Resurfacing The Only Overwater Single Lane Bridge To An Island Without Environmental Or Traffic Impact.

28th November 2017
Introduction

RMS NSW

▪ Needed to address the disrepair of a single lane spray seal timber bridge passing over the Murray River which was the only access to/from an island community

▪ Discovered most timber slabs needed replacing and resealing

▪ Identified that spray sealing at this location would risk contaminants falling into the Murray River and pose potential risk to the environment

▪ Island residents concerned that the repair would remove their only link to Albury
Location
Location

A single lane bridge is the only access to/from the island

The island – Bonegilla VIC
Boundary Rd Bridge - Albury
Boundary Rd Bridge - Albury
Scope

- Find a product to permanently replace and seal the surface
- Provide a surface equivalent to a spray seal
- Minimise any potential environmental contamination
- Minimise island access disruption
Project Challenges

- How to resurface the existing bridge
- How to deliver a quality surface
- Don’t negatively impact
  - the sensitive Murray River environment
  - or local resident access/egress.
How was this managed

▪ The solution of RMS/Downer was to use the BRP Road Patch to resurface the timber bridge deck.

▪ BRP Road Patch is a rubber bitumen spray seal prefabricated sheet

▪ Enabled resurfacing to be completed without resident interruption

▪ Delivered a spray seal surface

▪ Without conducting any activity to harm such an environmentally sensitive area.
What is the BRP Road Patch?

- 1m x 0.75m Prefabricated sheets
- 22% rubber bitumen spray seal
- Aggregate size Fine, 7mm, 10mm, 14mm & 20mm
- Requires no plant/capital equipment for installation
- Applied to surface with standard bitumen emulsion
In 5 simple steps the BRP Road Patch has been applied, protecting the surface against further water damage & providing texture, leaving a neat appearance with minimal financial & social costs.
City Of Knox – VIC Experience

- FY 12/13 City of Knox – VIC
  - 12 reported accidents on wooden decks
    - 11 Bicycle crashes
      - At least one serious resultant in a
        - Dislocated Shoulder
        - Fractured Arm
        - Chipped hip bone
  - 1 pedestrian trip
  - Unreported
City Of Knox - VIC Experience
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- Cycling is a fast growing recreation/exercise pursuit in Council Area
- Improved safety needed to avoid injuries and deaths
- BRP offers long term cost effective solution
- Has proven to Knox to successfully address dangers
- Is the Knox preferred deck treatment option
July 2015 - RMS Wagga Wagga BRP Installation
Key Customer Outcomes

Resurfacing with the BRP Road Patch

- was done safely with no incidents
- delivered an aesthetically pleasing surface
- improved surface safety
- eliminated previously problematic bridge noise.
- eliminated environmental pollution concerns
- used no heavy equipment = lower noise/Co2 levels.
- completed quickly in ½ a day
- trafficable during & immediately after = no resident impact
- received no complaints to council
- stops water penetrating wood deck surface assisting with decking longevity
Conclusion

Glen Henderson - Bridge Works Supervisor
Regional Maintenance Delivery
Asset Maintenance
RMS Wagga Wagga

“The product (BRP Road Patch) was good to work with and the sheets were a manageable size. Easy to lay, environmental controls were easier to manage dealing with smaller quantities of emulsion and being able to contain it. Good to use as crew can lay it and there is no requirement to organise asphalt companies for such small jobs. It can also be used for remote locations. Only problem we had was when it was cold, the plastic backing was hard to remove. We are already planning a second project in the coming months.”
RMS Wagga Wagga – Wee Jasper Bridge NSW