

# VITAL LINK CONNECTING SYDNEY'S RADIALS

National Precast member Hanson Precast is supplying prefabricated concrete elements which are integral to Stage 3 of the Schofields Road upgrade and extension in Western Sydney.

When the Schofields Road upgrade and extension is complete, it will form a tree lined transit boulevard linking the Rouse Hill and Marsden Park town centres. Aiming to help meet the future transport needs of the North-West Priority Land Release Area, the project is set to connect pedestrians, cyclists, public transport and vehicles with the surrounding urban land use.

Stage 3, the final phase, is an upgrade of the 2.5km extension of Schofields Road between Veron Road and Richmond Road. Expected to be completed by mid-2018, it includes extending Schofields Road from Veron Road, across Eastern Creek, to Carnarvon Road and widening the South Street alignment.

#### **Precaster** Hanson Precast

**Client** NSW Roads and Maratime Services

**Builder** BMD Constructions

Engineer Hyder Consulting

www.nationalprecast.com.au

## FLOODPLAIN DEMANDS A PRECAST SOLUTION

The Schofields Road upgrade involves the construction of twin bridges over Eastern Creek (422 metres long) and Bells Creek (175 metres long).

Hanson Precast's Estimating Manager, Richard Lorenzin, says the project's flood-prone area meant that precast concrete was the exemplary option.

"The existing single-lane road was in a floodplain that needed to be elevated to create a four-lane flood-free access across Eastern Creek and Bells Creek," he explains.

Given the required number and complexity of the precast elements, the client needed to award the project's precast package to a company that had the ideal expertise, precision, and manufacturing capabilities—qualities that Hanson Precast undoubtedly exhibits.

1,071 prefabricated concrete bridge planks and 560 bridge parapets were manufactured for the project. The bridge planks are 17.5 metres and 7.95 metres long, and they form a critical approach to the twin bridges.







### DELIVERY RUNS LIKE CLOCKWORK

Despite the precast elements only needing to be transported from Riverstone, a local suburb not far from the site, the delivery of such a large volume of units posed a potential challenge.

Hanson Precast's Logistic Manager, Will Dean, comments, "the co-ordination of deliveries was a critical challenge, with 25 extendable semi-trailer delivery vehicles usually required for each normal delivery day".

"On a couple of the delivery days the site required 34 loads in 8 hours, which demanded that the whole exercise of loading, driving to site, unloading and returning to the factory for reloading run like clockwork—and it ultimately did!"

With the precast planks weighing between 15 -18 tonnes, the units were transported on an extendable trailer, one at a time.

### CAPABILITIES FOR THE FUTURE

Hanson Precast has recently upgraded their prestressing casting facility, which Mr Lorenzin says perfectly positions the company to supply to such high-volume projects.

The timely design, installation and commissioning of the upgrade was critical to the project's success and ultimately satisfied all of the Roads and Maritime Services' requirements.

"The doubling of manufacturing capacity has now given Hanson Precast the capability to provide similar projects in the future," he details.

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