



SHIRE OF ASHBURTON

SPECIAL MEETING OF COUNCIL

MINUTES

**Council Chambers, Community Recreation
Centre, Tom Price**

21 March 2013

SHIRE OF ASHBURTON
SPECIAL COUNCIL MEETING

Dear Councillor

Notice is hereby given that a Special Meeting of the Council of the Shire of Ashburton will be held on 21 March 2013 at Council Chambers, Community Recreation Centre, Tom Price commencing at 10:00 am.

The business to be transacted is shown in the Agenda.

Frank Ludovico
A/CHIEF EXECUTIVE OFFICER

DISCLAIMER

The recommendations contained in the Agenda are subject to confirmation by Council. The Shire of Ashburton warns that anyone who has any application lodged with Council must obtain and should only rely on written confirmation of the outcomes of the application following the Council meeting, and any conditions attaching to the decision made by the Council in respect of the application. No responsibility whatsoever is implied or accepted by the Shire of Ashburton for any act, omission or statement or intimation occurring during a Council meeting.

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1. DECLARATION OF OPENING

Commissioner Yuryevich declared the meeting open at 10.00 am.

2. ANNOUNCEMENT OF VISITORS

Commissioner Yuryevich welcomed Cr Lisa Shields to the public gallery.

3. ATTENDANCE

3.1 PRESENT

Conference Room, City of Kalgoorlie Boulder 577 Hannan Street, Kalgoorlie

Mr R Yuryevich Commissioner

Council Chambers, Recreation Centre, Central Road, Tom Price

Mr F Ludovico A/Chief Executive Officer
Ms F Keneally Executive Manager, Operations
Ms J Smith Executive Officer CEO

Onslow Multi-Purpose Centre, Cnr of McGrath & Hooley Avenue, Onslow

Ms D Wilkes Executive Manager, Community Development
Mr Ean McDowell Construction Manager, Onslow Aerodrome
Redevelopment

3.2 APOLOGIES

Ms A O'Halloran Executive Manager, Strategic & Economic
Development
Mrs L Hannagan A/Executive Manager, Corporate Services
Mr K Pearson A/Executive Manager, Technical Services

3.3 APPROVED LEAVE OF ABSENCE

There were no approved leave of absences.

4. ANNOUNCEMENTS BY THE PRESIDING PERSON WITHOUT DISCUSSION

There were no announcements made by the Presiding Person without discussion.

5. DECLARATION BY MEMBERS

That Commissioner Yuryevich has given due consideration to all matters contained in the Agenda presently before the meeting.

5.1 DECLARATION OF INTEREST

Councillors to Note

A member who has a Financial Interest in any matter to be discussed at a Council or Committee Meeting, that will be attended by the member, must disclose the nature of the interest:

(a) In a written notice given to the Chief Executive Officer before the Meeting

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or;

- (b) At the Meeting, immediately before the matter is discussed.

A member, who makes a disclosure in respect to an interest, must not:

- (c) Preside at the part of the Meeting, relating to the matter or;
- (d) Participate in, or be present during any discussion or decision-making procedure relative to the matter, unless to the extent that the disclosing member is allowed to do so under Section 5.68 or Section 5.69 of the Local Government Act 1995.

NOTES ON FINANCIAL INTEREST (FOR YOUR GUIDANCE)

The following notes are a basic guide for Councillors when they are considering whether they have a Financial Interest in a matter.

I intend to include these notes in each agenda for the time being so that Councillors may refresh their memory.

