

**17.3 AWARDING OF CONTRACT - SHOULDER WIDENING AT KULKAMI ROAD AND BILLIATT ROAD**

**Responsible officer:** Matthew Sherman, Manager Infrastructure Services

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- Attachments:**
1. Tender review email HDS Australia
  2. PD Excavations methodology

<b>Section under the Act</b>	The grounds on which part of the Council or Committee may be closed to the public are listed in Section 90(2) & (3) of the <i>Local Government Act 1999</i> .
<b>Sub-clause and Reason:</b>	(k) - tenders for the supply of goods, the provision of services or the carrying out of works.

**Executive Summary**

This purpose of this report is to enable Council to consider entering into a contract for the delivery of shoulder widening works on Kulkami Road and inside corner widening on Billiatt Road.

**RECOMMENDATION**

That Council awards the contract for shoulder widening on Kulkami Road and inside corner widening (four corners) on Billiatt Road to P.D. Excavations Pty Ltd for the contract price of \$502,000.00 (ex GST).

**MOVED COUNCILLOR NEVILLE PFEIFFER  
SECONDED COUNCILLOR REBECCA BOSELEY**

That Council awards the contract for shoulder widening on Kulkami Road and inside corner widening (four corners) on Billiatt Road to P.D. Excavations Pty Ltd for the contract price of \$502,000.00 (ex GST).

**CARRIED.**

**Background**

The total 2020/21 budget for this project is \$502,000. Council allocated funding of \$165,000 in the annual budget for Kulkami Road and Billiatt Road shoulder works. This was a 1/3 contribution to this project with an additional 2/3 contribution of \$337,000 funding from the Commonwealth Government’s Local Roads and Community Infrastructure Program.

The total budget figure of \$502,000 provides for \$422,276 worth of works on Kulkami Road and \$80,000 worth of works on Billiatt Road.

**Context**

Council advertised for tenders via the SA Tenders website. Tenders opened on Friday 30 October 2020 and closed on Friday 20 November 2020 at 5pm.

The tender specification provided for shoulder widening and sealing of 5 kilometres m of Kulkami Road and the inside corner widening of four corners on Billiatt Road.

Council received a total of two tender submissions. The companies that made submissions were P.D. Excavations and SMS Bitumen. The tender response was low but is understandable given the amount of infrastructure money that the federal and state governments have made available for significant infrastructure projects.

It is noted that the final scope of works will need to be negotiated and finalised with the successful contractor. Specifically the final length of shoulder works on Kulkami Road will be determined based on the cost of works and the available budget.

### **Policy and statutory implications**

Council has a procurement policy and the tender process has been undertaken in accordance with the policy.

All Council purchases must be carried out in compliance with the Local Government Act 1999 (the Act). Section 49 (a1) of the Act requires Council to develop and maintain procurement policies, practices and procedures directed towards:

- Obtaining value in the expenditure of public money, and
- Providing for ethical and fair treatment of participants, and
- Ensuring probity, accountability and transparency in the procurement process.

Council is not obliged to accept the lowest tender or any tender.

### **Issues**

These type of road works are relatively expensive to undertake for relatively small budget allocations. Setup costs make up a higher portion of total costs on such projects. Productivity is also reduced when the project involves relatively low distances of shoulder works.

For example P.D. Excavations costs for site establishment and demobilisation is \$37,924. This would add up to a significant amount of money if works on Kulkami Road occur over a number of budget years.

The submitted tenders were as follows:

#### SMS Bitumen

Kulkami Road - 5 kilometres of shoulder works - \$657,106 ex GST (\$131,421 per kilometre)

Billiatt Road - corner widening (four corners) - \$109,500 ex GST

Total \$776,606

SMS Bitumen proposed a box out method (excavation of existing shoulder material then reinstatement)

#### P.D. Excavations

Kulkami Road - 5 kilometres of shoulder works - \$535,480 ex GST (\$107,000 per kilometre)

Billiatt Road - corner widening (four corners) - \$122,000 ex GST

Total \$657,480

P.D. Excavations proposed a top up and wet mix method. A summary of this method is attached to this report.

The two tendered prices far exceed the total budget allocation of \$502,000. The P.D. Excavations tender was considerably more price competitive than that of SMS Bitumen.

The tenders were reviewed by HDS Australia to provide an independent review of the two different methodologies presented and against the specifications. HDS's review considers that P.D. Excavations provided a good methodology, are Department of Infrastructure and Transport qualified, provided referee's for similar work and provided full tender documentation. HDS also considered the sealing price in the tender supplied by P.D. Excavations of \$52.18 per m<sup>2</sup> as extremely high. This was subsequently negotiated down to \$15.88 per m<sup>2</sup>.

