



# PROJECT SHEET

## RUSSELL TERRACE BRIDGE BEARINGS

### PROJECT SUMMARY

Client: BMD

Location: Russell Terrace,  
Indooroopilly

Duration: 1 week

Value: \$ 32,000

#### Major Challenges Overcome:

- Jacking Sensitivity
- Risk of deck cracking



**Russell Terrace Bridge**

#### Scope

1. Lift the girders equally to not fracture the concrete deck
2. Grout each of the bearings with an epoxy grout (Chemrite Pad Grout was used)
3. Where small gaps existed, these were to be epoxy injected (low viscosity resin was used – Chemrite CILV)
4. Re-position the girders to facilitate the new grout

#### *The Project*

An addition to the construction of the Legacy Way Tunnel was the widening of the bridge over Russell Terrace in Indooroopilly. The bridge spans approximately 22 meters with rubber Granor bearings at either side. It comprised of 4 large girders each approximately 1.2 meters deep.

At the time of construction, little to no grout was placed either below or above the rubber bearing.

Dynaciv was engaged by BMD Construction to work closely with the designer in order to safely lift and re-grout the rubber bearings, according to a jointly written Construction and Methodology Statement.

## ***Completed Work***

The support gussets were manufactured and bolted to the headstock using an epoxy grout, Chemrite Bar Grout. Large M24 bolts were used to hold the gussets in place.

Large hydraulic jacks were then placed on top of the gussets as shown below.



A 20mm support plate was placed on top of the jack to evenly distribute the load and these were grouted with fast curing Chemrite CR-FC grout.

Sensitive measuring equipment was fitted by Dynaciv to each girder to closely monitor any movement. This was important to avoid damage to the structure.



Each girder was then evenly lifted at a continuous rate to a point where each bearing could be easily accessed and grouted. The bearings were grouted with Chemrite Epoxy Pad grout. Small gaps were grouted with a low viscosity crack injection epoxy.

