



## MULLUM MULLUM BRIDGES 4, 5 & 6

Structural Systems was contracted to construct the piers and crossheads for 3 new bridges over the Mullum Mullum creek. The contract forms part of the 350 million dollar Eastlink Project connecting the Eastern Freeway at Mitcham to the Frankston Freeway.

The piers range in height from 4.5 metres to 19 metres and the crossheads are up to 50 metres long. Structural Systems designed and erected a heavy duty false work support system which was tailored to suit the fast track construction program on this project.



Structural Systems worked swiftly to comply with the tight time constraints for this project, formwork shutters for the bridge piers were custom designed and built to allow the large concrete elements to be poured and left to cure for the specified time and not compromise the program. Beam shutter design faced similar constraints and the professional Structural Systems team didn't disappoint. All formwork design was carried out in house by our specialized formwork designers and all completed within the time frame allowed.

Complex reinforcement detailing required allowing multistrand post tensioning to be installed in highly congested sections of the crossheads. 750 tonnes of reinforcement was supplied and fixed with some of the bars in the main larger piers weighing up to 120kg each.

The crossheads required 60 tonnes of post tensioning using the BBR Multistrand System. The stressing was carried out in stages with the final stage being completed after the 70 tonne super T bridge sections were placed in position.

Structural Systems employees had to take great care during concrete placement in order to achieve the high level quality architectural finish specified.

The contract is currently on time and budget and has achieved our goal of establishing Structural Systems as being able to deliver major civil structural packages with professionalism and quality workmanship.

The contract is currently on time and budget and has achieved our goal of establishing Structural Systems as being able to deliver major civil structural packages with professionalism and quality workmanship.



### Project Data Sheet

**Year:**  
2006/2007

**Location:**  
Ringwood, Victoria

**Client:**  
Thiess John Holland

**Division:**  
Structural Systems  
(Southern) Pty Ltd

**Scope:**  
Supply & Install Post-Tensioning, Reinforcement & Formwork Systems

Ph: 1300 SSL GRP (1300 775 477)  
Web: [www.structuralsystems.com.au](http://www.structuralsystems.com.au)

SSL-PDS-FW002