



Appendices

Ordinary Council Meeting

Thursday 27 August 2020



Shire of Murray

Minutes

Local Emergency Management Committee

First Quarter
Wednesday 5 August 2020

Local Emergency Management Committee – 5 August 2020

Table of Contents

1.	ATTENDANCES	1
2.	ABSENT	1
3.	CONFIRMATION OF MINUTES OF MEETING	2
3.1	Confirmation of Minutes of Local Emergency Management Committee Meeting – 5 February 2020, 18 March 2020 and 6 May 2020.....	2
3.2	Review of Meeting Action Register – refer to Appendix 1 – R Porter.....	2
4.	BUSINESS ARISING	3
4.1	Beach Emergency Number (BEN) Signs – R Porter	3
4.2	Amalgamation of Shire of Murray and Shire of Waroona Local Emergency Management Committees - R Porter	7
5.	STATE EM PREPAREDNESS PROCEDURE 7 – LEMC REQUIREMENTS	12
5.1	EVERY MEETING	12
5.1.1	Confirmation of LEMA Contact Details – refer to Appendix 2 - R Porter.....	12
5.1.2	Review any Post-Incident Reports and/or Post-Exercise Reports – R Porter.....	12
5.1.3	Funding Nominations and Applications Progress – R Porter	12
5.1.4	Emergency Risk Management (ERM) / Treatment Strategies Progress – R Porter ..	12
5.1.5	Review of Local Emergency Management Arrangements – R Porter.....	12
5.1.6	Review Business Plan Strategies and Record Key Achievements – R Porter.....	12
6.	GENERAL BUSINESS	12
6.1	SoM - CBFCO - R Wilson.....	12
6.2	St John Ambulance – Station Manager – C Hunter.....	12
6.3	WAPOL Pinjarra – Acting OIC – N Palmer	12
6.4	WAPOL Dwellingup – Acting OIC – S Vieceli	13
6.5	DFES – Acting DO Emergency Management – D Rowland	13
6.6	SoM – CESC – G Stevens	13
6.7	DFES - DEMA - M Cross.....	13
6.8	DFES - DEMA - M Cross.....	13
6.9	SoM – MRES – R Porter	13
6.10	DoH – Manager EPDR – S Beaton	13
7.	NEXT MEETING	13
8.	CLOSE	13



Notice of Meeting

Minutes of the Local Emergency Management Committee meeting held at the Shire of Murray Civic Centre Lesser Hall at 1915 Pinjarra Road, Pinjarra on Wednesday 5 August 2020. The Chairperson Mr. I Francis declared the meeting open the time being 12:46pm.

1. ATTENDANCES

Members

G Stevens	CEC, Shire of Murray
R Porter (Proxy)	LEMC Executive Officer | MRES, Shire of Murray
R Wilson	CBFCO, Shire of Murray
I Francis	LEMC Deputy Chairperson/OIC, WAPOL Pinjarra
S Vieceli (Proxy)	Acting OIC, WAPOL Dwellingup
C Hunter	Station Manager, St John Ambulance
C Thompson	Community Representative, Shire of Murray
C Louis	Principal, Pinjarra Primary School
S Gunn (Proxy)	Fire Operations Officer – Perth Hills District, DBCA

Ex-Officio

C Goff	RESSO, Shire of Murray
D Rowland (Proxy)	Acting District Officer – Emergency Management, DFES
J Carter (Proxy)	Acting District Officer – Wellington, DFES
M Cross	DEMA, DFES

Guests

N Palmer	Acting OIC, WAPOL Pinjarra
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2. ABSENT

Members

S Kirkham (Apology)	LEMC Chairperson Councillor, Shire of Murray
D Harnett (Apology)	OIC, WAPOL Dwellingup
L McGuirk (Apology)	LRC | Director Place and Community, Shire of Murray
P Steven (Apology)	Manager Environmental Health, Shire of Murray
K Jones (Apology)	Brigade Captain, Pinjarra VFRS
K Laurendi (Apology)	Senior Ranger Lane Poole Reserve, DBCA
G Cresswell	Emergency Services Superintendent, Alcoa
T Sillitto	Senior District Emergency Services Officer, DoC
P Dwyer	Unit Manager, Murray SES
D McLeod	OS&H Rep, Bedingfeld Park Inc Aged Care Facility
M Sutherland	Operations Manager, Water Corporation

Ex-Officio

D Walker (Apology)	BRPC, Shire of Murray
B Finlay (Apology)	District Officer – Fire Services, DFES
P Stewart (Apology)	District Officer – Emergency Management, DFES
S Beaton (Apology)	Manager EPDR, Department of Health
N Elrick	District Officer – Natural Hazards, DFES
T Simpson	Local Welfare Coordinator, DoC
D Cormack	Network Inspector, Main Roads WA
J Allcock	Emergency Response Coordinator, Alcoa
J Rawlins	Field Operations Team Leader, Western Power

3. CONFIRMATION OF MINUTES OF MEETING

- 3.1 Confirmation of Minutes of Local Emergency Management Committee Meeting – 5 February 2020, 18 March 2020 and 6 May 2020

Recommendation/Committee Decision

LEMC20/003

Moved: C Thompson

That the minutes of the Local Emergency Management Committee meeting held on Wednesday 5 February 2020 be confirmed as a true and correct record.

CARRIED UNANIMOUSLY 9:0

Please Note: Committee Recommendation LEMC20/003 is only a recommendation to, and not a decision of Council. The Council will consider this recommendation at the 27 August 2020 Ordinary Council Meeting.

Recommendation/Committee Decision

LEMC20/004

Moved: I Francis

That the minutes of the Special Local Emergency Management Committee meeting held on Wednesday 18 March 2020 be confirmed as a true and correct record.

CARRIED UNANIMOUSLY 9:0

Please Note: Committee Recommendation LEMC20/004 is only a recommendation to, and not a decision of Council. The Council will consider this recommendation at the 27 August 2020 Ordinary Council Meeting.

Recommendation/Committee Decision

LEMC20/005

Moved: I Francis

That the minutes of the Local Emergency Management Committee meeting held on Wednesday 6 May 2020 be noted.

CARRIED UNANIMOUSLY 9:0

Please Note: Committee Recommendation LEMC20/005 is only a recommendation to, and not a decision of Council. The Council will consider this recommendation at the 27 August 2020 Ordinary Council Meeting.

- 3.2 Review of Meeting Action Register – **refer to Appendix 1** – R Porter

The current Meeting Action Register was reviewed and all outstanding items were discussed. Refer to **Appendix 1**.

4. BUSINESS ARISING

4.1 Beach Emergency Number (BEN) Signs – R Porter

File Ref: 7206
Previous Items: Nil
Applicant: Nil
Author and Title: Ron Porter, Manager Ranger and Emergency Services
Declaration of Interest: Nil
Voting Requirements: Simple Majority

Recommendation/Committee Decision

LEMC20/006

Moved: C Hunter

That Council supports:

1. suitable locations being identified adjacent to the Peel Inlet and along the Murray and Serpentine Rivers, in consultation with stakeholders, for the potential installation of Beach Emergency Number (BEN) signs, and;
2. investigations be made into additional Beach Emergency Number (BEN) sign locations at approved and dedicated mountain bike and 4WD trail heads in the Dwellingup region, and;
3. correspondence be sent to the Director General of the Department of Biodiversity Conservation and Attractions seeking support for the installation of Beach Emergency Number (BEN) signs at suitable locations within the Lane Poole Reserve, Dwellingup, and;
4. grant funding options be investigated to offset the costs associated with the installation of Beach Emergency Number (BEN) signs within the district, and;
5. a further report to be presented to Council to consider costs should grant funding not be secured.

CARRIED UNANIMOUSLY 9:0

Please Note: Committee Recommendation LEMC20/006 is only a recommendation to, and not a decision of Council. The Council will consider this recommendation at the 27 August 2020 Ordinary Council Meeting.

In Brief

- Council is requested to support the investigation of suitable locations for the potential installation of Beach Emergency Number ('BEN') signs within the district.
- Correspondence be sent to the Department of Biodiversity Conservation and Attractions seeking their support in installing BEN signs at suitable locations within the Lane Poole Reserve, Dwellingup.
- Exploration of possible grant funding opportunities to offset the costs associated with the installation of BEN signs.

Background

BEN signs were initially implemented by the City of Mandurah in honour of Ben Gerring. Ben died in June 2016 after a shark bite at Geary's surf break, Falcon, and there were concerns about possible delays in emergency services being able to locate the closest beach access point to help him.

In December 2017, the State Government launched the grants program as part of its shark mitigation strategy to provide funding for the installation of BEN signs from Geraldton to the South Australian border. Up to \$25,000 was available for metropolitan local governments and up to \$50,000 for country local governments.

The Department of Primary Industries and Regional Development ('**DPIRD**') led the development of the BEN sign program, working with local governments and other stakeholders.

The system aimed to improve emergency response times by installing signs with unique codes primarily at beach access points. It also included other coastal areas like harbours, estuaries, boat ramps, fishing platforms, jetties.

Suitable sign locations are determined by the local government, Department of Biodiversity Conservation and Attractions ('**DBCA**') or other land managers in consultation with DPIRD.

The BEN code prefixes are based upon the location and are consistent with the Department of Transport's system for vehicle number plates, followed by a one to four digit number.

The numbers are based on the distance between the sign location and the local governments northern or western boundary. e.g. WR101 means the Shire of Waroona, approximately 10.1 km from its northern boundary. Because the numbers increase going south or east but are not sequential, the system allows for infill of extra signs later without upsetting the number order.

The signs provide specific location information to emergency services and other responders just by referencing the BEN numbers. The unique codes and linked underlying location coordinates are integrated into computer aided dispatch ('**CAD**') systems used by emergency services.

Since May 2018 WA Police has logged 326 requests for assistance thru 000 where BEN signs provided location information. The figure for St John Ambulance is 174, (very few emergencies have been shark-related).

All BEN signs installed under the program are reversible a uniform red and green sign on the front and a beach closure sign on the back. (Location data is present on both. This consistent approach to signage helps ensure familiarity, improving sign awareness in the event of an emergency.

So far over 900 BEN signs have been installed from Irwin around to Esperance, well over 1200 signs are anticipated to be installed by the summer of 2020/21.

In a local context, on the 24 January 2018, 22-year-old Kim Johnston was swimming with her 17-year-old brother Aaron at the Dwaarlindjinaap swimming hole in Lane Poole Reserve, Dwellingup. The current pulled Ms Johnston underwater and she became wedged under a rock.

The isolation of Lane Poole Reserve meant paramedics were hindered in their attempts to get to Ms Johnston, and the issue was compounded when there was a miscommunication about the location of the incident.

Ms Johnston's family called on DBCA and the Shire to consider the installation of locator signs similar to BEN signs within national parks. The proposal also had backing from St John Ambulance.

There was limited support from the land manager, being DBCA, at the time and the proposal was never progressed.

In early June 2020, Ms Marion Massam, the BEN Sign Coordinator from DPIRD contacted the Shire seeking to gauge interest on BEN signage being installed on the eastern side of the Peel Inlet.

Ms Massam indicated that the City of Mandurah had already installed a number of signs on the western side of the inlet and there has been project creep and a number of shires have now installed signs in non-coastal locations such as inland rivers & lakes.

The WA government paid for the production of Mandurah's signs because they were eligible as a coastal local government, unfortunately the Shire would have to self-fund our signs – each estimated at about \$300 however DPIRD would provide in-kind support in data management, production and communications support.

It was raised with Ms Massam that more than 220,000 visitors attend Lane Poole Reserve, Dwellingup annually. The 2018 incident was also raised as rationale for having BEN signs at popular destinations within the reserve.

Subsequent discussions between DPIRD and DBCA indicate that there is a reluctance on behalf of DBCA to install BEN signs within Lane Poole Reserve.

Report Detail

Should the recommendation be supported by Council then Officers from the Shire, in consultation with relevant stakeholders, will identify and examine suitable locations for the potential installation of BEN signs.

Furthermore, the change in project scope provides an ideal opportunity for the Shire to lobby and seek cooperation from the Department of Biodiversity Conservation and Attractions in installing BEN signs at suitable locations within the Lane Poole Reserve, Dwellingup.

Officers will also investigate possible grant funding opportunities to offset the costs associated with the installation of BEN signs, once the costs are better known. If grant funding cannot be secured then a further report will be presented to Council to consider costs before proceeding with any installation works.

Murray 2030 Strategic Community Plan

Focus Area	Places for People
Aspiration	To create great places for the people through strong partnerships with the community; innovative urban design; and improve the well-being and quality of life for residents.
Strategy	Ensure the safety.

Murray 2019- 2023 Corporate Business Plan

Focus Area	Places for People
Objective	1.1 Socially connected, safe and cohesive community
Strategy	1.1.6 Ensure the safety of our community
Project and Actions	

Other Strategic Links

Nil

Statutory Environment

Nil

Sustainability & Risk Considerations

Economic - (Impact on the Economy of the Shire and Region)

There are no economic impacts on the community.

Social - (Quality of life to community and/or affected landowners)

The installation of BEN signs at well frequented public locations provides confidence to residents and visitors that there will be a suitable response in emergency situations.

Environment – (Impact on environment’s sustainability)

Nil

Policy Implications

Nil

Risk Management Implications

Nil

Consultation

Emergency Management Act 2005,

Local Government Act 1995,

Department of Primary Industries and Regional Development,

Sharksmart,

LEMC membership,

External agencies; and,

Relevant internal staff.

Resource Implications

Financial

The cost of each BEN sign is about \$300.

Workforce

There will be minimal workforce implications associated with the installation of the BEN signs.

Options

Council has the option of:

1. Endorsing the recommendation,
2. Not endorsing the recommendation.

Conclusion

The BEN signs project provides residents and visitors with a consistent and well recognised system that ensures emergency services personnel and visitors unfamiliar with the area can seek and obtain emergency assistance in a timely manner.

Whilst there is no adverse reputational risk to the Shire should the recommendation not be supported there is significant benefit for visitors, the community and emergency services personnel by providing a well-established and clear location referencing system.

4.2 Amalgamation of Shire of Murray and Shire of Waroona Local Emergency Management Committees - R Porter

File Ref: 7206
Previous Items: LEMC. 5 Feb 20 Item 5.2 (LEMC20/002)
OCM. 26 Mar 20 Item 10.1.1 (OCM20/027)
Applicant: Nil
Author and Title: Ron Porter, Manager Ranger and Emergency Services
Declaration of Interest: Nil
Voting Requirements: Simple Majority

Recommendation/Committee Decision

LEMC20/007

Moved: I Francis

That Council supports:

- 6. the amalgamation of the Shire of Murray and Shire of Waroona Local Emergency Management Committees, and;**
- 7. the Chief Executive Officer overseeing the formation of a Working Group to establish the administration arrangements of the combined Local Emergency Management Committee and then seek final endorsement from the State Emergency Management Committee.**

CARRIED UNANIMOUSLY 9:0

Please Note: Committee Recommendation LEMC20/007 is only a recommendation to, and not a decision of Council. The Council will consider this recommendation at the 27 August 2020 Ordinary Council Meeting.

In Brief

- At the Ordinary Council Meeting on the 26 March 2020, Council provided in principle support for the amalgamation of the Shire of Murray and Shire of Waroona Local Emergency Management Committees subject to consultation with stakeholders.
- The Shire of Waroona Council endorsed an identical recommendation at its Ordinary Council Meeting on the 26 May 2020.
- Internal analysis and stakeholder consultation haven't uncovered any issues that would prevent the amalgamation from proceeding.
- Council is requested to support the finalisation of the amalgamation of the Shire of Murray and the Shire of Waroona Local Emergency Management Committees.