Based on the prices received 3.8 – 4 kilometres of shoulder works on Kulkami Road would expend the available budget allocation. It is also noted that the tender price of \$122,000 for Billiatt Road is over the allocation of \$80,000 budgeted for this road.

Whilst it is recommended that all four identified corners on Billiatt Road should be widened it is noted that the road audit undertaken by HDS on Billiatt and Kulkami Roads established that Kulkami Road has a higher priority than Billiatt Road given there are no sealed shoulders.

If Council proceeds with all of the identified works on Billiatt Road (\$122,000) this would reduce the allocation for Kulkami Road by \$42,000 and reduce the potential maximum length of Kulkami Road works to approximately 3.2 kilometres. This would ensure the works can be accommodated within the budget allocation of \$502,276.

#### **Alternate options**

Council could decide not to proceed with the works, however this is not recommended given that this project is reliant of substantial Commonwealth Government grant funding.

#### **Financial implications**

Council has allocated \$502,000 through the budget process. Works can be undertaken up to the allocated figure. There will be no additional financial implications unless Council decided to allocate more funding to the project. This would not be prudent.

#### **Work Health and Safety and Risk implications**

A general work, health and safety management system was included in the P.D. Excavations submission

Council could experience a challenge in attracting future Commonwealth Government grant funding if it is unable to deliver this grant funded project.

#### **Consultation**

The tender process was public.

**Email extract**

Email received from Daniel Ahrens received Tue 1/12/2020 9:34 AM

Hi Matthew,

Tender review summary as follows:

**SMS Bitumen**

- Insufficient tender documentation provided. This tender cannot be accepted. Further information is required including:
  - Methodology,
  - Tender schedules.

**P.D. Excavations**

- Good methodology,
- DIT qualified;
- Referees provided for similar work. I am waiting on return call from Port Pine for referee check;
- Full tender documentation provided;
- Schedule 12 Statement of Conformity is acceptable. The only concern I would have is no allowance for 300mm deep v-drain. However, this should not be a major concern based on existing road levels;
- Price for sealing (\$52/m2) is extremely high. Coorong Council recently had \$12 for similar shoulder sealing works. I suggest that Council request a revised price for sealing and/or remove from the scope of work and Council undertake sealing separately;
- Total price for Kulkami Road is approx. \$830k, which is higher than SMS. A significantly reduced sealing rate would result in a lower overall price than SMS.
- A reduced sealing rate should also significantly reduce the price of Billiat Road works.

**General**

- Check that contractors have allowed for RRPM's and guide posts in accordance with the General Notes on the drawings.

Please let me know how you go, and who you end up engaging. It's always valuable to keep up to date with construction methodologies and rates.

**Regards**

**Daniel Ahrens BE(Hons)(Civ&Env) MIEAust CPEng NER | Principal Engineer, Roads & Infrastructure**

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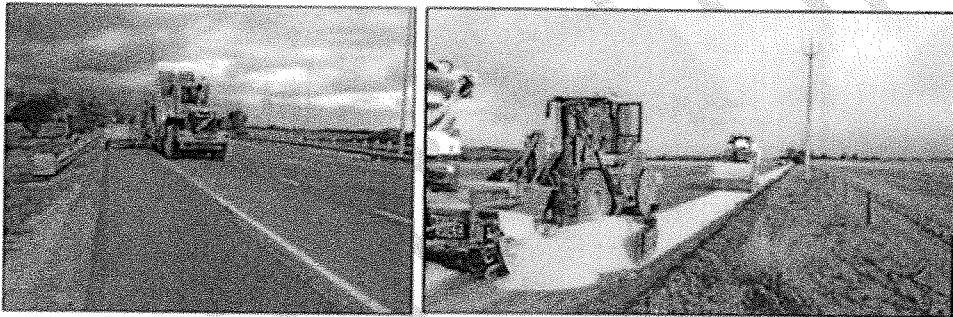
**Schedule 17 Value Added Services, Improvements and Innovations**

Provide details of any other benefits you can offer to improve the level of service or value of your Tender.

PDE proposes top-up and wet-mix method of shoulder reconstruction, as detailed below:

**Top-up existing shoulder**

- Prior to top-up, any existing non-weed vegetation on the shoulder will be stripped and broomed off to the side.
- Imported PM2/20 will be spread onto the shoulder using a shoulder paver. PDE's shoulder paver receives the rubble from the trucks in hopper and then dispels the material at a controlled pace, which is spread to the desired width, depth and grade with the side blade. This efficient method allows for high volume of materials to be placed per day and significantly reduces wastage and spillage onto the road.
- The topped-up shoulder will be wetted, compacted and sealed with a smooth drum roller to ensure trafficability, safety and to minimise dust prior to wet-mixing.
- A road broom will follow the shoulder paver to remove any loose material on the roadway.



