



## TECHNICAL COMMITTEE MEETING

# MINUTES

(Via Teams)

13 October 2023 at 10:00 am

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## 1.0 OPENING – RECORD OF ATTENDANCE

The Chairperson of the Technical Committee opened the TEAMS meeting at 10:03am, welcomed everyone and read the record of attendance.

### 1.1 Present

John Nuttall	Program Director – Non-Voting	WSFN Chairperson
Peter Hall	Program Manager – Non-Voting	WSFN
Racelis Rose	Executive Officer (for the Minutes)	WSFN
Craig Robertson	<b>Voting Member</b>	Kellerberrin Subgroup
Gary Sherry	<b>Voting Member</b>	Hotham-Dale Subgroup
David Holland	<b>Voting Member</b>	Roe Subgroup
Geoff McKeown	<b>Voting Member</b>	Narrogin Subgroup
Vacant	<b>Voting Member</b>	Avon Subgroup
Allister Butcher	Non-Voting Member	Moora Subgroup
Rod Munns	Non-Voting Member	Northeast Subgroup
Jacqui Early	Business Services Officer – Wheatbelt Region (Narrogin)	MRWA Representative

### 1.2 Apologies

Judd Hobson      Voting Member      Lakes Subgroup

### 1.3 Observers / Visitors

## 2.0 DECLARATIONS OF INTERESTS (Financial / Impartiality / Proximity)

Allister Butcher – Non-Voting Member submitted a Declaration of Interest – Financial on Item 4.0 – Shire of Dumbleyung Reseal Request. Allister is currently engaged by the Shire of Dumbleyung to provide project management support to manage WSFN projects.

## 3.0 CONFIRMATION OF PREVIOUS MINUTES OF MEETING

### ***Correction to the Minutes of Meeting dated 11 August 2023:***

*Geoff McKeown listed as Voting Member – Shire of Williams but should be listed as representative of the Narrogin Subgroup.*

### **RESOLUTION      TC2023/10-018**

That the Minutes of the Technical Committee meeting held on 11 August 2023 be confirmed as a true and accurate record of the meeting.

**MOVED:**            David Holland  
**SECONDED:**    Geoff McKeown  
**CARRIED:**       4/0

Before Item 4.0 was tabled, the Chairperson presented a Declaration of Interest – Financial from Allister Butcher – Non-Voting Member on Item 4.0 – Shire of Dumbleyung Reseal Request. Allister is currently engaged by the Shire of Dumbleyung to provide project management support for WSNF projects.

Allister Butcher left the TEAMS meeting at 10:06 am.

#### **4.0 SHIRE OF DUMBLEYUNG RESEAL REQUEST**

<b>Item 4</b>	<b>Shire of Dumbleyung Reseal Request</b>
<b>Date of Report</b>	09 October 2023
<b>Author</b>	Mr Peter Hall – Program Manager
<b>Attachments</b>	a) 2021/22 – Kulin Dumbleyung Road Budget costing SLK0-4 b) 2022/23 – Kulin Dumbleyung Road Budget costing SLK4-8 c) S45R Reseal Quote Summary Kulin Dumbleyung Road SLK 0-8 (Bitutek, Colas and Fulton Hogan) d) Quote from Bitutek Pty Ltd e) Project Cost Variation Sheets (SLK 4-9 and SLK 0-4)
<b>Senior Officer</b>	Mr John Nuttall – Program Director

##### Background:

The Shire of Dumbleyung has had ongoing works delivering multiple WSNF projects from previous financial years, the work is progressing, and Dumbleyung is catching up the backlog. The works have continued into the colder months and to control seal issues, Dumbleyung opted to go with a Double/Double Emulsion 14/7 these have not been completely successful, and Dumbleyung is looking at a reseal with S45R as a topcoat.

Dumbleyung has some funds remaining in the budget so is not requesting all the extra costs required to add the additional seal coat.