Background

Under section 38 of the *Emergency Management Act 2005* ('Act') local governments must establish at least one Local Emergency Management Committee ('LEMC') for their district. However, under section 34 of the Act local governments may unite for the purposes of emergency management with the approval of the State Emergency Management Committee ('SEMC').

The appointment of a shared Community Emergency Services Coordinator has meant that emergency management now forms part of the resource sharing arrangements between the Shires of Murray and Waroona. This provided the ideal opportunity to explore the possibility of amalgamating the LEMC's.

The LEMC Executive Officer has been in discussions with the Shire of Murray/Waroona Chief Executive Officer, the Chairpersons of the respective Committees and the Department of Fire and Emergency Services ('DFES') District Emergency Management Advisor ('DEMA') on the feasibility of amalgamating the LEMC's.

The advantages of amalgamating the LEMC's would be:

- Significant improvement in emergency management planning,
- Reduction in the number of meetings required to be attended by agency and stakeholder representatives; and,
- Ability for additional local government resources to be utilised should an emergency occur within either district.

At the Ordinary Council Meeting on 26 March 2020 (OCM20/027) council endorsed the following LEMC recommendation;

That Council:

1. *Provides in principle support for the amalgamation of the Shire of Murray and Shire of Waroona Local Emergency Management Committees,*
2. *Requests that consultation be undertaken to ensure the amalgamation is achievable and practicable for all Agencies and Stakeholders; and,*
3. *Requests that another report be prepared for consideration at the Local Emergency Management Committee meeting scheduled for the 6 May 2020 outlining the future direction on amalgamation of the Shire of Murray and Shire of Waroona Local Emergency Management Committees.*

An identical report, seeking in-principle support, was presented at the Shire of Waroona Ordinary Council Meeting (OCM20/05/083) on the 26 May 2020, having already been endorsed by the Shire of Waroona LEMC on the 4 March 2020 (LEMC20/002).

Report Detail

Subsequent to the abovementioned recommendation from both local governments providing in-principle support, a process was established to ensure agency and stakeholder consultation occurred in accordance with the requirements of State Emergency Management Preparedness Procedure 14 which states the following –

“Each local government must conduct an analysis of its ability to comply with the provisions of the EM Act in respect to EM. This analysis must examine the local government's ability to provide both effective and efficient EM and identify any associated risks.”

To meet this obligation a risk analysis assessment was designed and distributed to the Shire of Murray and the Shire of Waroona LEMC memberships on the 11 June 2020, with recipients being provided until 3 July 2020 to respond.

LEMC members were requested to identify and analysis any potential risks from their agency/stakeholder perspective that they believed may compromise either local governments' ability to provide both effective and efficient emergency management. Six agencies/stakeholders provided feedback with none identifying any issues or concerns.

Should Council support the recommendation, a Working Group involving representatives from both Shires will be formed to determine the administrative arrangements and communication strategy. Once these matters are resolved, a letter will be forwarded onto the SEMC Executive Officer, requesting endorsement of the proposed amalgamation by the State Emergency Management Committee.

Murray 2030 Strategic Community Plan

Focus Area	Places for People
Aspiration	To create great places for the people through strong partnerships with the community; innovative urban design; and improve the well-being and quality of life for residents.
Strategy	Ensure the safety.

Focus Area	Capable and Accountable
Aspiration	To develop strong leadership through good governance, effective communication and ensuring value for money.
Strategy	Deliver efficient and effective Council services to the community.

Murray 2019- 2023 Corporate Business Plan

Focus Area	Places for People
Objective	1.1 Socially connected, safe and cohesive community
Strategy	1.1.6 Ensure the safety of our community
Project and Actions	

Other Strategic Links

Nil

Statutory Environment

Local government emergency management responsibilities are set out under the *Emergency Management Act 2005*.

34. Local governments may combine

- (1) Two or more local governments may, with the approval of the SEMC, agree to unite for the purposes of emergency management under this Part.
- (2) If 2 or more local governments (the **combined local government**) unite as mentioned in subsection (1), the provisions of this Part apply as if —
 - (a) a reference to a local government were a reference to the combined local government; and
 - (b) a reference to the local government's district were a reference to the districts of the combined local government; and
 - (c) a reference to the local government's offices were a reference to the office of each local government that is part of the combined local government.

36. Functions of local government

It is a function of a local government —

- (a) subject to this Act, to ensure that effective local emergency management arrangements are prepared and maintained for its district; and
- (b) to manage recovery following an emergency affecting the community in its district; and
- (c) to perform other functions given to the local government under this Act.

38. Local emergency management committees

- (1) A local government is to establish one or more local emergency management committees for the local government's district.
- (2) If more than one local emergency management committee is established, the local government is to specify the area in respect of which the committee is to exercise its functions.
- (3) A local emergency management committee consists of —
 - (b) a chairman and other members appointed by the relevant local government in accordance with subsection (4); and
 - (c) if the local emergency coordinator is not appointed as chairman of the committee, the local emergency coordinator for the local government district.
- (4) Subject to this section, the constitution and procedures of a local emergency management committee, and the terms and conditions of appointment of members, are to be determined by the SEMC.

39. Functions of local emergency management committees

The functions of a local emergency management committee are, in relation to its district or the area for which it is established —

- (a) to advise and assist the local government in ensuring that local emergency management arrangements are established for its district; and
- (b) to liaise with public authorities and other persons in the development, review and testing of local emergency management arrangements; and
- (c) to carry out other emergency management activities as directed by the SEMC or prescribed by the regulations.

As mentioned in this report, **State Emergency Management Preparedness Procedure 14** provides a clear procedure for local governments to follow when amalgamating for the purpose of emergency management.

Sustainability & Risk Considerations

Economic - (Impact on the Economy of the Shire and Region)

There are no economic impacts on the community.

Social - (Quality of life to community and/or affected landowners)

The amalgamation of the LEMC memberships and the subsequent improvement in emergency management planning will result in positive outcomes for the community.

Environment – (Impact on environment’s sustainability)

There is no negative impact on the natural or built environment.

Policy Implications

The LEMC Terms of Reference will need to be updated to reflect the changes to the membership structure.

Risk Management Implications

<i>Risk Level</i>	<i>Comment</i>
Low	The amalgamation of the LEMC provides greater expertise on the committee and will reduce the Shire’s risk exposure through the development of associated plans, structures and training to effectively coordinate local emergency management activities.

Consultation

*Emergency Management Act 2005,
Local Government Act 1995,
State Emergency Management Preparedness Procedure 14,
Shire of Murray/Waroona Chief Executive Officer,
Shire of Murray and Shire of Waroona LEMC Chairpersons,
DFES DEMA,
LEMC membership,
External agencies; and,
Relevant internal staff.*

Resource Implications

Financial

There is no financial implication associated with this proposal.

Workforce

There is no workforce implication associated with this proposal.

Options

Council has the option of:

1. Endorsing the recommendation,
2. Not endorsing the recommendation.

Conclusion

The amalgamation of the Local Emergency Management Committees will realize significant efficiency gains for Shire staff and the agencies/stakeholders involved.

Furthermore, the subsequent improvements in emergency management planning will result in positive outcomes for the Shire of Murray and Shire of Waroona communities.

5. State EM Preparedness Procedure 7 – LEMC Requirements

5.1 Every Meeting

5.1.1 Confirmation of LEMA Contact Details – **refer to Appendix 2** - R Porter

The attendance sheet was passed around and filled out by all attendees. Attendees were asked to ensure that all their contact information was up to date. The LEMC Contact Register is attached in **Appendix 2**.

5.1.2 Review any Post-Incident Reports and/or Post-Exercise Reports – R Porter

Nil. It was raised that we are still in a State of Emergency due to COVID-19.

5.1.3 Funding Nominations and Applications Progress – R Porter

Nil. Most funding from the State will go towards Recovery. AWARE and NDRP funding will be available shortly for emergency management.

5.1.4 Emergency Risk Management (ERM) / Treatment Strategies Progress – R Porter

D Walker was an apology however a report was submitted as per **Appendix 3**.

5.1.5 Review of Local Emergency Management Arrangements – R Porter

Once the Shire of Murray and Shire of Waroona Local Emergency Management Committees are amalgamated, both Local Emergency Management Arrangements will be combined and a full review will be completed.

5.1.6 Review Business Plan Strategies and Record Key Achievements – R Porter

SEMC have reviewed the State Strategic Business Plan and are currently awaiting approval. Once approved it will be distributed to DEMC's and LEMC's. The Shire of Murray will continue to use the existing Business Plan until this process has been completed.

6. GENERAL BUSINESS

6.1 SoM - CBFCO - R Wilson

Due to COVID-19 training has been delayed but has recently started again. Areas in Pinjarra and Furnissdale have been identified for traditional burning.

A Rural Urban Interface (RUI) exercise has been planned for October 2020 in Dwellingup. All Brigades will be involved however this could be cancelled or delayed if restrictions change with COVID-19.

6.2 St John Ambulance – Station Manager – C Hunter

C Hunter advised that training is being held on Saturday. Additional PPE has been sourced and cleaning is being conducted regularly.

6.3 WAPOL Pinjarra – Acting OIC – N Palmer

N Palmer stated that crime levels have dropped significantly due to COVID-19. Police are conducting COVID-19 quarantine checks. Police stations and vehicles are being thoroughly cleaned regularly. N Palmer has been liaising with Bedingfield Park Inc Aged Care Facility to obtain a copy of their evacuation plan which they are still working on.

6.4 WAPOL Dwellingup – Acting OIC – S Vieceli

S Vieceli advised that the Dwellingup 100 Mountain Bike Classic and Mighty Jarrah Trail Run Event is scheduled for Saturday 19 September 2020. The event will also include a 6km dog run this year.

Bushfire plans are currently being reviewed in Pinjarra, Dwellingup, North Dandalup and Waroona.

A new performing arts centre and sports hall will be built at Pinjarra Senior High School and is expected to be completed in 2022.

6.5 DFES – Acting DO Emergency Management – D Rowland

A report was submitted as per **Appendix 4**.

6.6 SoM – CESC – G Stevens

A report was submitted as per **Appendix 5**.

6.7 DBCA – Fire Operations Officer – S Gunn

S Gunn stated that mandatory training is going ahead however precautions are in place with the groups being split. Regular cleaning is being conducted.

6.8 DFES - DEMA - M Cross

A report was submitted as per **Appendix 6**.

6.9 SoM – MRES – R Porter

R Porter advised that the State Government has amended state EM policy framework and will now be responsible for COVID-19 Recovery. No further Shire of Murray/Shire of Waroona recovery meetings have been held. The Shire is working on keeping connections with the community and people are being urged to buy local. Welfare initiatives are also in place. Initial impact statements have been completed and provided to the State Government to assist with Recovery. The Shire will continue to engage with the State Recovery Controller as recovery activities continue.

WALGA contacted the Shire back in April to obtain fortnightly PPE stocktakes. The Department of Finance (DoF) was named as the central conduit to report stock levels and lodge requests for PPE.

The DoF now undertakes centralised ordering of PPE stock across the public sector. The information previously gathered by WALGA, and fortnightly updates, are used to calculate PPE requirements. Genuine reasons are required for additional PPE.

6.10 DoH – Manager EPDR – S Beaton

S Beaton was an apology however a report was submitted as per **Appendix 7**.

7. NEXT MEETING

The next Local Emergency Management Committee meeting will be held on Wednesday 4 November 2020. The venue and time are to be advised.

8. CLOSE

There being no further business the Chairperson declared the meeting closed the time being 1:55pm.



Appendices

**Local Emergency
Management Committee**

**First Quarter
Wednesday 5 August 2020**

Date Raised	Serial N ^o	Item N ^o	Subject	Action	Responsible Officer	Completion Date / Status
8 August 2013	03/13	4.1.2 Appendix 1 Item e	The Shire of Murray LEMC in consultation with and key Hazard Management Agencies (HMA), special needs groups such as local schools, nursing homes and child cares etc are encouraged to establish evacuation plans and communication strategies. This will aid the HMA to manage evacuation and traffic management more effectively.	<p>06/02/14 On behalf of the LEMC send out a letter of correspondence to special needs groups within the Shire of Murray and encourage them to create an evacuation plan.</p> <p>07/02/18 Ongoing. Nursing Home Association to be contacted by Bedingfeld Aged Care Facility. M Cross to follow up the review of the Evacuation Plan. Adequate evacuation plans required for hospitals and aged care facilities. Transport is the biggest issue.</p> <p>07/11/18 To be discussed</p> <p>06/02/19 I Francis offered to contact the Pinjarra Network of School representative to discuss the evacuation plans for the schools in the district.to progress action item Serial No. 03/13.</p> <p>01/05/19 Evacuation Plans received by all Schools within the Murray were sent out to LEMC on 22 February 2019 for review. The Evacuation plans are outdated. M Cross will obtain a evacuation plan template. T Sillitto advised that he will organise evacuation training with Aged Care Facilities in conjunction with DEMA.</p> <p>07/08/19 Any feedback in regards to the School Evacuation Plans is to be sent to C Louis.</p> <p>05/02/20 Bedingfeld Aged Care Facility Evacuation Plan needs to be reviewed. A dementia ward is being added. MOU required. T Sillitto and M Cross will organise an evacuation workshop in liason with Shire of Murray.</p> <p>05/08/20 WAPOL are currently reviewing Aged Care Facility Evacuation Plans/Procedures and</p>	DEMA, DFES, OIC Pinjarra WAPOL, DoC and C Louis	Ongoing

				reporting back to the Commissioner. It is a requirement to have a 24-hour contact point and management plan. Bedingfeld currently have a maximum capacity of 45 people which will change in due course. M Cross will provide Police with Evacuation paperwork.		
8 August 2013	04/13	4.1.2 Appendix 1 Item f	The Shire of Murray LEMC to consider conducting a LEMC Evacuation Workshop to further develop evacuation plans for each townsite/settlements. An evacuation plan can be a one or two page generic document which clearly describes items such as location, map, demographics, entry/exit routes, critical infrastructure, possible evacuation centre, key contact numbers, people with special needs or lack of transport, Culturally And Linguistically Diverse (CALD) communities etc. Once developed this information is then made available to the HMA for any possible evacuation planning.	<p>06/02/14 Working Group to be established consisting of P Robinson, D Walker, P Stewart, SoM Community Development Rep & a SoM Tech Services Rep. CEMO to forward template plan.</p> <p>03/02/16 Working Group to be established consisting of P Robinson, D Walker, R Bradshaw, SoM Community Development Rep & a SoM Tech Services Rep.</p> <p>03/08/16 Successful grant funding in this financial year has provided opportunity to develop a Community Evacuation Field Exercise.</p> <p>02/08/17 Community Evacuation Field Exercise planning has commenced.</p> <p>07/02/18 Planning deferred until June 2018. Community Evacuation Field Exercise will be held in September 2018.</p> <p>01/08/18 To be discussed.</p> <p>07/11/18 Discussion on capability and resourcing to undertake exercise in conjunction with WAPOL.</p> <p>06/02/19 WAPol can provide a Project Officer. Working Group to be established.</p> <p>05/02/20 Community Evacuation Field Exercise project was cancelled due to deficiencies in staffing. Funding was sent back. G Stevens to organise meeting to list Evacuation Routes.</p>	MRES, CESC, WAPOL, CBFCO and K Jones	Not Started