1. A Financial Interest requiring disclosure occurs when a Council decision might advantageously or detrimentally affect the Councillor or a person closely associated with the Councillor and is capable of being measure in money terms. There are exceptions in the Local Government Act 1995 but they should not be relied on without advice, unless the situation is very clear.
2. If a Councillor is a member of an Association (which is a Body Corporate) with not less than 10 members i.e. sporting, social, religious etc), and the Councillor is not a holder of office of profit or a guarantor, and has not leased land to or from the club, i.e., if the Councillor is an ordinary member of the Association, the Councillor has a common and not a financial interest in any matter to that Association.
3. If an interest is shared in common with a significant number of electors or ratepayers, then the obligation to disclose that interest does not arise. Each case needs to be considered.
4. If in doubt declare.
5. As stated in (b) above, if written notice disclosing the interest has not been given to the Chief Executive Officer before the meeting, then it **MUST** be given when the matter arises in the Agenda, and immediately before the matter is discussed.
6. Ordinarily the disclosing Councillor must leave the meeting room before discussion commences. The **only** exceptions are:
 - 6.1 Where the Councillor discloses the **extent** of the interest, and Council carries a motion under s.5.68(1)(b)(ii) or the Local Government Act; or
 - 6.2 Where the Minister allows the Councillor to participate under s.5.69(3) of the Local Government Act, with or without conditions.

6. BUSINESS

6.1 ONSLOW AERODROME RUNWAY CONSTRUCTION - DESIGN AND METHODOLOGY FOR PAVEMENT AND BITUMINOUS WORKS

MINUTE: 7

FILE REFERENCE: OR.CM.10.19

AUTHOR'S NAME AND POSITION: Fiona Keneally
Executive Manager, Operations

NAME OF APPLICANT/
RESPONDENT: Not Applicable

DATE REPORT WRITTEN: 19 March 2013

DISCLOSURE OF FINANCIAL INTEREST: The author has no financial interest in the proposal.

PREVIOUS MEETING REFERENCE: Agenda Item 17.4, Ordinary Meeting of Council 15 February 2012 (Minute No: 11136)
Agenda Item 14.1, Ordinary Meeting of Council 13 March 2013 (Minute No: 11466)

Summary

The Shire is currently undertaking the Onslow Aerodrome Redevelopment including the construction of a new 1900m airstrip to CASA Code 3C requirements.

The construction of the runway and associated access roads and carparks require extensive pavement, bituminous and asphalt works to complete the project.

Provision of the required quantities of construction water has been problematic since the commencement of the project given the shortage in available freshwater in the vicinity of Onslow. The construction of the runway embankment has been undertaken with the use of salt water and is nearing completion within the specified area of the runway pavement.

ARRB Group Ltd has been engaged to assist Council to seek possible salt mitigation measures and to gain a full understanding of the long term effects that the use of salt water, local climate and surrounding environment may have on the aerodrome construction site and whether the use of salt water as construction water is a suitable pavement construction alternative.

Prior to progressing further construction works, Council endorsement is required on the following:

1. Acceptance of ARRB Report and ARRB Design and Risk Mitigation Measures
2. Proposed pavement construction methodology
3. Modified Tender Evaluation Criteria for proposed Request for Tender Provision of Bituminous and Asphalt Supply and Services for Onslow Aerodrome and Associated Works.

Background

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The Onslow aerodrome, located on Shire land at 16 Onslow Road, is a fit for purpose CASA certified facility that has more than adequately met the existing needs of the community to date.

With the formalisation of the Ashburton North Strategic Industrial Area (ANSIA), and the commencement of both the Macedon and Wheatstone projects, air transport will increase significantly. To serve the projected needs of industry, significant upgrades to all airport facilities are required.

The Onslow Aerodrome Redevelopment includes construction of a new runway, taxiway and apron, a terminal building, new access road and parking facilities. Chevron has agreed to contribute \$30 million to the redevelopment project which is to be delivered over a twelve month period.

The provision of construction water has been an on-going concern since the commencement of the project given the shortage in available freshwater in the vicinity of Onslow. To ensure progress to meet required timelines, the construction of the runway embankment has been undertaken with the use of salt-water (in general sea water).

To best understand the effects of the use of salt water on the runway construction, ARRB Group Ltd (formerly the Australian Road Research Board) has been engaged to assist Council to gain a full understanding of the long term effects that the salt water, local climate and surrounding environment may have on the aerodrome construction site and whether the use of salt water as construction water is a suitable alternative.

ARRB Group was formed in 1960 and incorporated in 1965. ARRB Group is owned collectively by Australia's state, federal and local government road authorities. These agencies recognised the benefit of sharing a national strategic research program (NSRP), to provide not only short-term access to improved technical outcomes and efficiencies, but also as a basis for developing and sustaining long-term expertise in the maintenance, operation and development of the public asset and the services it provides.

