

Australia's largest concrete recycling project

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ABSTRACT

The M1 Motorway is the major road between Sydney and Newcastle and carries traffic of up to 75,000 vehicles per day in 2018. The section between Tuggerah and Doyalson Interchanges is currently being upgraded with a completion date in 2020 anticipated. As many motorways in Australia are simultaneously coming to the end of their pavement design life and requiring additional lane capacity, this project represents one of the earliest major upgrades of its type. The Tuggerah to Doyalson M1 Motorway upgrade includes 9km of dual carriageway 2 lane concrete pavement with 200,000 tonnes of concrete to be recycled.

This paper provides commentary on the project traffic staging; the in-line concrete pavement demolition; crushing, moisture conditioning, processing and recycling of pavement materials; and lessons learnt during the construction, as well as recommendations for future motorway upgrades.