				<p>05/08/20 G Stevens met with R Porter, K Jones, R Wilson and I Francis to discuss Evacuation Routes. The next meeting will be held on 17 August 2020.</p>		
<p>27 November 2013</p>	<p>07/13</p>	<p>7.1 Appendix 4</p>	<p>AWARE ERM Report <i>Risk Reference 4 – Bushfire</i> Conduct a Bushfire Risk Assessment for Bushfire</p>	<p>06/02/14 Awaiting SEMC Secretariat & DFES funding opportunities. Likely to occur during to 2015/16 financial year.</p> <p>04/05/16 A budget submission has been provided for Council to consider funding the development of a Bushfire Risk Management Plan.</p> <p>03/08/16 The budget submission to develop a Bushfire Risk Management Plan was not supported at Council.</p> <p>02/11/16 As above. No financial capacity to undertake this project at this time.</p> <p>07/02/18 As above. AWARE Funding for risk management will be available shortly for Local Government only.</p> <p>01/08/18 Successful in obtaining DFES BRMP LG Grant funding for a Bushfire Risk Planning Coordinator (BRPC) position to be shared with Shire of Harvey</p> <p>06/02/19 BRMP Process will address the Bushfire Risk within the Shire of Murray.</p> <p>01/05/2019 Working on obtaining DFES BRMP LG Grant funding for the Bushfire Risk Planning Coordinator (BRPC) for 2019/20 financial year. Position will now be a Shire of Murray employee.</p> <p>07/08/19 D Walker is now the BRPC for Shire of Murray, Shire of Waroona and Shire of Harvey. D Walker is currently working on the SoM plan which should be complete by the end of the month. Assessments will be completed early next</p>	<p>CESC BRPC</p>	<p>In Progress</p>

				<p>year. In 2021 mitigation work should be completed.</p> <p>06/11/19 The Shire of Murray BRMP has been sent to be critiqued. D Walker is currently working on the assessments. Once the assessments are completed the BRMP will be sent to the OBRM and presented to Council.</p>		
27 November 2013	08/13	7.1 Appendix 4	<p>AWARE ERM Report</p> <p><i>Risk Reference 17 – Road Transport Emergency</i></p> <ol style="list-style-type: none"> 1. Community education via safety campaigns 2. Develop a Local Evacuation Plan 	<p>06/02/14 Part 2 linked to Item number 04/13.</p> <p>03/02/16 Responsible Officer changed from C Pearson to P Robinson.</p> <p>01/08/18 Responsible Officer changed from P Robinson to I Francis.</p> <p>05/02/20 SEMC approved a review of the State Risk Project prior to commencing phase 5. The project commenced in 2013 and was designed to gain comprehensive and consistent understanding of the risks faced at state, district and local levels. The review will assess how to move forward with the knowledge and data collated.</p>	OIC Pinjarra WAPOL	Deferred
27 November 2013	09/13	7.1 Appendix 4	<p>AWARE ERM Report</p> <p><i>Risk Reference 35 – Flood/Flash flooding</i></p> <p>Develop a Local Flood Management Plan</p>	<p>04/05/16 Consultation with DFES to develop the plan. Meeting to be held in June 2016.</p> <p>02/08/17 Ongoing. Discuss further with Water Corp.</p> <p>07/02/18 Ongoing. Invite to the next LEMC meeting DFES.</p> <p>05/02/20 SEMC approved a review of the State Risk Project prior to commencing phase 5. The project commenced in 2013 and was designed to gain comprehensive and consistent understanding of the risks faced at state, district and local levels. The review will assess how to</p>	D/O Natural Hazards DFES Unit Manager Murray SES	Deferred

				move forward with the knowledge and data collated.		
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LEMC Membership Contact List

(As at 5 August 2020)

Organisation	Name	Address	Contact Details
Shire of Murray	Cr. Stuart Kirkham (Councillor / LEMC Chairperson)	%/- Shire of Murray PO Box 21 PINJARRA WA 6208	0427 868 306 slkirkham@iinet.net.au skirkham@murraycouncillor.wa.gov.au
	Gavin Stevens (Community Emergency Services Coordinator / LEMC Executive Officer)		(08) 9531 7635 / 0421 236 275 Gavin.Stevens@murray.wa.gov.au
	Mr. Robert "Bluey" Wilson (Chief Bush Fire Control Officer)		(08) 9535 8093 / 0417 916 468 robert.wilson@alcoa.com.au backburner61@yahoo.com.au
	Mr. Phil Steven (Manager Environmental Health)		(08) 9531 7735 / 0427 910 062 meh@murray.wa.gov.au
WAPOL (Pinjarra)	Snr Sgt. Ian Francis (LEC / LEMC Deputy Chairperson / Pinjarra – Officer in Charge)	24 George Street PINJARRA WA 6208	(08) 9531 7111 / 0429 051 898 ian.francis@police.wa.gov.au
WAPOL (Dwellingup)	Sgt. Dave Harnett (Dwellingup – Officer in Charge)	55 McLarty Street DWELLINGUP WA 6213	(08) 9538 1057 / 0436 851 564 Dave.harnett@police.wa.gov.au
DBCA – Parks and Wildlife Service	Mr. Kris Laurendi (Senior Ranger – Lane Poole Reserve)	1 Banksiadale Road DWELLINGUP WA 6213	(08) 9538 1078 / 0437 413 485 kristofer.laurendi@dbca.wa.gov.au
Pinjarra Volunteer Fire & Rescue Service	Mr. Ken Jones (Brigade Captain)	Lot 69 Murray Street PINJARRA WA 6208	(08) 9531 2998 / 0409 205 071 kennethjones11@bigpond.com
Department of Communities - Child Protection and Family Support	Mr. Terry Sillitto (Senior District Emergency Services Officer)	25 Adelaide Street FREMANTLE WA 6160	(08) 9411 4610 / 0427 389 375 terry.sillitto@communities.wa.gov.au
Alcoa Australia	Mr. Gary Cresswell (Security Supervisor - Pinjarra)	PO Box 172 PINJARRA WA 6208	(08) 9531 6303 / 0404 800 186 Gary.cresswell@alcoa.com.au
Murray SES	Mr. Paul Dwyer (Unit Manager)	PO Box 341 PINJARRA WA 6208	(08) 9531 3044 / 0410 560 075 pauld58@bigpond.net.au
Water Corporation	Mr. Matthew Sutherland (Operations Manager)	109 Park Road MANDURAH WA 6210	(08) 9423 7209 / 0438 384 237 matthew.sutherland@watercorporation.com.au
St John Ambulance	Ms. Christine Hunter (Station Manager – Pinjarra Sub Centre)	PO Box 123 PINJARRA WA 6208	(08) 9531 3322 / 0428 571 927 christine.hunter@stjohnambulance.com.au
Pinjarra Primary School	Mr. Christian Louis (Principal – Pinjarra Primary School)	Dixon Avenue PINJARRA WA 6208	(08) 9531 1856 / 0447 294 487 Christian.Louis@education.wa.edu.au
Bedingfeld Park Inc Aged Care Facility	Ms. Deborah McLeod (Chief Executive Officer)	PO Box 762 PINJARRA WA 6208	(08) 9531 1622 deborah@bedingfeld.com
Community Representative - Shire of Murray	Ms. Christine Thompson JP (Community Representative)	1 York Road FURNISSDALE WA 6209	0429 447 341 chris.t1@bigpond.com
Ex Officio Committee Members			
Organisation	Name	Address	Contact Details
Shire of Murray	Ms. Chantelle Goff (Ranger Emergency Services Support Officer / Minute Secretary)	%/- Shire of Murray PO Box 21 PINJARRA WA 6208	(08) 9531 7637 / 0413 453 739 resso@murray.wa.gov.au
	Mr. Ron Porter (Manager Ranger and Emergency Services)		(08) 9531 7716 / 0448 875 632 mres@murray.wa.gov.au
	Ms. Leanne McQuirk Director Place and Community Development / Local Recovery Coordinator		(08) 9531 7734 / 0418 922 803 leanne.mcquirk@murray.wa.gov.au
DFES (Fire Services)	Mr. Brett Finlay (District Officer Wellington)	Lot 719 South Western Highway BUNBURY WA 6230	(08) 9780 1904 / 0427 011 386 brett.finlay@dfes.wa.gov.au

Ex Officio Committee Members

Organisation	Name	Address	Contact Details
DFES (Natural Hazards)	Mr. Nick Elrick (District Officer – Natural Hazards – South West)	Lot 719 South Western Highway BUNBURY WA 6230	(08) 9780 1910 / 0428 100 491 nick.elrick@dfes.wa.gov.au
DFES (Emergency Management)	Mr. Peter Stewart (District Officer – Emergency Management – South West)		(08) 9780 1907 / 0409 153 931 peter.stewart@dfes.wa.gov.au
DFES (Emergency Management)	Ms. Merveen Cross (District Emergency Management Advisor - Metropolitan)	91 Leake Street BELMONT WA 6104	(08) 9478 8343 / 0427 996 676 merveen.cross@dfes.wa.gov.au
Department of Communities - Child Protection and Family Support	Ms. Tracy Simpson (Local Welfare Coordinator – Peel District Office)	PO Box 972 MANDURAH WA 6210	(08) 9583 6688 Tracy.Simpson@communities.wa.gov.au
Alcoa Australia	Mr. Jamie Allcock (Emergency Response Coordinator)	PO Box 172 PINJARRA WA 6208	0407 175 611 Jamie.Allcock@alcoa.com.au
Main Roads WA	Mr. Dave Cormack (Routine Maintenance Works Manager)	Lakes Road MANDURAH WA 6208	0427 770 942 dave.cormack2@fultonhogan.com.au
Western Power	Ms. Joscelynd Rawlins (Field Operations Team Leader)	22 Husband Road MANDURAH WA 6210	(08) 9582 4111 / 0400 200 391 Joscelynd.Rawlins@westernpower.com.au
Atco Gas	Mr. Gordon Davies (Supervisor, Mandurah)	20 Quarry Way GREENFIELDS WA 6210	0414 510 364 gordon.davies@atcoqas.com.au
Department of Health	Mr. Scott Beaton (Manager Emergency Preparedness Disaster Response)	Elanora Drive COOLOONGUP WA 6168	(08) 9599 4518 / 0419 904 148 Scott.Beaton@health.wa.gov.au

Bushfire Risk Planning Coordinator Report – August 2020

Bushfire Risk Management Plan

- Draft completed and forwarded to Department of Fire and Emergency Services (DFES) for quality assurance review of the Plan – August 2019.

Risk Identification and Assessments

- Approximately 60% of the Local Government area has been mapped and risk assessed.
- Some assessments have been conducted by desktop and may be amended once ground proofing has been done.
- Currently mapping in Murray Hills and working west towards Coolup.

Stakeholder liaison

- Ongoing and as required.

DFES Southwest Region / Bushfire Risk Management Officer

- UCL / UMR within Shire of Murray discussed with DFES BRMO (ongoing)

Administration

- Nil

Department of Fire and Emergency Services Report for the Shire of Murray Local Emergency Management Committee Wednesday 5th August 2020

COVID-19 Update

Phase 4 of the WA Government's COVID-19 roadmap has come into effect. This saw most of the restrictions removed in Western Australia, although the two-square-metre rule has remained in place, and major venues are restricted to 50 per cent capacity. Phase 5 has been delayed with a new tentative date of 15 August due to current situation on eastern seaboard.

While the DFES Facilities and Vehicle Cleaning Guidelines for COVID-19 will remain in place, the Incident Response Team have authorised the removal of additional facility sanitisation from 1 July 2020. Normal facility, fleet and equipment cleaning regimes should continue, as should personal hygiene practices.

SEASONAL OUTLOOK

The BOM have released their seasonal outlook for August to October. Access to this forecast is available via this link - <http://www.bom.gov.au/climate/outlooks/#/overview/video>

- Wetter than average three month period for Mid to Lower west coast of WA
- Less chance in NW of WA
- Warmer than average days & nights in NW of WA

\$6 MILLION TO ASSIST LOCAL GOVERNMENTS REDUCE BUSHFIRE RISK

Twenty-one local governments across Western Australia have been granted a total of \$6.05 million in State Government assistance to help reduce bushfire risks in their communities.

Under the first round of the 2020-21 Mitigation Activity Fund (MAF) Grants Program, 612 mitigation activities will be carried out on Crown lands that are managed by local government and deemed to be at high risk of bushfire.

Local Government	Allocated Amount	Number of Treatments
City of Bunbury	\$302,868.00	42
Shire of Collie	\$131,235.00	22
Shire of Dardanup	\$492,880.00	39

BUSHFIRE CENTRE OF EXCELLENCE

Construction of the new BCoE has commenced with completion due in December 2020.

<https://www.dfes.wa.gov.au/bushfirecoe>

DFES REGION NAME CHANGES

District Officer Murray – now District Officer Wellington

Area Officer Harvey Hills – now Area Officer Preston

Area Officer Bunbury – now Area Officer Forrest

DFES REGIONAL OFFICE STAFFING

Superintendent Peter Norman - PSL due to knee replacement

Acting Superintendent Andrew Wright

Acting District Officer Bunbury Ian Joseph

Acting District Officer Emergency Management Daryn Rowland

Acting District Officer Wellington John Carter

Daryn Rowland

Acting District Officer Emergency Management South West

9780 1907

0427 088 156

CEC Murray Waroona – LEMC Report

5th August 2020

Response to Action Items:

- Met from 13th May 2020 – Many local plans are confidential or held buy the agency required. Next meeting booked for 17th August 2020

Recent activities:

- 2019/2020 finished with 157 Jobs to the Shire of Murray as the primary (approx. 1 every 2 - 3 days). Operationally a less active month in July with 3 jobs across the shire.
- Firebreak Notice and BFAC work across both Shires with no change in Murray but dates at Waroona to shift similar to the rest of the South West. Murray is;
 - Permits required: 1st Oct – 30th Nov
 - Prohibited (No Burning): 1st Dec – 31 March
 - Permits required: 1st April – 15th May (subject to extension dependent on conditions)
- Training meeting post Covid lock down to bring preparedness on track for upcoming fire season. Significant number of new members in Murray (68+) we are trying to have made active for upcoming fire season. Murray pre-season forum 14th Nov 2020
- Vehicle and Station preparation for upcoming season
- Enhanced Covid cleaning processes still in place
- LGGS line 9 purchases: Celfi, pelican light kits and minor station upgrades



**MURRAY
LOCAL EMERGENCY MANAGEMENT COMMITTEE
DISTRICT EMERGENCY MANAGEMENT ADVISOR REPORT
5 AUGUST 2020**

STATE NEWS

CORONAVIRUS (COVID-19)

The Department of Health is continuing to work under the umbrella of a State Emergency Declaration to manage COVID-19.

LEGISLATION AMENDMENTS

In March 2020 the Emergency Management Amendment Regulations 2020 amended the EM Regulations to:

- **prescribe hostile act as a hazard;**
- prescribe heatwave as a hazard rather than rely on the 'or other natural event' definition;
- amend the scope and territorial jurisdiction for marine search and rescue;
- prescribe the Chief Executive Officer of the Department of Transport as the Hazard Management Agency for marine transport emergency and spillage/release/escape of oil hazards;
- prescribe the Chief Executive Officer of the Department of Health as the Hazard Management Agency for the human epidemic hazard, spillage/release/escape of biological substance and heatwave hazards;
- prescribe the Department of Fire and Emergency Services as a combat agency for the emergency management activity of fire suppression; and
- administrative amendments to update the description of support function, update Hazard Management Agency name and Departmental references.

In April 2020 The Emergency Management Amendment (COVID-19 Response) Bill 2020 amended the EM Act to:

- introduce new provisions into the Western Australian emergency management framework to strengthen the State's capacity to respond to the COVID-19 pandemic and similar events in the future;
- clarify and amend existing provisions to remove barriers in the existing laws that were impeding the COVID-19 response and future emergencies.

Related amendments were also made to the EM Regulations to introduce the ability for infringement notices to be issued for a failure to comply with directions under the EM Act.