ARRB Group has a national and international reputation for excellence in transport and infrastructure solutions through research, technical services, leading-edge products and technology transfer.

Approximately one million litres of water will be required per day for use in pavement material pre conditioning, pavement construction and compaction. No potable water is available in the Onslow Township, and the ongoing reliability of bores within 60km of site (along the Onslow Mount Stuart Road) is unknown. Installation of potential bore infrastructure on a pastoral property within 40km of site is awaiting approvals and the anticipated earliest availability of supply is 20th April 2013.

The runway pavement design consists of a 200mm depth subbase layer (consisting of a minus 75mm natural gravel) and a 200mm basecourse layer (consisting of a 20mm crushed rock ,generally to MRWA specifications).

As part of their brief, ARRB Group was requested to

- investigate the use of salt water (sea water) as an alternative solution
- consider and provide risk mitigation measures given the climate and surrounding environment to prevent ongoing asset management impacts

ARRB Group Risk Mitigation Measures are included in “Contract Report – the use of sea water in Onslow aerodrome pavement construction”.

ATTACHMENT 6.1

Comment

Analysis and Clarification of Costs

Water cost for pavement construction

Project Budgeted water costs (Ex GST)	\$430,000
Estimated costs utilising sea water (Ex GST)	\$430,000
Estimated costs utilising bores (Ex GST)	\$950,000

There is a negligible difference in estimated water supply costs between utilising the Onslow – Mount Stuart (Main Roads Western Australia) and Minderoo Pastoral Company bores. However there are scheduling implications which will indirectly impact costs as follows :

- Onslow – Mount Stuart Road bores
 - Water pumping and delivery infrastructure - procurement, delivery, installation and commissioning – 2 weeks – Estimated pavement construction start date 5th April 2013.
- Minderoo Pastoral Company
 - Approvals pending (earliest approval date 12th April 2013)
 - Installation and commissioning of bore infrastructure (estimated earliest completion date 16th April 2013.
 - Water pumping and delivery infrastructure - installation and commissioning – 4 days weeks. Procurement and delivery to occur prior to 12th April 2013. Earliest pavement construction start date 20th April 2013. The cost of the delay to the project will need be calculated.
 - Potential unsealed road cost depended on location of stand pipe

There are also risks with utilising bores associated with the ongoing reliance of supply and quality through the duration of the works. Given historical information, it is unlikely that MRWA bores will yield the required daily quantities, and prior pumping and storage could raise the salinity of the water.

Quality of water from the Minderoo Pastoral Company bore is unknown and further resources may be required for maintenance of the unsealed road whilst water is being carted.

The use of sea water would provide for an immediate pavement construction start which will remain scheduled for the 22nd March 2013.

Primary Risk Mitigation – construction with sea water

The bituminous and asphalt component of the approved budget estimate was based on the initial specification supplied to the Shire by Chevron and their design consultant AMS.

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Estimated costs, and current approved budget (inclusive of mobilisation and demobilisation), are based on 2011 contract rates and are as follows –

Primerseal C170 / 10mm Aggregate	\$ 471,243
Wearing Course @ minimum depth 56mm AC14DG	<u>\$4,571,806</u>
Total (Ex GST)	\$5,043,049

A revised design was received following commencement of earthworks, however changes to the bituminous specification have only recently become evident to all parties. Design and indicative costs are –

Prime 50/50 Bitumen / medium curing cutter	\$ 190,000
2 Coat Seal C320 10/5mm	\$1,150,000
Asphalt C320 @ 60mm depth	\$4,420,000
Mobilisation / Demobilisation	<u>\$ 150,000</u>
Total (Ex GST)	\$5,910,000

This matter has been brought to the attention of the Onslow Social Infrastructure Working Group and we have been awaiting the ARRB report before progressing the above issue to negotiate all construction variation.

