

## Gateway Bridge



### Location

Brisbane, Australia

### Client

Maunsell/SMEC Leighton Abigroup

### Start Date

September 2005

### Office Responsible

Cardno

### Responsibilities

Tender design for bridge duplication; detail design and documentation of new bridge

### Project Scope

The \$1.88 billion Gateway Upgrade Project is the largest road and bridge infrastructure project in Queensland's history. The Queensland Government initiative is being delivered by Queensland Motorways in partnership with the Leighton Abigroup Joint Venture (LAJV). The project involves duplicating the Gateway Bridge and upgrading 20 km of the Gateway Motorway from Mt Gravatt Capalaba Rd to Nudgee Rd.

The existing Gateway Bridge crosses the Brisbane River to the east of the city comprising a 1,627m long concrete box girder bridge with a main span of 260m, constructed using the cast-in-place balanced cantilever technique. Cardno, as specialist bridge subconsultant with Maunsell SMEC, carried out the successful tender design of the duplication bridge for the LAJV as part of the overall Gateway Upgrade Project.

Cardno, in association with Maunsell, are now carrying out the detail design of the main bridge which incorporates

a cast-in-place twin cell concrete box girder constructed using the balanced cantilever technique for the three main spans with maximum span length of 260m and approach spans comprising twin single cell precast, match-cast concrete box girders of typical span length of 71m, also constructed using the balanced cantilever technique with an overhead erection truss.

The design of the main bridge commenced in October 2006 and will continue until September 2007. Thereafter, Cardno and Maunsell will provide construction stage services until the completion of the project. Cardno is assisting Maunsell SMEC in providing design management services for the design of the other bridges on the route.

### Contact

bridges@cardno.com

1300 782 171 (in Australia) or your local office

+61 7 3369 9822 internationally

www.cardno.com