A detailed summary of the amendments to the EM Act and EM Regulations is available on the [SEMC Policy Amendments webpage](#)

Amendments to the suite of State Emergency Management Documents

The State Emergency Management (EM) Policy and Plan have been amended to facilitate the State Government approved whole of government approach to Western Australia's recovery from the COVID-19 pandemic. The amendments were approved by the SEMC on 21 July 2020 (SEMC Resolution Number 42/2020).

The inclusion of appendix AA in State Emergency Management Policy and Plan permits the State Recovery Controller to continue leading the whole of government approach to Western Australia's recovery from COVID-19, whilst removing the responsibility of the HMA/Controlling Agency and Local Governments recovery functions as prescribed in the State Emergency Management Framework. The implemented changes are a consequence from a Ministerial direction issued to the SEMC, which fundamentally is a result from a Cabinet decision. Local Governments will continue to collate data and monitor progress for COVID-19 recovery activities at the request of the State Recovery Controller.

The SEMC approved the inclusion of the below statement as an Appendix (AA) to both the State EM Policy and Plan:

APPENDIX AA: COVID-19 RECOVERY

1. The following five sections of the State Emergency Management Framework are amended such that they do not apply for a period of 12 months retrospectively from the 15 July 2020 for recovery activities undertaken by the pandemic caused by virus COVID-19:
 - i. State Emergency Management Policy 6.2 Role of Controlling Agency
 - ii. State Emergency Management Plan 6.2 Commencement of Recovery
 - iii. State Emergency Management Plan 6.4.1 Impact Statement
 - iv. State Emergency Management Plan 6.5 Role of Local Government in Recovery
 - v. State Emergency Management Plan 6.8 State Level Recovery Plan
2. These five sections continue to apply for all other emergencies.

In addition to the above amendments, the SEMC recently approved (SEMC Resolution Number 40/2020) a revised State Support Plan – Emergency Welfare (Interim). It is acknowledged that further work and consultation will be undertaken on the Plan following the completion of the Department of Communities emergency services review.

The fundamental principles of the Plan remain unchanged, the main alterations include:

- Naming of the State Welfare Incident Coordination Centre.
- Re-designation of the Department of Communities, Emergency Services Coordinator to the Welfare Emergency Controller.
- Further details regarding scope and responsibilities pertaining to emergency food provision.
- New roles and responsibilities and process flow of activation of the AUSREPLAN.

- Delegation capacities of the State Welfare Coordinator and Welfare Emergency Controller and emphasis towards scale-ability.
- Other minor expansions of explanation of scope, roles and responsibilities and statement of fact changes.

All documents are now available on the SEMC Website [State EM Policy](#) [State EM Plan](#) [State Support Plan - Emergency Welfare](#), it is strongly advised that all agencies review the updated documents.

For any queries, please email semc.policylegislation@dfes.wa.gov.au.

The inclusion of appendix AA in State Emergency Management Policy and Plan permits the State Recovery Controller to continue leading the whole of government approach to Western Australia's recovery from COVID-19, whilst removing the responsibility of the HMA/Controlling Agency and Local Governments recovery functions as prescribed in the State Emergency Management Framework. The implemented changes are a consequence from a Ministerial direction issued to the SEMC, which fundamentally is a result from a Cabinet decision. Local Governments will continue to collate data and monitor progress for COVID-19 recovery activities at the request of the State Recovery Controller.

SEMC UPDATE

COVID19 has had a significant impact on Western Australia (WA) and the emergency management (EM) sector has worked well together to deliver a coordinated response for the WA community. The Chair of SEMC thanks you for the active and valuable role you have played.

As organisation's capacity allows the Chair strongly encourage emergency management meetings and business as usual activities, such as risk workshops, consultation and emergency management arrangement development, to resume.

EMERGENCY MANAGEMENT CAPABILITY SUMMARY 2019

The Emergency Preparedness Report Steering Committee have determined not to release the Annual and Preparedness Report Capability Survey for 2020. This decision reflects the significant impact that COVID-19 has, and continues to have, on the EM sector across WA. It is expected that the 2021 survey will go ahead in April next year.

STATE EMERGENCY MANAGEMENT EXERCISE FRAMEWORK TRANSITION PROJECT

A number of new and engaging initiatives are now available to the Emergency Management sector. We encourage all agencies and organisations to utilise the resources and information that is now readily accessible.

SEMC Website

With several updates and additions, the EXERCISING tab on the SEMC website now provides the EM sector with easy to find references for:

- The State Emergency Management Exercise Framework
- The State EM Exercise Cycle
- The State Exercise
- Managing Exercises Online Training

- Templates, Guidelines and Resources
- Reporting of Exercises

Online Training

The Managing Exercises online self-paced training course is now available for all EM sector professionals. It is designed to provide greater accessibility to exercise training which will help with your preparedness to deal with hazards. It can be accessed on any device, from a desktop computer to a mobile phone and is optimised in Chrome. The course compliments the WA Managing Exercises Guideline

Exercise Schedules

We understand that during the operational response to COVID19, EM exercising has been the last thing on your mind. As we come out the other side and the sector slowly returns to normality, agencies and organisations will commence exercising again. The exercise framework requires you to develop an Exercise Schedule for your agency or organisation, so you can progressively plan your exercises over the three year period. If you have started developing your Exercise Schedule, this should be submitted to your DEMC who will forward the information on to the SECT via sect@dfes.wa.gov.au. Schedules will eventually be used to populate the State Exercise Calendar.

- The State Exercise Coordination Team (SECT) is currently in the process of considering a new State Exercise topic for SEMC to approve at their meeting on the 9th October.
- Due to the delays caused by Covid19 we are proposing that the State Exercise Cycle be 'reset' to the 1st July 2020 so that the exercising cycle can align with the financial year which will assist agencies and LGAs with their planning.
- This would mean that Year 1 of the cycle has just started and as such we would encourage LGAs and agencies to commence exercising when they can according to the framework ie. Single agency in Year 1, Multi agency in Year 2 and then participate where required in the State Exercise in Year 3.
- Please keep an eye on <https://semc.wa.gov.au/capability-and-preparedness/exercising> and the Exercise Framework Newsletters for updates on the latest developments re exercising.
- The State Exercise Calendar is in its last stages of testing and will also be available for use in the not too distant future.

ROLE OF LOCAL GOVERNMENT IN WA'S COVID-19 RECOVERY PANDEMIC LETTER FROM STATE RECOVERY CONTROLLER

The State Recovery Controller, Ms Sharyn O'Neill, has sent a letter to all local governments acknowledging the considerable support local government have provided to their communities.

Given the scale of the impact of the COVID-19 pandemic and the extended nature of recovery efforts the Government has determined that WA's approach to recovery is most appropriately coordinated at a State level rather than local.

However, every local government will play a key role in recovery, particularly as they are the closest touch points to the community.

DISTRICT NEWS

METROPOLITAN DISTRICT EMERGENCY MANAGEMENT COMMITTEE MEETINGS

The Metropolitan District Emergency Management Committee meetings have been confirmed. Calendar invites will be sent over the coming weeks once venues have been confirmed. The meetings will be hosted on the following dates:

- North DEMC Tuesday 22 September
- Central DEMC Wednesday 14 October 2020
- East DEMC Tuesday 20 October 2020
- South DEMC Wednesday 28 October 2020

2020 SEMC MEETING SCHEDULE

- 14 August 2020
- 9 October 2020
- 4 December 2020

**District Emergency Management Advisor
Metropolitan Operations
Department of Fire and Emergency Services**

From: [Beaton, Scott](#)
To: [Chantelle Goff](#)
Cc: [Ron Porter](#)
Subject: RE: Shire of Murray Local Emergency Management Committee (LEMC) Meeting - Agenda, Appendices and Previous Minutes - Wednesday 5 August 2020
Date: Thursday, 30 July 2020 12:38:20 PM
Attachments: [image001.jpg](#)
[image002.png](#)

Hi Chantelle,

Unfortunately I will be an apology for this meeting due to conflicting meetings occurring at the Hospital. From a South Metropolitan Health Service (SMHS):

- COVID-19 Preparedness and Response efforts continue. Scenario testing; outbreak management planning and response capability – inclusive of Contact Tracing requirements; and, COVID Clinic provision remain high priorities.
- SMHS continues to provide required input to state-wide COVID-19 Preparedness and Response efforts; this will be ongoing.
- Surge Management planning and Clinical Pathway modelling, inclusive of separation of ILI to non-ILI (to maintain facility integrity in the event of a surge) is in place and under constant review relative to the state and national situation.
- State Briefing Notes continue daily.
- The Hospitals and Community sites are engaging in the vast majority of BAU activities; relevant to EM include the SMHS Emergency Risk Management project involving Fiona Stanley, Fremantle, Rockingham, Murray District and Peel (Hospital sites) as well as Community Sites (Allied/Public Health and Mental Health).
- The message from SMHS is for all people and organisations to continue to practice respiratory etiquette (cover sneezes and coughs), maintain effective hand hygiene, keep appropriate physical distancing (including meeting room attendances) and if unwell – to stay home and seek testing for COVID-19.

Thanks Chantelle, Scott.

Scott Beaton

Manager – Emergency Management and Work Health & Safety

South Metropolitan Health Service | Rockingham Peel Group | M: 0419 904 148 | P: (08) 9599 4518 | E: scott.beaton@health.wa.gov.au

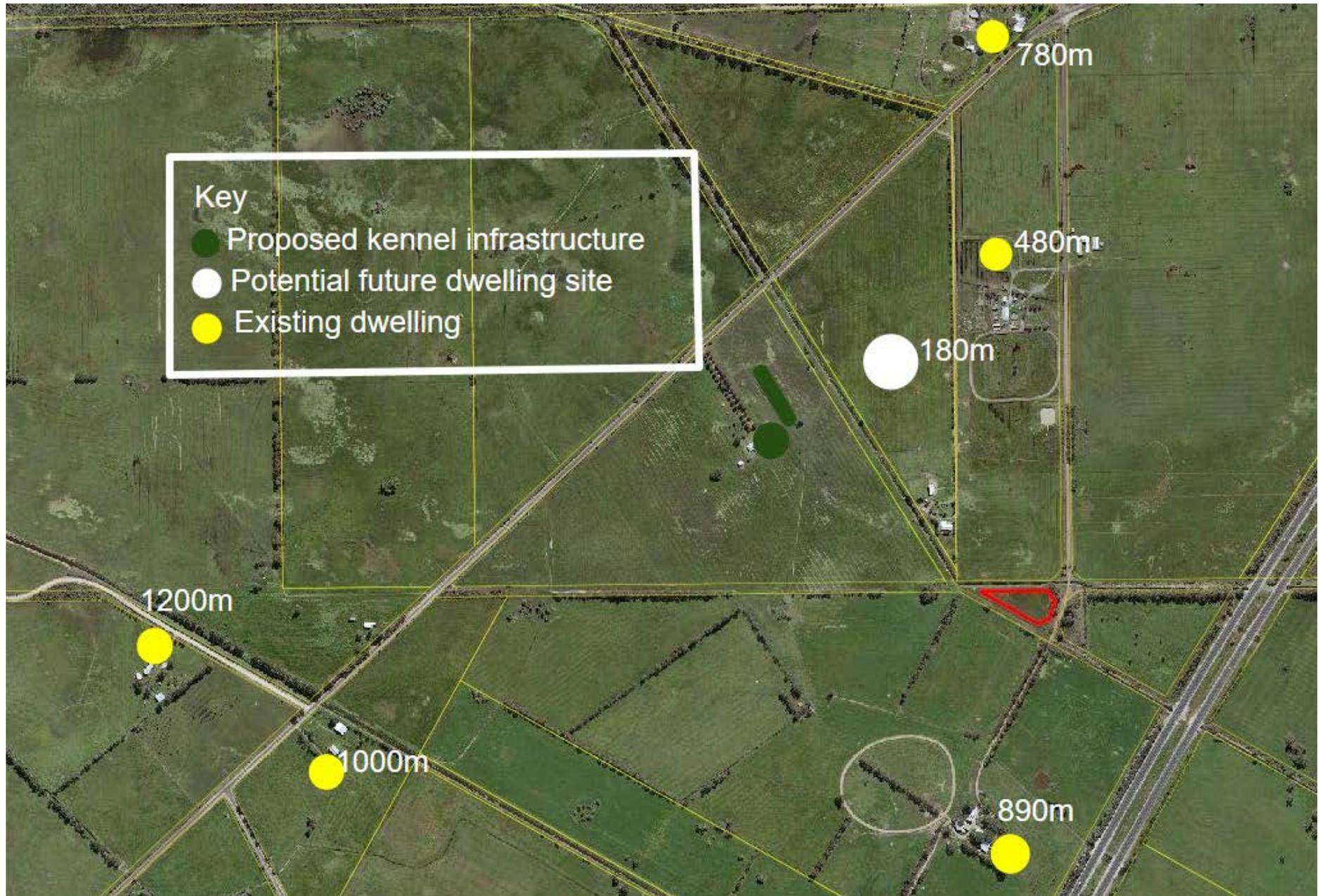
cid:image001.jpg@01D4450A.D4FBFAA0



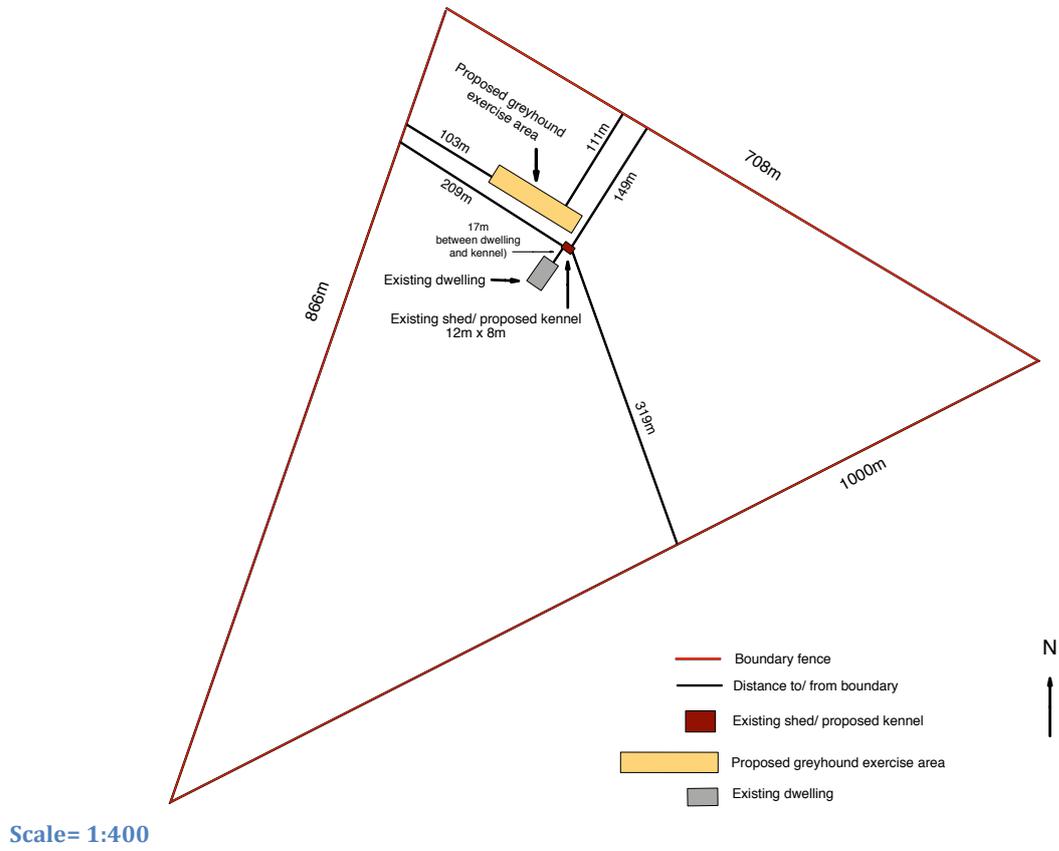
Delivering a **Healthy WA**

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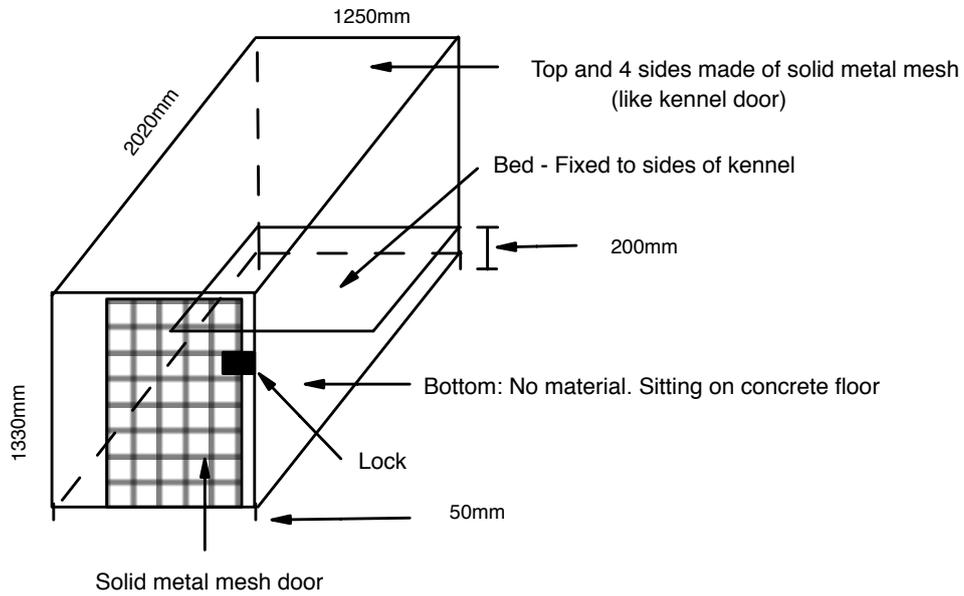
From: Chantelle Goff [<mailto:resso@murray.wa.gov.au>]