ARRB Group recommendation for risk mitigation measures for the use of sea water throughout pavement construction, and for mitigating secondary environmental risk, includes the following bituminous and asphalt design (indicative costs are shown) –

Emulsion Prime	\$ 310,000
Waterproofing polymer modified binder 14mm S10E	\$ 880,000
Asphalt 56mm AAA MT 001 (Airport Mix)	\$4,220,000
Mobilisation / Demobilisation	\$ 150,000
<u>Stand By Costs contingency¹</u>	<u>\$ 50,000</u>
Total (Ex GST)	\$5,610,000

¹The ARRB option may incur standby costs (due to the recommended methodology) if dry back periods vary with weather conditions. A provisional amount of \$50,000 should be considered additional to the total.

Secondary risk – sea water inundation

An option to mitigate additional capillary rise is the application of a thick geotextile fabric (PF2 or equivalent) prior to the placing of pavement material. Enquiries regarding the availability of PF2 indicate that it would not be available for 4-6 weeks and the application to PF1 with a polymer modified emulsion is not considered financially viable. Further discussion with ARRB has resulted in the recommendation of Bidim A34 (or equivalent) which is more readily available throughout the industry. Indicative costs to undertake this option are as follows –

Supply geotextile fabric (allow for overlap)	\$170,000
Freight	\$ 20,000
Installation	\$ 40,000
Cost implication to placing subbase (up to 20%)	<u>\$105,000</u>
Total (Ex GST)	\$335,000

The process of spreading subbase material is less efficient than that of normal construction to avoid damage to the geotextile fabric.

Conclusion

Water for pavement construction

The decision to progress pavement construction with sea water does contain some risks, however ARRB Group conclude that these risks can be “contained to an acceptable level” if primary risk mitigation methodologies are applied during the construction process.

Disadvantages to the project in progressing with bore water supply include -

- Delays of 2 – 4 weeks (or more) in commencing pavement construction associated with the procurement, delivery and installation of bore infrastructure and potentially associated approvals.
- Estimated costs to proceed with bore water exceed the approved budget by approximately \$520,000 (\$950,000 less \$430,000).

Risks associated with water supply from bores include the reliability of ongoing yields and water salinity levels.

Advantages in progressing with sea water are that the project can progress on its current schedule at no additional construction cost.

In considering the water supply options, it is important to be aware that the subbase material proposed for construction is from the same source as the select fill on the earthworks formation. Salt water has been used to precondition this material prior to ripping and crushing, and stockpiles watered as a dust control measure for the construction site and the operations of the existing runway.

Refer ARRB Contract Report – The use of sea water in Onslow aerodrome pavement construction, “Section 5.3 – *Having already compacted the select fill with sea water, the literature suggests that even if potable water was used for the subbase and basecourse, mitigation measures would still be required. This means that the use of saline bore water for remaining basecourse compaction would have no real advantage over continuing with sea water.*”

ARRB have also advised via email “*any delays to the project are probably the highest risk of all – giving potential for salt to rise to the surface caused by the surface drying out (leaving the salt behind to crystallise) to be replaced by salt water arriving by capillary action.*”

It is therefore considered that the additional expense and the associated delays of sourcing water from bores is not required, providing that the primary risk mitigation design below is adopted and careful attention is given to risk mitigation measures in recommended chronological order.

Primary Risk Mitigation

It seems apparent that the original bituminous design is inadequate for the application to the aerodrome runway, given the runway location and the earthworks construction process. It is assumed that the revised project design resulted from later geotechnical investigations into the proposed runway alignment, however was never highlighted as a change in scope after the Aerodrome Project budget was established and agreed with stakeholders.

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Regardless of whether pavement construction progresses with sea water or bore water, the ARRB Group Ltd bituminous seal and asphalt design would seem the most appropriate and cost effective, as it also addresses further risks associated with future capillary rise resulting from sea water inundation (tidal and storm surge).

The adjacent existing runway was constructed in 2006 using freshwater in both the rework of the existing basecourse and the addition of a 200mm pavement layer utilising imported natural gravel and treated with a stabilising product (Kalfoss). There have been ongoing maintenance issues with the sealed surface since construction, which have been mitigated with regular pneumatic rolling and resealing. These seal issues have been consistent with effects of salt damage.

