# Brisbane Inner City Bypass

## Project Report - Queensland

The project involved the construction of a four to six lane motorway that links Hale Street at Milton to Kingsford Smith Drive at Hamilton. The 4.5km bypass includes the following features:

- Queensland's first land bridge linking Victoria Park and Gregory Terrace parklands, crossing the bypass
- a six lane cut and cover tunnel through the RNA Showgrounds, 400m long
- a 110m diaphragm wall for a four lane tunnel on Kingsford Smith Drive in front of the Breakfast Creek Hotel, and
- a series of viaducts and bridges crossing over existing major arterial roads, rail lines and creeks.



for the construction need. The contractor was able to appreciate the benefits of high performance concrete systems and service optimisation in the delivery of this project.



Holcim supplied 60,000m<sup>3</sup> of concrete and Humes supplied 60,000 tonnes of structural and concrete products to the project. Holcim worked closely with Leighton Contractors in providing efficient concrete and precast solutions for each of the major structures. This resulted in the contractor being able to accelerate the construction program and achieve considerable project cost savings.

The significant project cost savings were largely facilitated by technical and engineering input applied at an early stage. Holcim's experience and knowledge of early-age maturity of concrete (based on significant research and development work) was used extensively in the system employed to construct the diaphragm wall. As a result, the contractor was able to construct the tunnel wall in half the planned time. Extensive use was made of superplasticizers and other specialist admixtures to optimise early-age concrete performance

Location	Brisbane, Qld
Client	Brisbane City Council
Contractor	Leighton Contractors Pty Ltd
Engineer	Maunsell McIntyre
Products supplied	60,000m <sup>3</sup> of concrete including <ul style="list-style-type: none"> <li>• Set retarding concrete</li> <li>• Optimised plastic concrete</li> <li>• Specialist precast concrete</li> </ul>
Commencement	June 2000
Completion	May 2003