Site Plan: Lot 11 (783) Greenlands Rd, West Pinjarra



Internal section diagram of kennel



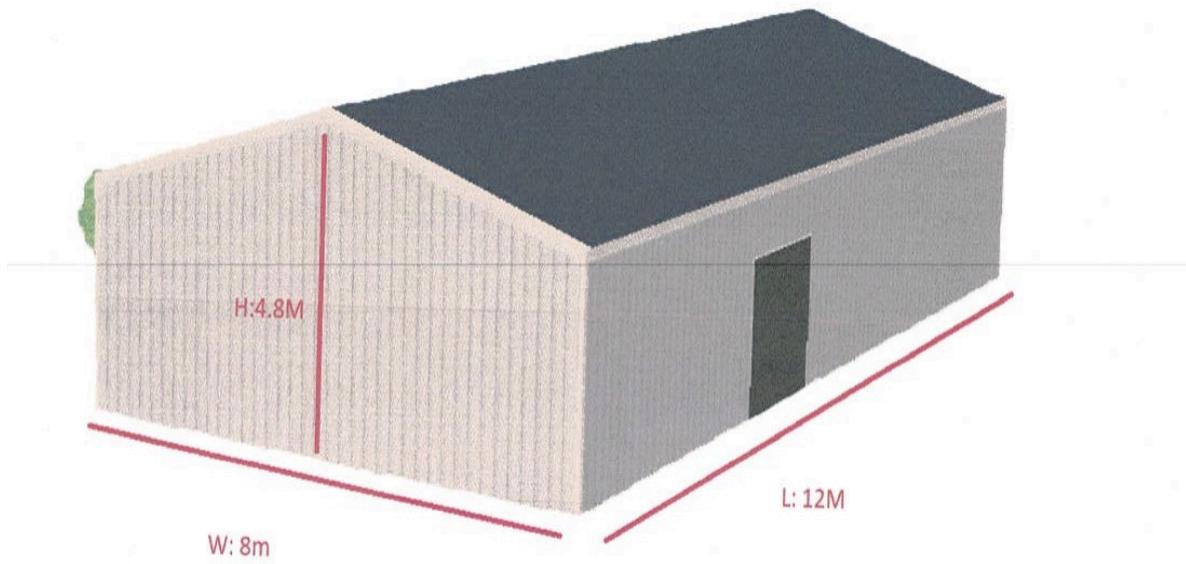
Dog Kennel

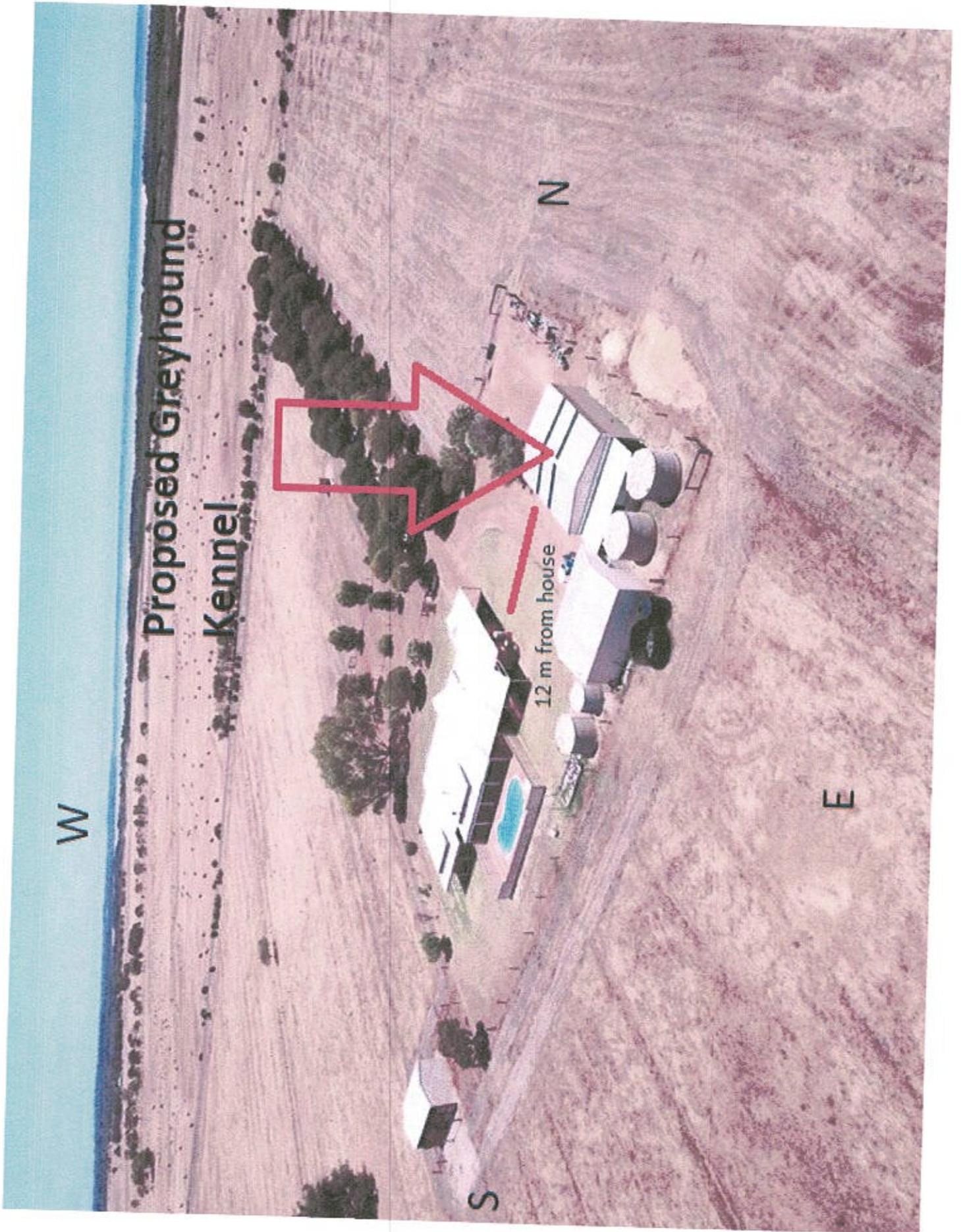


Dog Exercise Area



EXISTING SHED







DATE:	22 th June 2020
FROM:	Miguel de la Mata Acoustics Consultants Australia – Director
TO:	Joseph Dailly
SUBJECT:	NOISE ASSESSMENT, PROPOSED KENNEL, 783 GREENLANDS RD, WEST PINJARRA
REFERENCE:	ACA 10.00076-1L

Dear Joseph,

A noise assessment of the proposed dog kennel (the site) was completed. Acoustics Consultants Australia (ACA) were engaged to assess noise from the proposed site that could potentially have an impact on neighbouring residences.

The assessment included a review of the nearest sensitive receivers, review of the proposed site location and noise prediction using a 3D noise model. The assessment was prepared in accordance with the WA Environmental Protection (Noise) Regulations 1997 (EPNR).

Based on the assessment results, it has been determined that noise mitigation and minor modifications of the internal surfaces of the kennel building will be required to minimise potential to exceed the applicable noise limits at nearest sensitive receivers. The following points summarise the recommended noise mitigations:

1. Walls and roof of the kennel building will require insulation internally to minimise noise build-up and to increase the sound transmission loss of the building. Either foil insulation/anticon type insulation or mesh/insulation arrangements may be considered.
2. Ensure that the building does not have prominent openings particularly overlooking east, south and west. Penetrations used for mechanical, hydraulic or electrical services must be well sealed to avoid noise breakout.
3. It is recommended that time that kennel building doors are open is kept to the minimum.

Details of the recommendations and the detailed assessment are provided in the report.

Sincerely,

A handwritten signature in black ink, appearing to read "Miguel de la Mata", with a small dot at the end.

Miguel de la Mata

ACOUSTICS – DIRECTOR





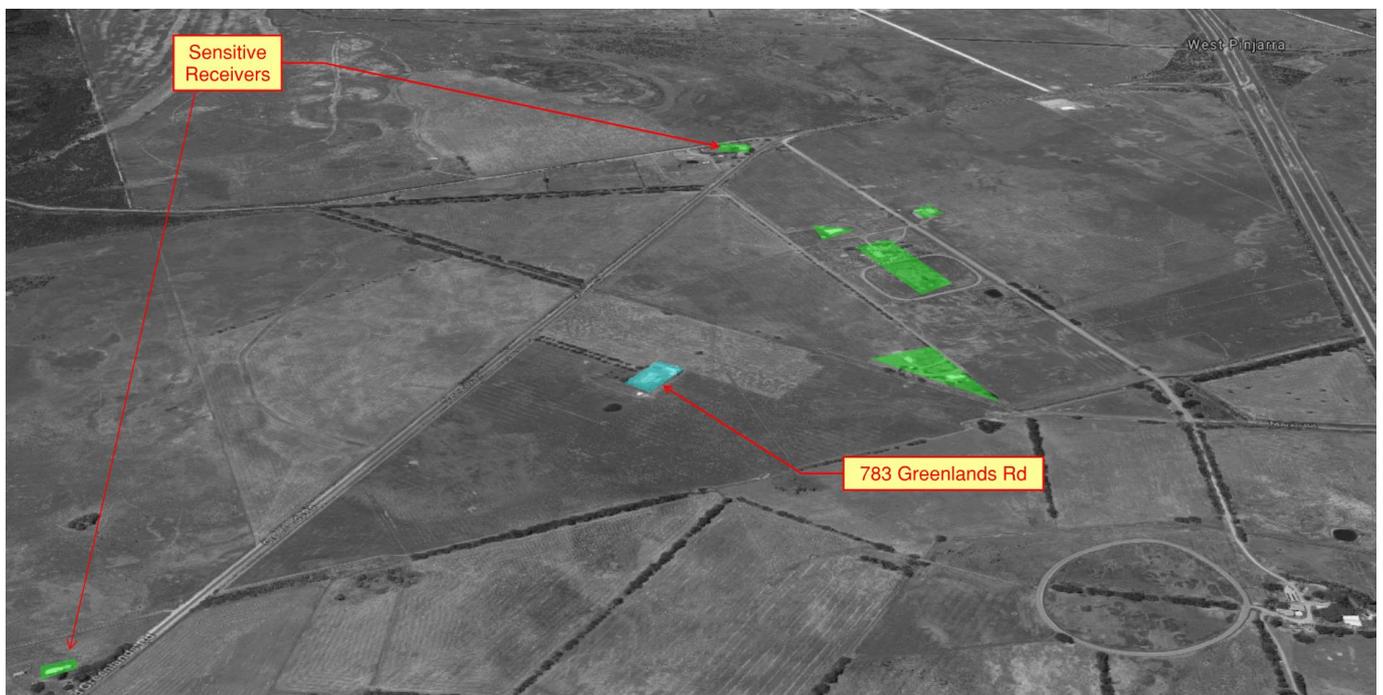
1. Description of the Site and Noise Sources

The identified noise-generating activities include:

- Scenario 1: Group of 4 dogs outdoors, 10-15 minutes in the morning and in the afternoon.
- Scenario 2: 12 dogs inside the kennel during the day.

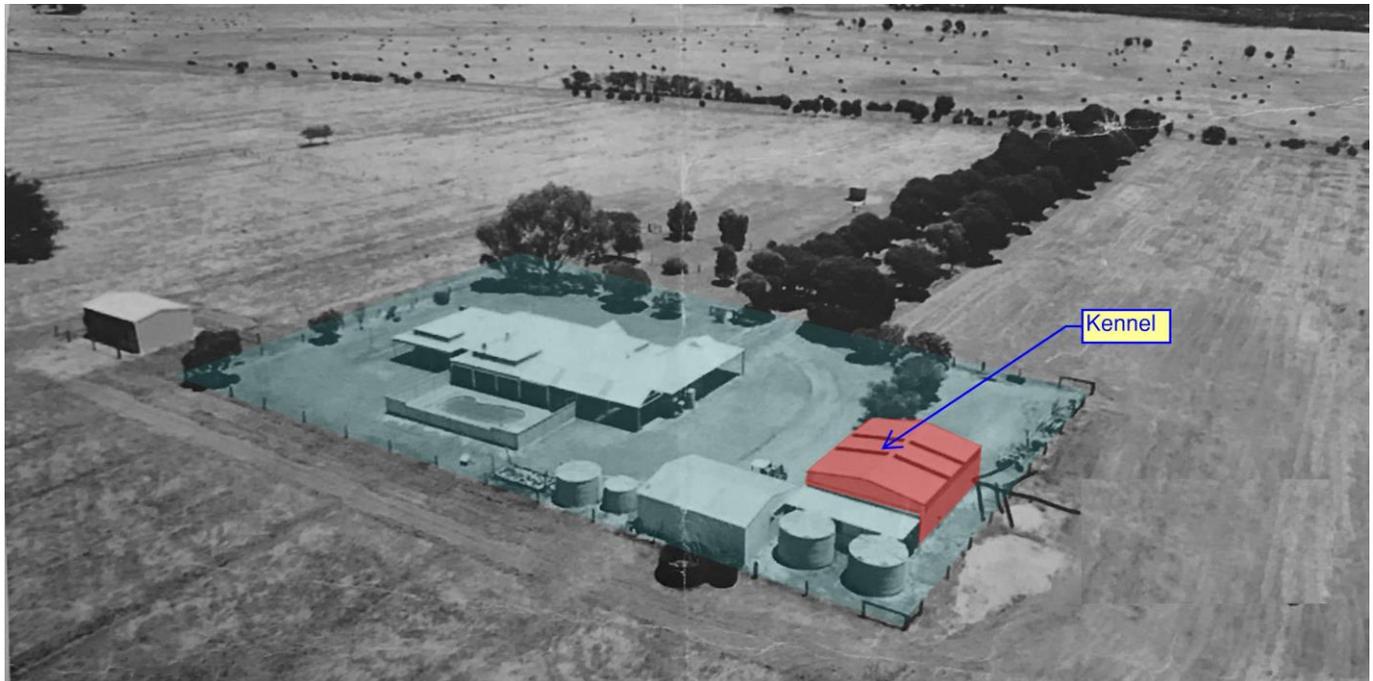
The activities are not expected to take place outside 7am and 7pm Monday to Saturday; therefore, always within daytime periods, for noise assessment purposes. **Figure 1** depicts the location of the site described and the nearest sensitive receivers.