##### Consultation:

The Shire of Dumbleyung have obtained quotes from Colas and Bitutek Pty Ltd (quote summary is attached).

##### Proposal:

Dumbleyung is requesting to add S45R to both sections 0 to 4 and 4 to 8 on the Rabbit Proof Fence Road. The cost for each section is \$209,928 with savings each section will need an additional:

- 0 to 4 = \$81,795
- 4 to 8 = \$180,649

##### Financial Implications:

\$262,444 to come from the surplus funds.

Risk Assessment:

An emulsion seal is good for low temperatures but should only be considered as a holding seal because of the short life span.

Comment:

Given the efforts made by the Shire of Dumbleyung over recent months and the need to ensure the required standards and quality is met in the finished product, it is recommended that the Committee approved the request.

**RESOLUTION** **TC2023/10-19**

That the Technical Committee **approve** the Shire of Dumbleyung's request to reseal 8km of the Rabbit Proof Fence Road at a total cost of \$262,444 being split between the two projects 0 to 4 at \$81,795 and 4 to 8 \$180,649.

**MOVED:**       **Craig Robertson**  
**SECONDED:**   **David Holland**  
**CARRIED:**     **4/0**

Allister Butcher returned to the TEAMS meeting at 10:21 and was advised of the outcome of the discussions and voting on the item presented.

## 5.0 SHIRE OF WONGAN-BALLIDU 2023/2024 PROJECT

<b>Item</b>	<b>Shire of Wongan-Ballidu 2023/2024 Project</b>
<b>Date of Report</b>	09 October 2023
<b>Author</b>	Mr Peter Hall – Program Manager
<b>Attachments</b>	a) Letter requesting Variation, b) Project Scope Identification Form, c) WSNF Finalised budget schedule dated 14/09/23, d) WSNF Finalised Budget Summary dated 14/09/23, e) LG 21-067 – Particle Size Distribution (PSD) f) LG 21-068 – Particle Size Distribution (PSD) g) All other supporting documents (plan view, cross sections etc)
<b>Senior Officer</b>	Mr John Nuttall – Program Director

### Background:

The Shire of Wongan-Ballidu (Wongan) completed 14 km of the Dowerin-Kalannie Road in the 2022 2023 financial year. The project did not have enough development and the determined methodology was based on previous shire works. In addition, Wongan found that the total length was too big for them to manage, and it had a negative impact on their remaining works for the RRG etc.

To meet their targets, Wongan had to rush and probably took some short cuts which has left them with an ongoing maintenance impost.

The WSNF requested a full review of the forward program by Wongan starting at the current year, the outcome was that a reduction in the future project lengths was strongly encouraged by the WSNF and as part of the review a quick assessment of the pavement by a pavement engineer was also encouraged.

Wongan has a project for this year on the Dowerin-Kalannie Road from 14 to 27 slk, a length of 13km at a budget of \$1,938,779. The final project cost was \$2,247,432 a cost per km of \$160,531.

Subgrade has been tested and found to be more than adequate. Siva Thillainath has determined that box out widening to 11m, import material to existing level, stabilise and shape the existing, then import 200mm and wet mix will meet the WSNF requirements.

Wongan has re-costed the 2023-2024 project with the new scope and process. These are provided in the attached summary sheets.

### Consultation:

Stabiltech was engaged to give advice and testing.

### Proposal:

Wongan requests to change the scope to 5km from 14 to 19slk at a budget of \$1,910,657. Cost per km of \$382,131.

Financial Implications:

There is no increase in the budget required, however there is less road being delivered, the offset is that the quality will be at WSFN standards.

Risk Assessment:

The risk is the pavement will fail prematurely.

Comment:

WSFN motto is *"Build to a standard, not to a cost."* A lack of pre-testing and trying to deliver too much has put pressure on the Shire that it could not handle.

**RESOLUTION** **TC2023/10-20**

That the Technical Committee **approve** the scope change for Wongan Ballidu to 5 km from 14 to 19 slk at a budget of \$1,910,657 on the Dowerin-Kalannie Road.