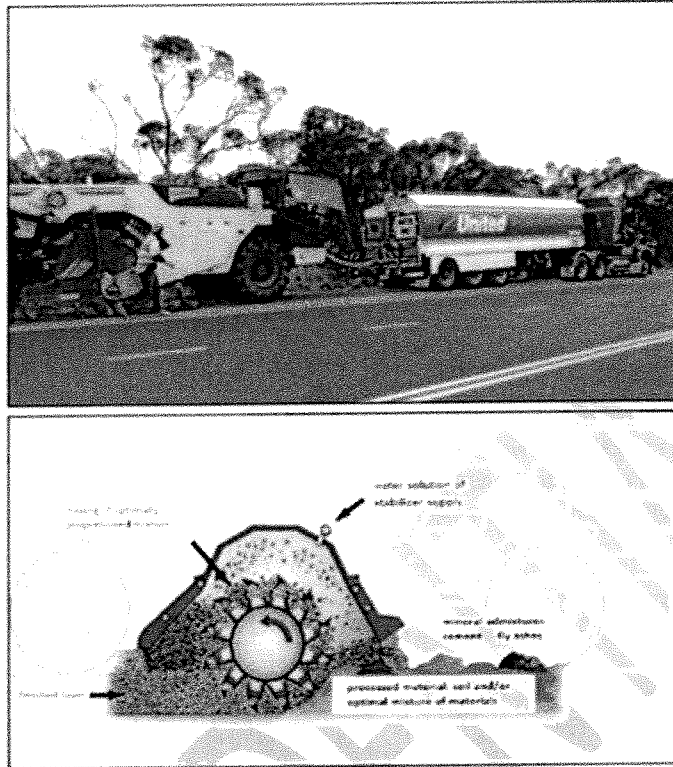
PDE topping up with shoulder paver

**Wet-mixing of shoulder material**

- A stabiliser will wet mix the shoulder material along the existing edge of seal to the depth required, with water carts transporting and feeding water to the stabiliser to achieve optimal moisture content.
- The stabiliser will mix the shoulder material to the depth required to achieve a homogenous and uniform layer.
- The shoulder will be compacted using a roller immediately after wet mixing. Compaction will be achieved using a smooth drum roller followed by a multi-wheel roller (the latter primarily for compaction along the joint).
- A road broom will follow the stabiliser to ensure no material is left on the roadway and to clearly identify the joint to assist rolling and compaction.
- Compaction testings will be undertaken to verify that the new shoulder has achieved the required specification requirements.

**Edge breaks & rollovers**

- PDE has allowed to cut into existing edge of seal by up to 100mm as specified to provide a clean finish for new spray seal to match into, and to remove any existing edge breaks & roll overs. This will be achieved during wet-mixing with the stabilizer.



**PDE wet-mixing with stabiliser and watercart**

**Compaction of the joint**

- During wet-mixing, material will be windrowed with the grader toward the road edge and left high along the joint.
- The purpose of this is to allow for settlement along the joint, eliminate ravelling of materials along the joint and to prove the joint. This ensures maximum compaction effort is achieved along the joint where future rutting is most likely to occur.
- During construction, trucks and water carts will be instructed to drive along the topped-up joint whenever possible to provide further compaction.
- Once the shoulder is final trimmed, the shoulder including the joint will be further compacted again.

**Trimming of shoulder**

- The compacted shoulder will then be final trimmed using a grader to match existing road levels and crossfalls. PDE's graders are equipped with an automatic slope control that will allow the operator to dial in the required grade.
- A multi wheel-roller will be used to finish the surface.
- The outside of shoulders will be graded to ensure stormwater run-off into side/cut-off drains.



PDE final trimming with grader

**PDE's Shoulder Paver - Features and Technical Advantages**

- Latest shoulder paver model in Australia.
- Receives, discharges and places pavement material in one single operation – greater control and efficiency with reduced spillage.
- Lighter and more compact than traditional set-up (loader with paver attachment), without compromising productivity.
- Improved auto-grade control for more accurate placement of materials and waste reduction.
- Safer transportation – can be folded to legal width (no oversize issues).
- Open cabin design providing better operator visibility than before.
- Ability to discharge both sides (left and right).



PDE's Shoulder Paver