Figure 1 Site and nearest sensitive receivers' locations



The nearest noise sensitive receiver (i.e. LOT 10 783 Greenlands Rd) is approximately 360 m away from the proposed kennel building. **Figure 2** indicates the relative location of the proposed kennel in reference to the site.

Figure 2 Location of proposed kennel



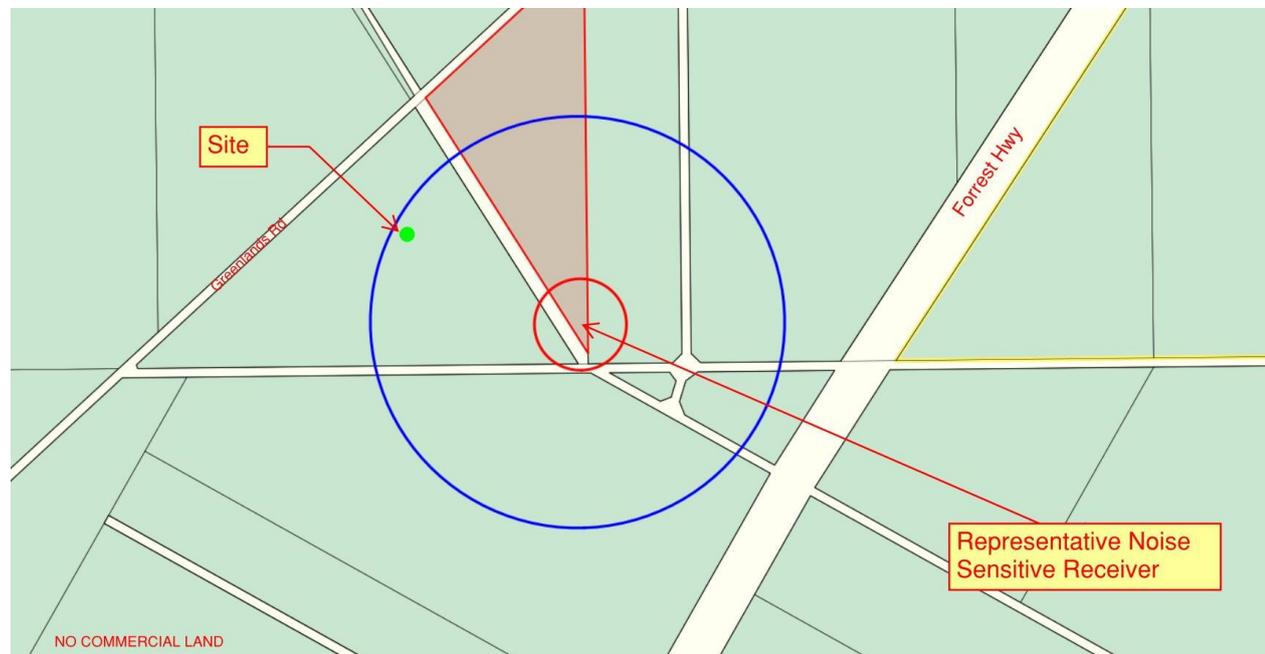
The kennel building is conservatively assumed as being built of colourbond 0.6mm steel without internal lining.

2. Noise Criteria: WA Environmental Protection (Noise) Regulations 1997

Noise emissions from commercial premises to nearby noise sensitive properties are covered by State noise policy in the form of the Western Australia Environmental Protection (Noise) Regulations of 1997 (EPNR). To achieve compliance with this Policy, noise levels at nearby residential areas are not to exceed defined limits. These limits are determined from consideration of prevailing background noise levels and 'influencing factors' that consider the level of commercial and industrial zoning in the locality.

The influencing factor considers zoning and road traffic volumes around the sensitive receiver of interest, within a 100 and 450 m radius. This is represented by the nearest resident at LOT 10 783 Greenlands Rd.

Figure 3 Influencing factor map



The resulting influencing factor is 0 dB as the surrounding land within 450m from the site is entirely rural (not commercial) and the nearest roads do not carry significant vehicle volumes. A summary of the EPNR noise criteria is provided in **Table 1**.

Table 1 WA EPNR Assigned Noise Levels

Type of premises receiving noise	Time of day	Assigned Level (dB)		
		LA10	LA1	LAmx
Noise sensitive premises: highly sensitive area	0700 to 1900 hours Monday to Saturday	45	55	65
	0900 to 1900 hours Sunday and public holidays	40	50	65
	1900 to 2200 hours All days	40	50	55
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays	35	45	55
Noise sensitive premises: any area other than highly sensitive area	All hours	60	75	80

A series of adjustments must be added to the noise source levels if noise received at the sensitive premises cannot reasonably be free of intrusive characteristics of tonality, modulation and impulsiveness, and the adjusted level must comply with the assigned level. Definition of impulsiveness can be read from Regulation 9(1) of the EPNR.

Table 2 summarises the adjustments, as defined by the Regulations.



Table 2 Noise character adjustments

Adjustment where noise emission is not music		
Where tonality is present	Where modulation is present	Where impulsiveness is present
+ 5 dB	+5 dB	+10 dB

From analysis of dog kennel noise data, it has been determined that tonality or impulsiveness do not apply and; therefore, adjustment for noise character does not apply in this case.

The worst-case scenario and the most at-risk noise criteria that apply at the nearest sensitive receiver are:

- **Scenario 1 (dogs outdoors):** L_{Amax} **65 dB** between 7am and 7pm, Monday to Saturday;
- **Scenario 2 (dogs indoors):** L_{A10} **45 dB** between 7am and 7pm, Monday to Saturday;
- No other activities are planned at other times.

3. Noise Levels and Predictions

Noise levels calculated at receivers have been predicted based on typical noise data for kennels. These are presented in **Table 3**. L_{max} and L_{10} levels are presented for one dog; however, in the assessment a total of 4 dogs have been assessed for outdoor operations (scenario 1) and 12 dogs (11 dB added to the sound power levels) have been considered for internal operations (scenario 2).

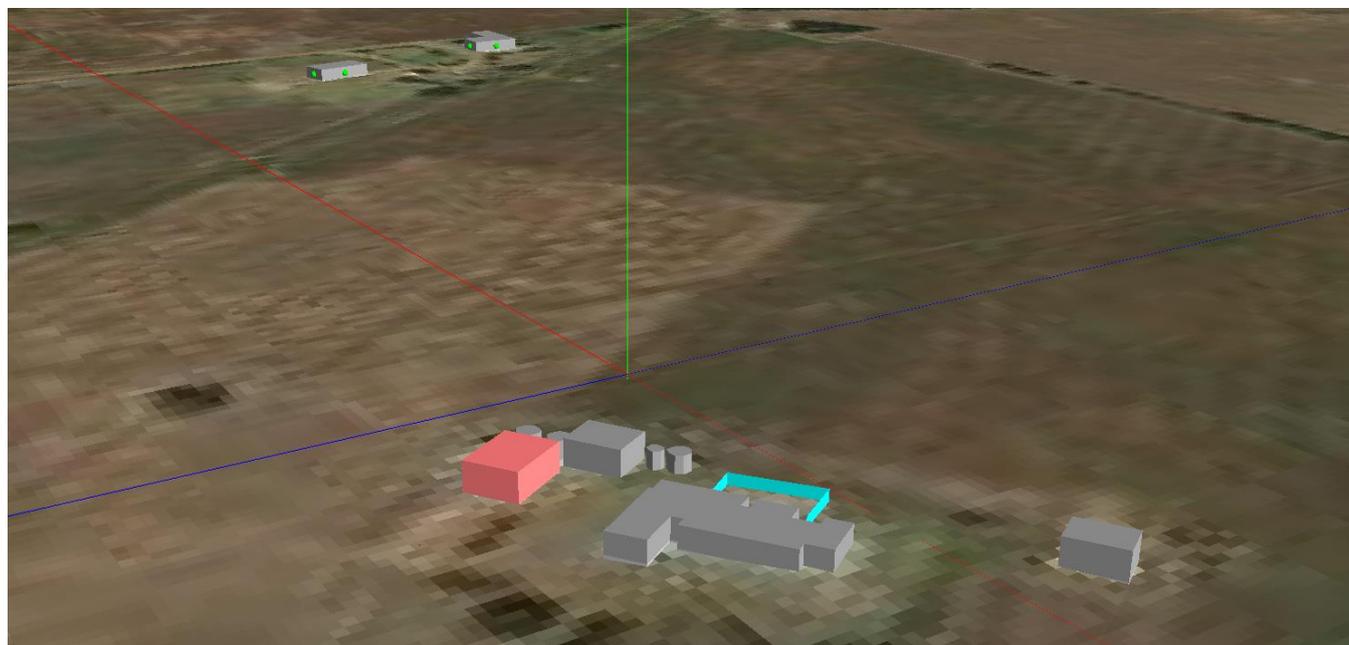
Table 3 Noise Source Levels (dB re 20µPa).

1/3 Octave Band Sound Level – dB																											
Metric	31.5 Hz	40 Hz	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1000 Hz	1250 Hz	1600 Hz	2000 Hz	2500 Hz	3150 Hz	4000 Hz	5000 Hz	6300 Hz	8000 Hz	10000 Hz	dBA
Dog Kennels - Average Sound Power Levels																											
L_{10}	51	53	57	60	61	63	64	66	67	74	85	91	92	92	93	93	91	87	80	76	73	73	70	64	61	51	100
L_{max}	62	66	68	72	75	76	78	79	81	82	89	100	106	107	107	108	108	106	102	95	91	88	88	85	79	76	115

Fences and building geometry have been captured from existing conditions of the site. Mainly sound absorption for grass (overall absorption $G=0.6$) has been considered in the outdoor propagation calculations.

After consideration of the above, predictions were carried out with SoundPLAN Essential V5.0 software including all the identified noise sources for the two scenarios described.

Figure 4 3D modelling of the proposed kennel and nearest sensitive receivers



Additional calculations were conducted after inspection of potential exceedances at the nearest sensitive receivers and it was determined that the mitigated scenario would reduce overall noise levels between 3-5 dB at the surrounding sensitive receivers. This scenario is described in the following section of recommendations.

The predicted noise levels (sound pressures) at the nearest receiver locations are presented in **Table 3**.

Table 3 Noise predictions at nearest affected receivers and assessment

Receiver	Metric	Daytime Assigned Noise Level dB	Predicted Noise Level *		Assessment
			Without mitigation	With Mitigation	Daytime
LOT 10 783 Greenlands Rd	LA10	45	46-48	41-43	Compliant with mitigation
	L _{Amax}	65	46-47	n/a	Compliant
Faunterloy Rd	LA10	45	45-48	40-43	Compliant with mitigation
	L _{Amax}	65	42-47	n/a	Compliant
891 Greenlands Rd	LA10	45	35-38	30-33	Compliant
	L _{Amax}	65	34-37	n/a	Compliant

Note: Levels in **RED** represent exceedance of the assigned noise level.

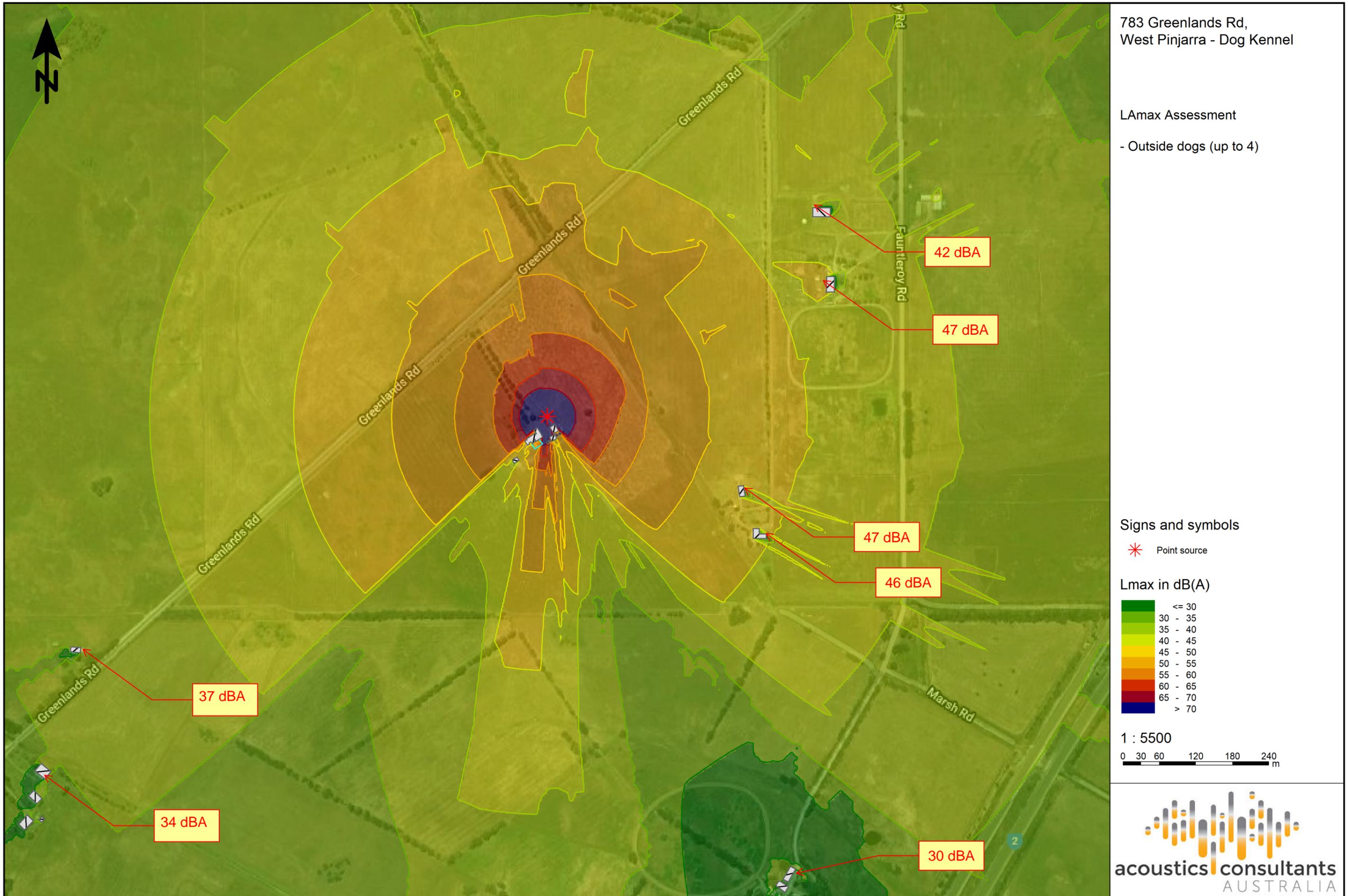
The **Appendix** shows the noise contours generated with the modelling scenario (Scenarios 1 and 2, without mitigation).

