

PREVIOUS WINNERS

Category 1 (Large Structures):

Winner – Category 1

Otira Viaduct

New Zealand

Submitted by: Beca Carter Hollings & Ferner

This four span 442m curved viaduct with central spans of 134m is located in Arthur's Pass National Park, South Island. Designers had to address sensitive flora and fauna issues as well as the fact that the bridge was located in a highly seismic zone.

The bridge, which is curved in plan, was constructed by the balanced cantilever method.

Category 2 (Small/Medium Structures):

Winner – Category 2

Graham Farmer Freeway Bridges

Perth

Submitted by: Bruechle Gilchrist & Evans

The seven concrete road bridges in Stage 2 of the Graham Farmer Freeway incorporate precast elements which reflect innovation, functionality and aesthetics.

Ranging in span from 20 to 30 metres, the precast prestressed concrete beams provide a continuous flat soffit and a clean outside face to the superstructures. Particular attention has been paid to the aesthetics of these bridges by incorporating pier crossheads into the beam depth and developing a more sculptured shape for piers.

Honourable Mention – Category 2

Imbil Town Bridge

Queensland

Submitted by: GHD and Cooloola Shire Council

The Imbil Town Bridge over the Yarra Creek replaces an old 83m long timber structure that was destroyed by a record flood in 1999. The new three span, 63m long bridge consists of standard precast deck units with precast concrete arch panels fixed to the side faces to enhance its appearance. The new design had to allow for future flooding, provide a structure that blended with the picturesque locality and meet a tight fixed budget.

Category 3 (Maintenance/rehabilitation projects):

Joint Winner – Category 3

Thorndon Overbridge Seismic Retrofit

New Zealand

Submitted by: Beca Carter Hollings & Ferner

The Thorndon Overbridge is a 1.3km long elevated concrete bridge on the reclaimed fore-shore of Wellington Harbour, an area of high seismicity passing over the Wellington fault. Built in 1970, the structure required extensive seismic retrofitting, including pilecap strength-ening, column jacketing, portal pier infill walls, deck restrainers and fault 'catch frames'.

Joint Winner – Category 3

Yarra Boulevard & Gibdon St Bridges

Melbourne

Submitted by: Hyder/Egis Joint Venture

Both bridges pass over a freeway that was widened as part of the Melbourne City Link Project. They were modified from 3 span prestressed concrete structures to cable stayed bridges of increased overall length. The conversion involved transverse prestressing and the attachment of stay cable anchors, a solution that provided substantial savings in costs and minimum disruption to the public over the alternative of demolition and reconstruction.