

## **Oberon thin concrete pavement 3 years on - from design to construction**

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### **ABSTRACT**

This paper presents a review of the thin concrete pavement (TCP) system that was constructed for a fuel station in Oberon NSW, from design through to construction and a look at the pavement performance following nearly three years of service.

At the ASCP Conference at Coffs Harbour in 2015, Juan Pablo Covarrubias presented the Optipave software and thin concrete pavement system to an Australian audience for the first time. There has now been a number of projects constructed locally using this method.

With close collaboration between the consulting engineer, contractor and fibre supplier, the TCP system is carving out a niche in this area of the market owing to the cost saving the system provides to the client. With potentially 40% less concrete required, TCP also has a lower carbon footprint than traditionally designed concrete pavements, while the elimination of steel mesh through the use BarChip macro synthetic fibres further enhances the green credentials of this construction system.

This paper has been prepared to provide contractors and designers a review of the first thin concrete pavement (TCP) project in Oberon NSW that was completed in early 2016. This paper will provide details on the initial design using traditional methods, the Optipave solution and the challenges faced by the design engineer. Secondly, it will review the construction process and provide important feed-back from both the contractor and concrete placer on how they approached this project and what expectations and barriers they were presented with. An examination of the pavement nearly three years later and how it has performed will also be reported.