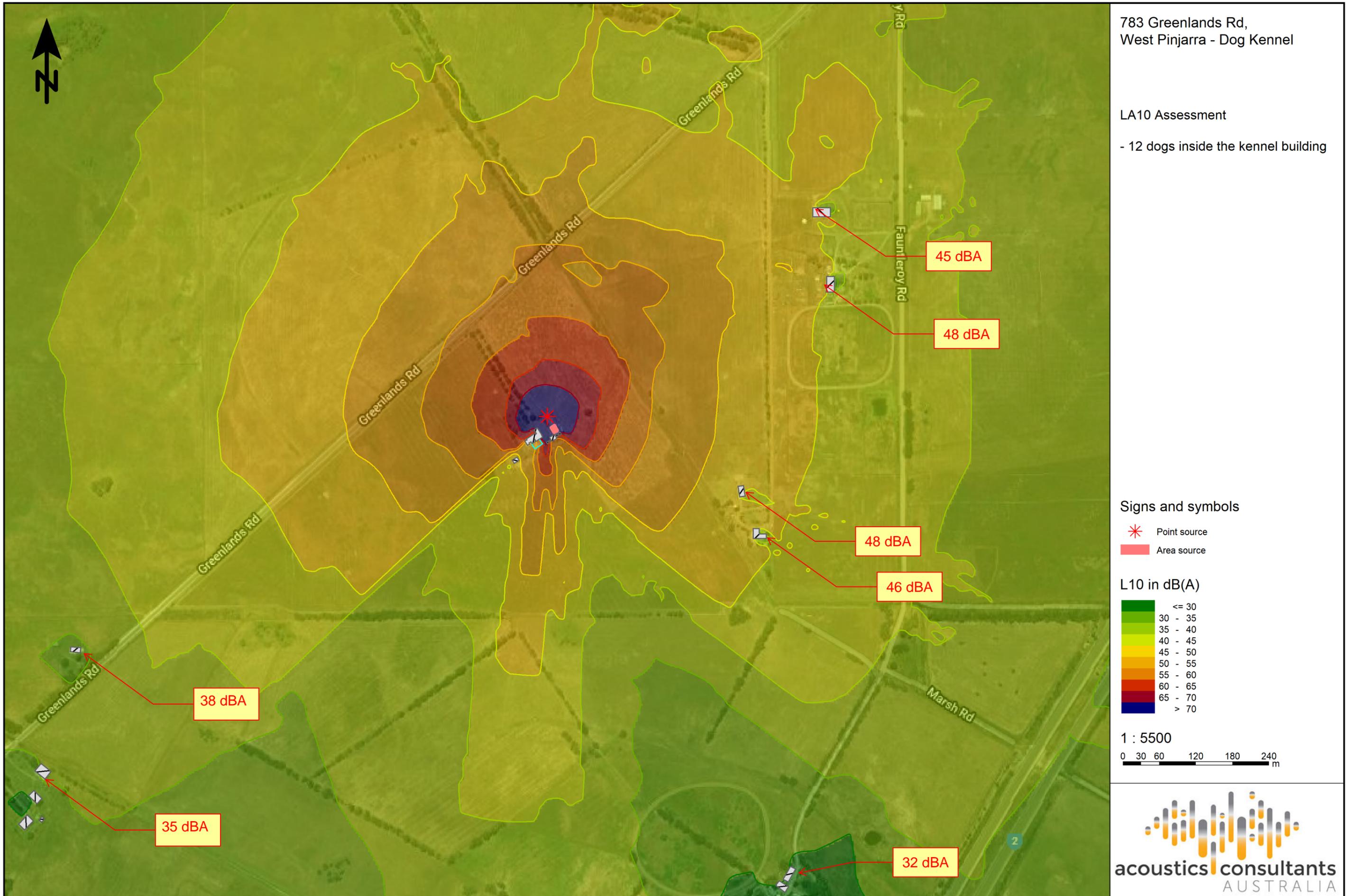


4. Discussion and Recommendations

Based on the results, additional noise mitigation measures would be required to achieve compliance of the EPNR criteria. That is:

1. Line the kennel building internally (walls and roof) with foil insulation with a minimum recommended density of 11 kg/m³ (e.g. Anticon 80 or similar).
2. If possible, maintain doors closed while dogs are kept indoors.
3. Treat all mechanical, hydraulic and electrical services penetrations to avoid significant openings within the building envelope. If the kennel is to be naturally ventilated (i.e. no mechanical ventilation); avoid horizontal openings, particularly overlooking east and south of the building. If possible, seal these openings and keep ventilation through the north and west facades.







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Peer Review

Lot 11 (783) Greenlands Road, West Pinjarra

Reference: 20075603-01.docx

Prepared for:
Shire of Murray

Report: 20075603-01.docx

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Date:	Rev	Description	Prepared By	Verified
23-Jul-20	0	Issued to Client	Terry George	Olivier Mallié

Table of Contents

1	INTRODUCTION _____	1
2	DESCRIPTION OF SITE AND NOISE SOURCES _____	1
3	NOISE CRITERIA _____	2
4	ACA NOISE LEVEL PREDICTIONS _____	3
5	LGA NOISE LEVEL PREDICTIONS _____	4
6	CONCLUSION _____	7

List of Tables

Table 3-1 Assigned Noise Levels _____	2
Table 3-2 Adjustments Where Characteristics Cannot Be Removed _____	3
Table 4-1 Assessed Noise Levels by ACA _____	4
Table 4-2 Adjusted Assessed Noise Levels by ACA _____	4
Table 5-1 Adjusted Assessed Noise Levels by LGA _____	5
Table 5-2 Adjusted Assessed Noise Levels by LGA to Possible New Residence _____	6

List of Figures

Figure 5-1 Possible Future Residence _____	6
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Appendices

A	Terminology
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1 INTRODUCTION

The Shire of Murray requested a peer review of an acoustic assessment undertaken of a proposed dog kennel for greyhounds, located at Lot 11 (783) Greenlands Road, West Pinjarra, being the subject of this report. Information provided were:

- Noise Assessment, Proposed Kennel, 783 Greenlands Rd, West Pinjarra; 22nd June 2020, Ref: ACA 10.00076-1L, Acoustics Consultants Australia (ACA);
- Email from Rhys Bloxside (Manager Planning Services, Shire of Murray) following a conversation from the applicant to clarify some queries.

The layout of this report follows that of the Noise Report undertaken by ACA.

Appendix A contains a description of some of the terminology used throughout this report.

2 DESCRIPTION OF SITE AND NOISE SOURCES

Scenario 1 is described as 4 dogs outdoors, 10-15 minutes in the morning and in the afternoon.

To clarify, it is understood there will be up to 12 dogs in total. These will be outside in groups of 4 for 10-15 minutes in the morning and 10-15 minutes in the afternoon. As such, the total outdoor activity time is expected to be 30-45 minutes in the morning and 30-45 minutes in the afternoon.

Scenario 2 is described as 12 dogs inside the kennel during the day.

Whilst the dogs will be inside during the day, other than whilst in the exercise yard, they will also be inside the kennels during the night.

It is stated the activities are not expected to take place outside 7am to 7pm Monday to Saturday and therefore the noise events will always be within the daytime periods. This is incorrect for the following reasons:

- The outdoor activity (Scenario 1) will also occur on Sundays and public holidays. Presumably this can be between 9am and 7pm, however it is noted the assigned noise levels on a Sunday and public holiday (refer *Section 3*) are 5 dB L_{A10} and 5 dB L_{A1} less than that of Mondays to Saturdays. The L_{Amax} assigned noise level is the same.
- Noise from inside the kennel (Scenario 2) will occur at all hours as the dogs remain on site throughout the day and night.

The locations of the site and nearest existing neighbouring receivers appear to be correctly identified.

It is stated the kennel building is conservatively assumed as being built of *Colorbond* 0.6mm steel without internal lining. Whilst such thickness is available in some products (e.g. Fielders), *Colorbond* is available in two thicknesses of either 0.42mm or 0.48mm thick. This could make a 1-2 dB increase in predicted noise levels.

3 NOISE CRITERIA

The influencing factor has been correctly determined as 0 dB. As such, *Table 3-1* provides the applicable assigned noise levels for the closest residence at Lot 10 Greenlands Road.

Table 3-1 Assigned Noise Levels

Premises Receiving Noise	Time Of Day	Assigned Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises: highly sensitive area ¹	0700 to 1900 hours Monday to Saturday (Day)	45	55	65
	0900 to 1900 hours Sunday and public holidays (Sunday)	40	50	65
	1900 to 2200 hours all days (Evening)	40	50	55
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays (Night)	35	45	55
Noise sensitive premises: any area other than highly sensitive area	All hours	60	75	80

1. *highly sensitive area* means that area (if any) of noise sensitive premises comprising –
 (a) a building, or a part of a building, on the premises that is used for a noise sensitive purpose; and
 (b) any other part of the premises within 15 metres of that building or that part of the building.

Regulation 7 defines the prescribed standard for noise emissions as follows:

“7. (1) Noise emitted from any premises or public place when received at other premises –

- (a) Must not cause or significantly contribute to, a level of noise which exceeds the assigned level in respect of noise received at premises of that kind; and
- (b) Must be free of –
 - i. tonality;
 - ii. impulsiveness; and
 - iii. modulation,

when assessed under regulation 9”

A “...noise emission is taken to significantly contribute to a level of noise if the noise emission ... exceeds a value which is 5 dB below the assigned level...”

Tonality, impulsiveness and modulation are defined in Regulation 9. Noise is to be taken to be free of these characteristics if:

- (a) The characteristics cannot be reasonably and practicably removed by techniques other than attenuating the overall level of noise emission; and
- (b) The noise emission complies with the standard prescribed under regulation 7 after the adjustments of *Table 3-2* are made to the noise emission as measured at the point of reception.

Table 3-2 Adjustments Where Characteristics Cannot Be Removed

Where Noise Emission is Not Music			Where Noise Emission is Music	
Tonality	Modulation	Impulsiveness	No Impulsiveness	Impulsiveness
+ 5 dB	+ 5 dB	+ 10 dB	+ 10 dB	+ 15 dB

Note: The above are cumulative to a maximum of 15dB.

It is noted the assigned noise levels are statistical levels and therefore the period over which they are determined is important. The Regulations define the Representative Assessment Period (RAP) as *a period of time of not less than 15 minutes, and not exceeding 4 hours*, which is determined by an *inspector or authorised person* to be appropriate for the assessment of a noise emission, having regard to the type and nature of the noise emission. An *inspector or authorised person* is a person appointed under Sections 87 & 88 of the *Environmental Protection Act 1986* and include Local Government Environmental Health Officers and Officers from the Department of Environment Regulation. Acoustic consultants or other environmental consultants are not appointed as an *inspector or authorised person*. Therefore, whilst this assessment is based on a 4 hour RAP, which is assumed to be appropriate given the nature of the operations, this is to be used for guidance only.

It is stated that no adjustments for intrusive characteristics are required. In our experience, we would typically apply a + 5 dB adjustment to L_{A10} and L_{A1} predicted noise levels for tonality and a + 10 dB adjustment to L_{Amax} predicted noise levels for impulsiveness. It is difficult to know whether or not these will be present in practice and as such, it is our opinion these should be assumed to be present.

The two scenarios developed are assessed against the daytime L_{Amax} and L_{A10} assigned noise levels. No consideration is given to night-time noise impacts or noise levels at a neighbouring boundary.

4 ACA NOISE LEVEL PREDICTIONS

The sound power levels for a single dog barking are provided as 100 dB L_{A10} and 115 dB L_{Amax} . It is then stated that for Scenario 2, the L_{A10} sound power level is increased to 111 dB L_{A10} , allowing for all 12 dogs. This approach is considered conservative as it is unlikely that all 12 dogs would bark for more than 10% of the time simultaneously.

For comparison, our own file data suggests sound power levels of 104 dB L_{A10} , 109 dB L_{A1} and 116 dB L_{Amax} .

Ground absorption used in the modelling of 0.6 is considered reasonable.

It is not stated which algorithms have been selected within the SoundPLAN modelling software or the temperature and wind conditions used.

Using the worst-case receiver (Lot 10), ACA provide predicted noise levels as shown in *Table 4-1* and compared to the daytime assigned noise levels as per their report.

Table 4-1 Assessed Noise Levels by ACA

Location	Scenario	Predicted Noise Level	Assigned Noise Level	Exceedance
Lot 10	1 - L _{Amax}	47 dB L _{Amax}	65 dB L _{Amax}	Complies
	2 - L _{A10}	48 dB L _{A10}	45 dB L _{A10}	+ 3 dB

As stated earlier, it is our opinion the assessment should have considered penalties for intrusive characteristics and the night-time assigned level for Scenario 2. As such, *Table 4-2* provides a revised assessment using the ACA predicted noise levels.

Table 4-2 Adjusted Assessed Noise Levels by ACA

Location	Scenario	Adjusted Predicted Noise Level	Assigned Noise Level	Exceedance
Lot 10	1 - L _{Amax}	57 dB L _{Amax}	65 dB L _{Amax}	Complies
	2 - L _{A10}	53 dB L _{A10}	35 dB L _{A10}	+ 18 dB

The noise mitigation proposed is stated as providing a 3-5 dB reduction, which was adequate according to *Table 4-1* but would be inadequate according to *Table 4-2*.

5 LGA NOISE LEVEL PREDICTIONS

As stated earlier, our sound power level is slightly different to what ACA has used which is not surprising as each consultant would have measured different dog kennels over the years and such a noise is not consistent. We also wouldn't increase the L_{A10} sound power level by + 11 dB, mostly because our determined sound power level would be based on measurements from a kennel. But we would apply + 5 dB tonality and + 10 dB impulsiveness adjustments where relevant to the predicted levels, as well as assess against Sunday daytime and night-time where relevant.

The use of L_{Amax}, L_{A1} or L_{A10} is dependent on how often the dogs bark, which is an unknown. Given the kennel is relatively small, we would assess as follows:

- L_{Amax} during the day whilst in the exercise area;
- L_{A10} during the day (including Sundays and public holidays) whilst in the kennel; and
- L_{A1} during the night.

Note that when dogs are in the outdoor area, any dog that is barking excessively may need to be exercised by itself and/or for shorter durations to avoid the L_{A1}/L_{A10} criteria being applicable.

Furthermore, when dogs are inside the kennel, they mostly begin barking during feeding times. As such, this is to be undertaken during the day only (Monday to Saturdays 7am to 7pm, Sundays and public holidays 9am to 7pm) to minimise the L_{A10} assessment during the night.

Based on our sound power levels and typical assessment methodology, *Table 5-1* presents our assessment of noise levels. Note that we have not undertaken our own modelling but simply used the differential of sound power level and predicted levels in the ACA report.

Table 5-1 Adjusted Assessed Noise Levels by LGA

Location	Scenario	Adjusted Predicted Noise Level	Assigned Noise Level	Exceedance
Lot 10	1 - L_{Amax} Day Exercise	58 dB L_{Amax}	65 dB L_{Amax}	Complies
	2 - L_{A1} Night Kennel	49 dB L_{A1}	45 dB L_{A1}	+ 4 dB
	3 - L_{A10} Day Kennel	46 dB L_{A10}	40 dB L_{A10}	+ 6 dB

From *Table 5-1*, the worst-case exceedance at a neighbouring residence is 6 dB. As discussed in *Section 2*, the assumed *Colorbond* thickness is greater than in reality and may result in a 1-2 dB increase in noise level and as such the exceedance may be 7-8 dB. Should sustained barking occur during the night, the exceedance would increase by 5 dB to 12-13 dB since the assigned level is 5 dB less.

The proposed noise mitigation is stated as providing a 3-5 dB reduction, which would therefore be inadequate.

