

# Denham Court Road Upgrade, Sydney NSW

Case study – Gas main protection slabs



# Precast concrete slabs for protection of a Sydney gas main an Australian first

During civil works at the Denham Court Road Upgrade in Leppington, Sydney, contractor JK Williams needed to construct a protection slab for the gas main running through the site. Looking to remove this task from the project's critical path, JK Williams worked closely with Humes to come up with a solution that also met the requirements of the utilities authority, Jemena. Precast concrete beams and roof slabs were chosen which is an Australian first for this type of application.

Choosing to use a precast solution offered JK Williams the advantage of greatly reducing the man-hours and exposure to on-site hazards, such as working around a live gas main, that an in-situ installation would have required.

The initial order of 72 roof slab units (4200 x 2500 x 375) and 144 beams (600 x 2500 x 1000) totalling 1,188 tonnes was manufactured at Humes Blacktown facility in just two months with up to eight units cast per day. All precast components were manufactured to AS3600 and supplied with a Class 2 finish or better.

Delivery and staging was carefully managed through several on site meetings with the Humes project team and client to ensure disruptions and uncertainty were eliminated. This allowed JK Williams to install up to 20 units per day and have the first line completed in a week as planned.

The high level of dedication from the Humes project team from initial design to delivery, has left JK Williams more than happy with the outcome of the project. "Working with Humes saved us time, minimised disruption on site, and greatly reduced our risk of working around a live gas main. All the staff involved contributed in making this a great success. Humes delivered in full, as promised" said Chris Goldmann, Senior Site Foreman.

## Project

Denham Court Road Upgrade,  
Sydney, NSW

## Principal

Cardno

## Civil Contractor

JK Williams

## Product supplied

72 no. Roof slab units  
(4200 x 2500 x 375)

144 no. Beams  
(600 x 2500 x 1000)



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