Category 5: Young Stabiliser of the Year

Cameron Hopkins

Project Engineer Stabilised Pavements of Australia





2023 AustStab Awards of Excellence





Background

- A South Australian native, Cameron Hopkins graduated BE Civil and Project Management from University of South Australia in 2012 with Honors and a year later achieved a Masters in Project Management.
- If you talk with Cameron, you will find him passionate about two things:
 - Stabilisation (of course)
 - His beloved Port Adelaide Football Club









Background

- Cameron was recruited by SPA in 2017 and commenced his stabilisation career in the Victorian office in 2017. In this role Cameron showed a willingness to learn and a dedication to his duties as he assisted in the delivery of multiple stabilisation and civil road projects in the Victorian business unit between 2017-2020.
- Some projects of significance being:
 - Project Engineer for \$2.6M (15km) cement treated pavement VicRoads project from Geelong to Portland.
 - Project Engineer for City of Manningham \$600k of foamed bitumen treatment.
 - Project Engineer for \$1.7M (2.5km) foamed bitumen treated pavement VicRoads project.
 - Central Goldfields Shire design of cement stabilised pavement treatments





Evidence of Success

Post Graduate Studies

- Following on from his Masters in Project Management (2013) Cameron commenced a PhD through the University of Adelaide on the topic: Stabilisation of Local Government Roads.
- This project saw Cameron liaise with 3 x SA Councils (Salisbury, Adelaide & Playford) and, with the creation of a partnership, Cameron oversaw varying design treatments on 4 x trial sections comparing the relative benefits of a stabilisation treatment on high trafficked failed urban road pavements using Polyroad OR Bitumen Emulsion, including control sections for each that involved re-mixing pavement materials with no chemical additive plus a section which incorporated the use of RAP as a mechanical stabilisation additive.

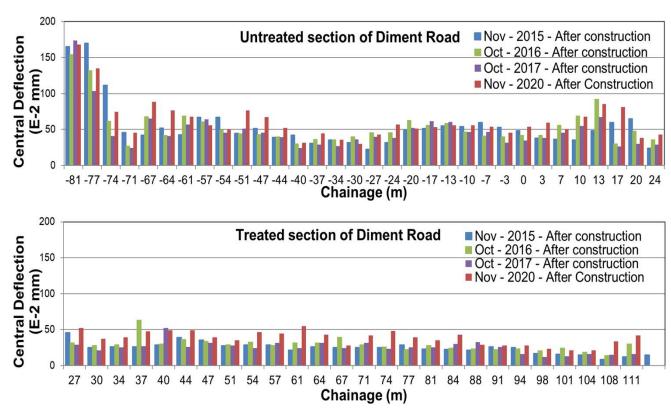
Trial Findings

Five years into their service life it was found that two of the treated trail sections demonstrated great results with the third section not faring so well yet yielding some important information. The learned outcomes of these trails have been captured in 5 separate research papers which form part of Cameron's PhD.





Evidence of Success



Cameron recently presented at the Australian and New Zealand Geomechanics Conference in Cairns on the topic of *Field Performance of Two Unbound Granular Pavements Treated In-situ with Hydrophobic Polymer*.





Innovation and Influence

Trial Findings (Diment Road)

- Average deflections halved over full sample (0.5mm vs 1.0mm)
- Strengths were found to steadily gain over the 5-year period of deflectograph measurements
- Polyroad additive had the effect of wet weather waterproofing to greatly reduce seasonal strength loss
- Importantly, the participating councils increased their interest and appetite for realising the benefits of stabilisation solutions as a result of this initiative!





Returning to South Australia

Cameron returned to SA in the newly created SA Regional Engineer role in 2020 and in the past 3-years has achieved:

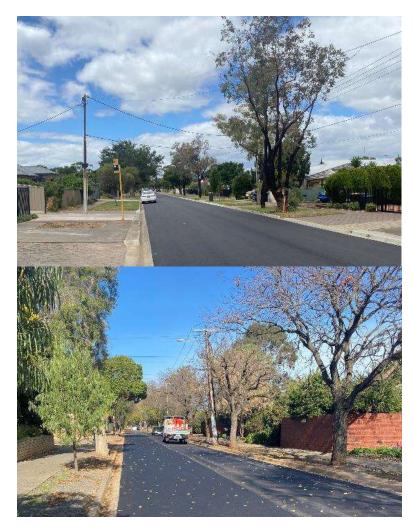
- The growth of a client base
 - Through sound engineering advice and a flexible approach, matching stabilisation solutions to the particular client needs and budget constraints
- Client trust and repeat business
 - Sound project delivery underpinned by good planning
 - Always finding a solution when challenged (i.e. storm events, unexpected materials)
 - Repeat business





Projects of Significance

- Port Adelaide Enfield road rehabilitation
 - (10,000m² top RHS)
 - 280mm deep cement treatment with AC surfacing
- City of Mitcham road rehabilitation
 - (3,500m² bottom RHS)
 - 350mm 2 x stage lime and cement treatment with AC surfacing
- Barossa Regional Council
 - (11,000m² bottom RHS)
 - 250mm deep cement treatment with 2-coat seal surfacing
- Beverly Mine Airstrip Upgrade
 - (38,000m²)
 - Successful treatment of insitu soils to meet service demand







Summary

In summary Cameron has demonstrated he is an expert in the design and application of stabilisation solutions and despite being in the early years of his career he is a person who has gained the respect of the stabilisation community and clients/asset owners alike.





