

Judd Street – Kwinana Freeway (Australia)



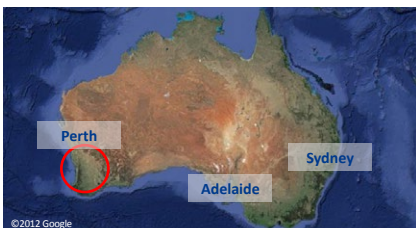
Project description

The Kwinana Freeway is a 72-kilometre (45 mi) freeway in and beyond the southern suburbs of Perth, Western Australia, linking central Perth with Mandurah to the south.

Planning for the Kwinana Freeway began in the 1950s, and the first segment in South Perth was constructed between 1956 and 1959. The route has been progressively widened and extended south since then.

With the widening plans for this vital connection, replacement works have also been faced by the constructor. Furthermore, strong focus on the freeway's reliability, efficiency and safety comprise the main features of the project's target.

The Judd Street on Ramp of the Kwinana Freeway is located in Perth, Australia



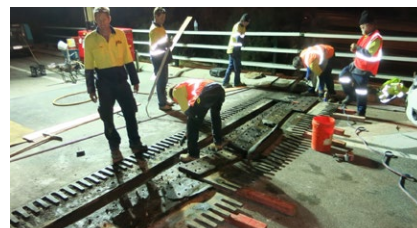
mageba scope

In order to minimise the effect of construction works for the traffic, mageba offered a solution to replace the existing sliding finger joints by the use of a flexible plug joint. Based on elastic polymers, this joint offers several advantages such as unsurpassed driving comfort, nearly zero noise emissions and 100 % water tightness.

The replacement process was fully performed during 4 night shifts:

- **Night 1:** Removal of the existing finger joint and clearing the recess
- **Night 2:** Support beam construction using polymeric concrete
- **Night 3:** Installation of the joint in carriageway area
- **Night 4:** Installation of the joint in kerb area

Night 1: Preparation works have been started and will be followed by polymeric concret works in night 2



Highlights & Facts

mageba products:

Type: POLYFLEX®ADVANCED flexible plug joint of type PA90

Features: total movements of 90 mm (3.54 in)

Installation: 2015

Structure:

City: Perth

Country: Australia

Construction: 1956–1959

Type: Freeway

Length: 72 km (45 mi)

Contractor: MRWA / Downer Mouchel

Consultant: AECOM

Night 3: Installation of the Polyflex material in the carriageway

