DARACON Group

Shaping the Future

PROJECT PROFILE

Name **TOURLE STREET BRIDGE REPLACEMENT**

Client Roads and Traffic Authority of NSW

Project Description

- Construction of bridge including:
  - Tubular steel piles
  - Abutments
  - Reinforced concrete piers
  - 255m, 8 span prestressed concrete girder bridge
  - Traffic barrier railings
  - Road pavements
  - 300mm stormwater and 600mm watermain
- Earthworks including pre-consolidation of soils and construction of embankments, 680m of approach road works

Site Location Mayfield West, Kooragang Island

Value $30.3 million

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Duration	8 months completed May 2009
Referees	Mr Peter McTackett – 02 4924 0318
Key Personnel	Project Manager – Justin Foot Superintendent – Rod Lang Supervisor – Matt Burgin
Extent of Involvement & Role of Proponent(s)	Daracon was the principle contractor for this project. Arenco was engaged to assist with the bridge works.
Significant Achievements	• The project was completed approximately 10 weeks ahead of schedule. • An innovative girder launching system was utilised on the project to overcome practical limitations. A purpose-built 70m long, 130t gantry was employed to place girders for the bridge, which also provided a high level of precision during placement. • An underground bentonite cut-off wall was constructed on the Southern approach to prevent spread of existing industrial waste contamination (benzene plume) into the adjacent groundwater and surface water systems.

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- Steel casings were installed prior to the driving of concrete piles as protective sleeves to prevent the surrounding contaminated soil and groundwater making contact with the piles.
- Extensive planning was required to coordinate and allow watermain relocation, approach works, and bridge works to be carried out simultaneously.
- Various sacrificial anodes were installed to provide the pile, abutment and pier concrete with cathodic protection from the surrounding marine environment.
- Due to existing high traffic volumes, complex traffic management issues were successfully overcome through the staging of approach works, construction of temporary sidetracks, and implementation of various traffic restrictions.