**MOVED:** Dave Holland  
**SECONDED:** Gary Sherry  
**CARRIED:** 4/0

## 6.0 S45R BITUMEN BINDER

<b>Title</b>	S45R Bitumen Binder
<b>Date of Report</b>	09 October 2023
<b>Author</b>	Mr Peter Hall – Program Manager
<b>Attachments</b>	Nil
<b>Senior Officer</b>	Mr John Nuttall – Program Director

### Background:

WSFN is fielding requests to adopt an S45R binder and other rubber percentage binders as part of the sealing specifications. There is a ground swell of support for utilising S45R due to the problems encountered with C170 binder. The problems being experienced are:

- Some of the results for testing of C170 are falling outside of the tolerances due to the petroleum industry trying to maximise fuel production for the world.
- The window for the perfect application rate is now so small that it is very hard to achieve and spray companies are erring on the side of caution meaning that a lower app rate is delivered, this has flow on consequences.
- Lower app rates mean less life span before a reseal is required.
- Bleeding occurs when the binder is too high on the stone, previously if a seal had gone through a summer with no problems, then it was considered good, this is no longer the case; seals are now bleeding two or three years after application.

### Consultation:

#### **Benefits of S45R**

- Includes crumbed rubber in the mix giving eco points.
- Resists stripping,
- Does not bleed,
- Has longer life before resealing required 20+ years,
- Can be sprayed double/double,
- Is used as a Strain Alleviating Membrane (SAM) to resist cracking etc.

#### **Detriments**

- Cannot be sprayed in small quantities – smallest batch size is 20,000l, however as the industry adopts S45R then this will become less of a problem.
- More expensive than C170
- Less forgiving during application - C170 is becoming more sensitive to errors so this problem is having less and less impact.
  - Primer seal application not advised, an eco-prime or emulsion prime with no volatiles is strongly recommended instead.
  - Surface and stone needs to be clean.
  - Spray temperature both surface and product are critical.



Proposal:

That the WSNF adopts S45R or crumbed rubber binders as the final seal layer as a minimum and encourages the use of S45R for all reseal applications, seals on base course must have an appropriate prime.

Financial Implications:

Initial cost of S45R is approx. 15% higher than C170, however the whole of life cost savings experienced by the shires far exceeds this.

Rubber is sourced from old tyres so aids in a world rubbish problem gaining eco points.

Risk Assessment:

Main Roads WA are beginning to adopt crumbed rubber seals as a business-as-usual protocol. This is because of the problems of stripping and bleeding being experienced by the current C170 seals. Main Roads have far greater traffic counts than the local governments however, the Shires do not have the funds to indulge in an optimal reseal program.

Comment:

Given all the positive benefits outlined, the PMT recommend that the use of S45R be adopted as per the recommendation below.

Officer Recommendation

That the Technical Committee recommends to the Steering Committee to **adopt** the S45R and other crumbed rubber binder options as the final seal layer as a minimum and encourages the use of S45R for all reseal applications. Seals on base course must have an appropriate prime and that the adoption is added to the Basis of Design.

After discussions, the Technical Committee made changes to the recommendation.

**RESOLUTION** **TC2023/10-21**

That the Technical Committee recommends to the Steering Committee to adopt the following:

- S45R and other crumbed rubber binder as an option for the final seal layer.
- Encourage the use of S45R for all reseal applications.
- S45R seals on base course must have an appropriate prime and that the adoption is added to the Basis of Design.

**MOVED:** Dave Holland  
**SECONDED:** Geoff McKeown  
**CARRIED:** 4/0

## **7.0 CLOSURE**

The Chairperson announced that the next Technical Committee meeting will be determined at a later date after the local government elections and member shires have nominated their representatives to the Regional Road Group.

There being no further business to discuss, the Chairperson closed the meeting at 11:05pm.