The estimated costs to proceed with the ARRB Group design exceed the approved budget by approximately \$520,000 (Ex GST) and would also require a provisional sum of up to \$50,000 to allow for any material dry back delays that could result from weather conditions.

If the ARRB Group design is adopted, then given the careful methodology required and focus on particular materials for a purpose design it is seen as necessary to apply modified weightings to standard qualitative selection criteria for the provision of services and materials, to meet a purpose design specification and required construction methodology and timelines.

The tender will require submission of schedule of rates for the provision of bituminous and asphalt supply and services. It will also require the submission of a proposed asphalt design mix that complies with the specification. The General Conditions of Contract shall be AS2124 - 1992. A best value for money approach shall be applied to the tender. This means that although price is considered, the tender containing the lowest price will not necessarily be accepted, nor will the tender ranked highest on qualitative criteria. The following criteria and weighting is proposed for application to the tender:

<p>a) Relevant Experience</p> <p>Demonstration of experience in completing / supplying similar requirements, particularly in relation to experience with supplying to State and/or Local Government</p>	10%
<p>b) Demonstration of ability to meet required timeframes</p> <p>Indication of how timeframes will be met. Outline of availability of plant and personnel and future known commitments</p>	20%
<p>c) Demonstration of ability to meet required specification</p> <p>Provision of compliant asphalt design mix; provisions of NATA Testing Certificates demonstrating compliance with specification from proposed mix sources</p>	30%
<p>d) Occupational Health Safety Management</p> <p>Provision of an overview of the status of Respondent's safety management system</p>	10%
<p>e) Tendered Price</p>	30%

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Shire of Ashburton FIN04 – Buy Local – Regional Price Preference Policy (Management Policy) shall also apply to the Tender evaluation.

Public invitation will need to occur as soon as practicable following receipt of Council's endorsement and approval of recommended specification in order that it may be awarded in a timely manner to ensure that works on the Aerodrome construction critical path continue.

Secondary risk – sea water inundation

The estimated cost to undertake the secondary risk mitigation of covering the earthworks formation with geotextile fabric exceeds the approved budget by approximately \$335,000 (Ex GST).

Indicative prices and availability of appropriate geotextile fabric have been sought for the purposes of this report. Extensive on-line research has been conducted comparing technical data from suppliers and formal requests for these companies to supply equivalent product data sheets have been submitted. We are aware a WALGA Preferred Supplier (this reduces the tender timeframes) can provide an equivalent product but quantities and delivery times are not confirmed.

It has previously been mentioned that salt water has already been utilised for moisture conditioning subbase material as the subbase material has been selected through the process of winning select fill for the earthworks embankment. The stockpiled material has also been watered with sea water for dust suppression to ensure the continued operation of the existing aerodrome service whilst undertaking the improvement project. This has minimised the impact on flight service for the Wheatstone Project.

If it is a practical mitigation proposal to cover the subbase with geofabric, and still achieve the desired mitigation outcome, then potential construction delays due to availability of the product would be minimised.

Consultation

Kym Neaylon - National Technical Leader – Surfacing (Pavements and Surfacing) ARRB Group Ltd

Riaan Burger - Principal Engineer, Sustainable Infrastructure Management, ARRB Group Ltd

Darren Lunburg - Project Team Leader - Community and Essential Infrastructure (Wheatstone)

Frank Ludovico - A/Chief Executive Officer

Amanda O'Halloran - Executive Manager Strategic and Economic Development

Ean McDowell - Construction Manager Onslow Aerodrome Redevelopment

Allan Monson - Capital Works Manager

Statutory Environment

Local Government Act 1995, S3.57 Tenders for providing goods or services

Local Government (Functions and General) Regulations 1996 – Part 4; Division 2; r. 14 (2a)

Financial Implications

Implementation of the design recommendations will exceed the Council approved budget, however adoption of the design is intended to improve the life cycle costs of the aerodrome runway asset.

The original the bituminous and asphalt component of the approved budget (in 2011 dollars) was \$5,043,049 and if Council agrees with the recommendations the anticipated cost for these works are \$5,610,000 a difference of \$566,951.

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Including the secondary risk mitigation measures of \$335,000, this will bring to the total additional cost to \$901,951.

This amount provides for the construction of pavement with sea water. If other options are used then the estimated additional cost will be a minimum of \$520,000.

The Administration believes this should be funded from the Wheatstone Community Development Fund as it is the major legacy project for Onslow.

Strategic Implications

Shire of Ashburton 10 Year Community Strategic Plan 2012-2022

Goal 04 – ‘Distinctive and Well Serviced Places’

Objective 01 – Quality Public Infrastructure

Objective 02 – Accessible and Safe Towns

Objective 03 – Well Planned Towns

Policy Implications

FIN04 – Buy Local – Regional Price Preference Policy and

FIN12 – Purchasing & Tender Policy

FIN14 – Shire of Ashburton Tender Assessment Criteria Policy

Voting Requirement

Absolute Majority Required

Janyce Smith left the meeting at 10.06 am.

Janyce Smith entered the meeting at 10.08 am.

Kym Neaylon - National Technical Leader – Surfacing (Pavements and Surfacing) ARRB Group Ltd entered the meeting via telephone at 10.08 am.

Council Decision

MOVED: Commissioner Yuryevich

That Council suspend standing orders at 10:10 am in order for the Commissioner to invite Kym Neaylon from ARRB Group Ltd to provide further information to the Council.

CARRIED 1/0

Points emerging from the discussion were:

- the existing runway was constructed with freshwater and problems have occurred with the seal.
- the Onslow Infrastructure Working Group allowed for the use of salt water in the material up to 1 meter below the runway surface.
- because salt water has been used already mitigation techniques are required.
- a guarantee can't be provided however the suggested mitigation measures will reduce the risk of issues occurring into the future.
- The expect design life of a pavement is approximately 30 years and ARRB believe if the mitigation measures, as recommended, are implemented then they are 90% confident that we would achieved the expected design life.

Council Decision

MOVED: Commissioner Yuryevich

That Council reinstate standing orders at 10.30 am.

CARRIED 1/0

Kym Neaylon - National Technical Leader – Surfacing (Pavements and Surfacing) ARRB Group Ltd left the meeting via telephone at 10.31 am.

Council Decision

MOVED: Commissioner Yuryevich

That Council:

1. **Receive ARRB Group Ltd Contract Report – The use of sea water in Onslow aerodrome pavement construction.**
2. **Endorse ARRB Group Ltd Contract Report – Section 6.1.1 – Risk mitigation measures 5, 6, 7, 8, and 9 with attributed costs of \$520,000 plus provisional sum of \$50,000 (Ex GST).**
3. **Endorse the construction of the aerodrome runway pavement using sea water, providing all primary risk mitigation measures as recommended in ARRB Group Ltd Contract Report Section 6.1.1 are adopted throughout construction.**
4. **Endorse ARRB Group Ltd Contract Report – Section 6.2 – Risk mitigation SLORC is none other than are machine measures 1,2 and 4, providing ARRB Group Ltd confirm that, in the event of supply delays, it remains a practical mitigation measure to cover the subbase with geotextile fabric and achieve the desired mitigation outcome with attributed costs of \$335,000 (Ex GST).**
5. **Negotiate with the Onslow Social Infrastructure Working Group to obtain the additional funds of to undertake the revised runway works.**
6. **Invite public tenders for the Provision of Bituminous and Asphalt Supply and Services for Onslow Aerodrome and Associated Works, to be issued in accordance with the following evaluation criteria:**
 - a) **Relevant Experience** 10%
 - b) **Demonstration of ability to meet required timeframes** 20%
 - c) **Demonstration of ability to meet required specifications** 30%
 - d) **Occupational Health Safety Management** 10%
 - e) **Tendered Price** 30%

CARRIED BY ABSOLUTE MAJORITY 1/0

7. NEXT MEETING

The next Ordinary Meeting of Council will be held on 10 April 2013, at the Council Chambers, Central Road, Tom Price, commencing at 1.00 pm.

8. CLOSURE OF MEETING

The Commissioner closed the meeting at 10.34 am.