One aspect not considered in the ACA assessment is noise levels at a neighbouring property boundary. From *Table 3-1*, the assigned levels are 60 dB L_{A10} , 75 dB L_{A1} and 80 dB L_{Amax} . From the ACA contour plots, the predicted levels are approximately 60 dB L_{Amax} and 60 dB L_{A10} . In comparison to our sound power levels, these would become predicted levels of 61 dB L_{Amax} and 53 dB L_{A10} , adjusted to 71 dB L_{Amax} and 58 dB L_{A10} with intrusive characteristic penalties. As such, compliance is expected on the boundary.

It is also understood that the owner of Lot 10 is considering construction of a residential dwelling, somewhere in the vicinity of the area shown on *Figure 5-1*. The existing assessment locations are around 350 metres from the kennel, whereas the possible new residential location could be around half this distance, resulting in an increase of around 6 dB as shown in *Table 5-2*.



Figure 5-2 Possible Future Residence

Table 5-2 Adjusted Assessed Noise Levels by LGA to Possible New Residence

Location	Scenario	Adjusted Predicted Noise Level	Assigned Noise Level	Exceedance
Lot 10 New	1 - L _{Amax} Day Exercise	64 dB L _{Amax}	65 dB L _{Amax}	Complies
	2 - L _{A1} Night Kennel	54 dB L _{A1}	45 dB L _{A1}	+ 9 dB
	3 - L _{A10} Day Kennel	51 dB L _{A10}	40 dB L _{A10}	+ 11 dB

Noise levels from within the dog kennel can generally be controlled by increasing the noise attenuation of the building, taking into account controlling any openings or penetrations. The results of Table 5-3 also show that compliance for exercise run area is achieved but is marginal. On this basis, it may be better to locate the runs further southwest to maximise the separation distance.

With the location of the Lot 10 residence, or any other future residence being unknown, it must be recognised by the applicant that the onus of controlling noise emissions is on the owner of the premises making or allowing the noise to be made, even if the residence is constructed after the kennel is in operation. As such, the construction of any new residence does become a risk to the applicant.

6 CONCLUSION

Our review indicates that the exceedances of dog barking noise may be higher than that reported in the ACA report. Our review however does indicate that compliance in the exercise yard is calculated, with appropriate management. As such, to achieve overall compliance, the recommended noise mitigation to the shed would need to be increased in our opinion.

Based on the noise reduction from the proposed kennel presented in the ACA report and our methodology, the recommended treatments/management would be:

- Feeding time for the dogs shall be limited to between the hours of 7am to 7pm Mondays to Saturdays and 9am to 7pm Sundays and public holidays. Other activities such as dog exercise, pick up and drop off of dogs, cleaning the kennels etc shall also be limited to these times;
- As the property dwelling is in close proximity to the kennel, should a particular dog be heard to be excessively barking during the night, that dog may need to be settled and/or taken inside the property residence to avoid disturbance to neighbours;
- Where a dog being exercised barks for an extended period of time, the dog will need to be returned to the kennel and exercised by itself under control of the operator;
- Consider relocation of the exercise runs to the southwest to maximise the distance to any neighbour;
- The Shed construction is to be improved, for instance:
 - Install steel studwork to the inside of perimeter walls. Place insulation between studs such as 75mm thick, 14kg/m³ glasswool. Line inside of wall with 13mm thick Impact resistant plasterboard or 6mm fibre cement sheet;
 - Install 13mm plasterboard ceiling or equivalent with insulation above;
 - Entry doors to be solid timber core fitted with perimeter acoustic seals and automatic door closers;
 - Any penetrations/openings in the building envelope to be acoustically treated.

The above advice is considered indicative only since we are reliant on the calculations undertaken by ACA, being the consultant for the applicant.

The analysis in both the ACA report and this report refers to compliance with the Noise Regulations, which are considered to reflect noise levels that the majority of persons would find satisfactory. There can be instances where compliance with the Noise Regulations can be achieved, however a person may still find the noise annoying. For instance in such a rural area, background noise may be relatively low (25-30 dB(A)) such that even if the assigned levels are met, dog barking may still be audible and considered annoying. This cannot be stated definitively one way or the other, since the annoyance is a subjective response.

Appendix A

Terminology

The following is an explanation of the terminology used throughout this report.

Decibel (dB)

The decibel is the unit that describes the sound pressure and sound power levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

A-Weighting

An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as L_A dB.

Sound Power Level (L_w)

Under normal conditions, a given sound source will radiate the same amount of energy, irrespective of its surroundings, being the sound power level. This is similar to a 1kW electric heater always radiating 1kW of heat. The sound power level of a noise source cannot be directly measured using a sound level meter but is calculated based on measured sound pressure levels at known distances. Noise modelling incorporates source sound power levels as part of the input data.

Sound Pressure Level (L_p)

The sound pressure level of a noise source is dependent upon its surroundings, being influenced by distance, ground absorption, topography, meteorological conditions etc and is what the human ear actually hears. Using the electric heater analogy above, the heat will vary depending upon where the heater is located, just as the sound pressure level will vary depending on the surroundings. Noise modelling predicts the sound pressure level from the sound power levels taking into account ground absorption, barrier effects, distance etc.

L_{ASlow}

This is the noise level in decibels, obtained using the A frequency weighting and the S (Slow) time weighting as specified in IEC 61672-1:2002. Unless assessing modulation, all measurements use the slow time weighting characteristic.

L_{AFast}

This is the noise level in decibels, obtained using the A frequency weighting and the F (Fast) time weighting as specified in IEC 61672-1:2002. This is used when assessing the presence of modulation only.

L_{APeak}

This is the greatest absolute instantaneous sound pressure in decibels using the A frequency weighting as specified in IEC 61672-1:2002.

L_{Amax}

An L_{Amax} level is the maximum A-weighted noise level during a particular measurement.

L_{A1}

An L_{A1} level is the A-weighted noise level which is exceeded for one percent of the measurement period and is considered to represent the average of the maximum noise levels measured.

L_{A10}

An L_{A10} level is the A-weighted noise level which is exceeded for 10 percent of the measurement period and is considered to represent the "intrusive" noise level.

L_{Aeq}

The equivalent steady state A-weighted sound level (“equal energy”) in decibels which, in a specified time period, contains the same acoustic energy as the time-varying level during the same period. It is considered to represent the “average” noise level.

L_{A90}

An L_{A90} level is the A-weighted noise level which is exceeded for 90 percent of the measurement period and is considered to represent the “background” noise level.

One-Third-Octave Band

Means a band of frequencies spanning one-third of an octave and having a centre frequency between 25 Hz and 20 000 Hz inclusive.

L_{Amax} assigned level

Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded at any time.

L_{A1} assigned level

Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded for more than 1% of the representative assessment period.

L_{A10} assigned level

Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded for more than 10% of the representative assessment period.

Tonal Noise

A tonal noise source can be described as a source that has a distinctive noise emission in one or more frequencies. An example would be whining or droning. The quantitative definition of tonality is:

the presence in the noise emission of tonal characteristics where the difference between -

- (a) the A-weighted sound pressure level in any one-third octave band; and
- (b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A\ Slow}$ levels.

This is relatively common in most noise sources.

Modulating Noise

A modulating source is regular, cyclic and audible and is present for at least 10% of the measurement period. The quantitative definition of modulation is:

a variation in the emission of noise that —

- (a) is more than 3 dB $L_{A\ Fast}$ or is more than 3 dB $L_{A\ Fast}$ in any one-third octave band;
- (b) is present for at least 10% of the representative.

Impulsive Noise

An impulsive noise source has a short-term banging, clunking or explosive sound. The quantitative definition of impulsiveness is:

a variation in the emission of a noise where the difference between $L_{A\ peak}$ and $L_{A\ Max\ slow}$ is more than 15 dB when determined for a single representative event;

Major Road

Is a road with an estimated average daily traffic count of more than 15,000 vehicles.

Secondary / Minor Road

Is a road with an estimated average daily traffic count of between 6,000 and 15,000 vehicles.

Influencing Factor (IF)

$$= \frac{1}{10} (\% \text{ Type A}_{100} + \% \text{ Type A}_{450}) + \frac{1}{20} (\% \text{ Type B}_{100} + \% \text{ Type B}_{450})$$

where :

% Type A₁₀₀ = the percentage of industrial land within
a 100m radius of the premises receiving the noise

% Type A₄₅₀ = the percentage of industrial land within
a 450m radius of the premises receiving the noise

% Type B₁₀₀ = the percentage of commercial land within
a 100m radius of the premises receiving the noise

% Type B₄₅₀ = the percentage of commercial land within
a 450m radius of the premises receiving the noise

+ Traffic Factor (maximum of 6 dB)

= 2 for each secondary road within 100m

= 2 for each major road within 450m

= 6 for each major road within 100m

Representative Assessment Period

Means a period of time not less than 15 minutes, and not exceeding four hours, determined by an inspector or authorised person to be appropriate for the assessment of a noise emission, having regard to the type and nature of the noise emission.

Background Noise

Background noise or residual noise is the noise level from sources other than the source of concern. When measuring environmental noise, residual sound is often a problem. One reason is that regulations often require that the noise from different types of sources be dealt with separately. This separation, e.g. of traffic noise from industrial noise, is often difficult to accomplish in practice. Another reason is that the measurements are normally carried out outdoors. Wind-induced noise, directly on the microphone and indirectly on trees, buildings, etc., may also affect the result. The character of these noise sources can make it difficult or even impossible to carry out any corrections.

Ambient Noise

Means the level of noise from all sources, including background noise from near and far and the source of interest.

Specific Noise

Relates to the component of the ambient noise that is of interest. This can be referred to as the noise of concern or the noise of interest.

Peak Component Particle Velocity (PCPV)

The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and in one of the three orthogonal directions (x, y or z) measured as a peak response. Peak velocity is normally used for the assessment of structural damage from vibration.

Peak Particle Velocity (PPV)

The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and is the vector sum of the PCPV for the x, y and z directions measured as a peak response. Peak velocity is normally used for the assessment of structural damage from vibration.

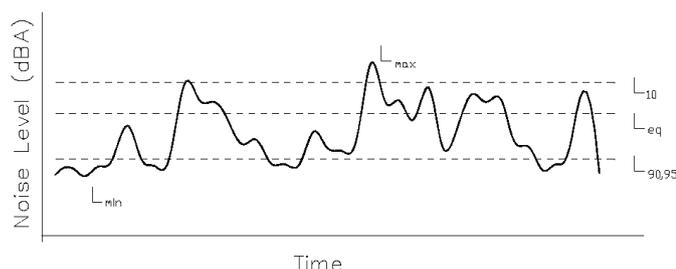
RMS Component Particle Velocity (PCPV)

The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and in one of the three orthogonal directions (x, y or z) measured as a root mean square (rms) response. RMS velocity is normally used for the assessment of human annoyance from vibration.

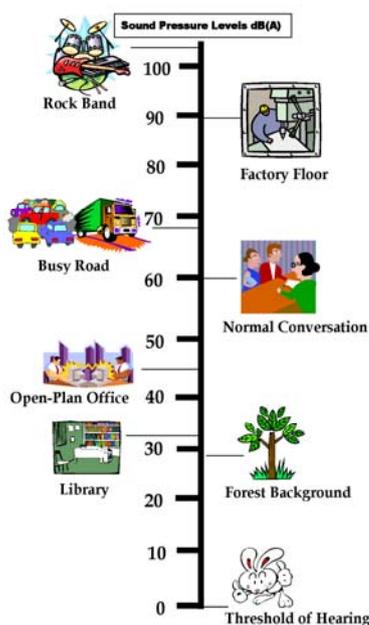
Peak Particle Velocity (PPV)

The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and is the vector sum of the PCPV for the x, y and z directions measured as a root mean square (rms) response. RMS velocity is normally used for the assessment of human annoyance from vibration.

Chart of Noise Level Descriptors



Typical Noise Levels





File Ref: _____
Officer: _____

TO: Chief Executive Officer
Post to: PO Box 21, Pinjarra WA 6208
Email to: mailbag@murray.wa.gov.au

Submission

Proposed Kennels
Lot 11 (783) Greenlands Road, West Pinjarra

Submissions required by 4.30pm, 24 July 2020

Before completing this form, please refer to privacy statement at bottom of page

Name: PAUL & NICOLA WILSON Email: [Redacted]
Postal Address: [Redacted] Phone: [Redacted]

Subject of Submission (State how your interests are affected, whether as a private citizen, on behalf of a company or other organisation, or as an owner or occupier of property)

Noise levels & de-valuation of property.

Address of Property Affected:

696 GREENLANDS ROAD NIRIMBA.

Submission: (Give in full your comments and any arguments supporting your comments - continue on additional sheets if necessary)

We are concerned of the noise level that may be generated by the proposed greyhound kennels.
We understand they will be housed inside of a shed by when feeding and exercising thus level will increase.
Also once there is one kennel allowed in the area it will give others a reason to possibly move here too. There is a set area in the region for kennels and I think that is where it should go.

Signature: [Redacted] Date: 15.7.2020.

PRIVACY STATEMENT
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File Ref: _____
Officer: _____

TO: Chief Executive Officer
Post to: PO Box 21, Pinjarra WA 6208
Email to: mailbag@murray.wa.gov.au

Submission

Proposed Kennels
Lot 11 (783) Greenlands Road, West Pinjarra

Submissions required by 4.30pm, 24 July 2020

Before completing this form, please refer to privacy statement at bottom of page

Name: Steven & Linda Jelf Email: _____
Postal Address: _____ Phone: _____

Subject of Submission (State how your interests are affected, whether as a private citizen, on behalf of a company or other organisation, or as an owner or occupier of property)

We are the owners & occupiers of lot location 208 Murray Shire

Address of Property Affected:

39 Fountleroy Rd Greenlands Rd 100mtrs from proposed Greyhound site

Submission: (Give in full your comments and any arguments supporting your comments - continue on additional sheets if necessary)

- 1/ Very concerned on application seems to be very fabricated
- 2/ Very misleading photo of property show no surrounding ~~properties~~ properties homesteads
- 3/ Noise levels only in shed area not where dogs are going to be.
- 4/ Surrounding properties devaluation
- 5/ Visual impact on our families that visit
- 6/ Very worried proposed property will end up like greyhound establishment West Pinjarra Greenlands Rd. Disgusting to say the least. 7/ Sheep having lambs Cows calving Manes foaling all around this property they will abort their young worrying about greyhounds. Many more problems ahead

Signature: _____ Date: 12-7-2020

PRIVACY STATEMENT

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Rhys Bloxsidge

From: heather nancarrow <heathernancarrow@bigpond.com>
Sent: Sunday, 19 July 2020 9:27 AM
To: Shire of Murray
Subject: re: Development Application for Dog Kennels

RE: SUBMISSION FOR DEVELOPMENT APPLICATION FOR DOG KENNELS – LOT 11 783 GREENLANDS RD, WEST PINJARRA WA

What is the difference between horse facilities (stables) with 6+ horses without effluent facilities and dog kennels with 6-12 dogs, enclosed in an insulated-airconditioned shed with up-to-date effluent facilities and a fenced exercise area, not a full circle training track like horses have to have. Remembering the size of this dog facility is controlled by the Shire, therefore cannot be expanded without Shire permission, needless to say I have never complained about the horses being stabled, trained and aggristed near me but I would wonder whether they have all the necessary health requirements and permission ie effluent disposals and exercise areas as required in this proposal for dogs and it should be pointed out their effect on the ground and groundwater is far more detrimental by horses than dogs.

Due to the small size of these Lots in this area and lack of ability to sub-divide they tend towards being perfect sites to run small scale rural lifestyle blocks, as broadacre farming is becoming a non-viable option.

If councillors have any concerns I would hope they can find the time to view the proposed site location and its intended facility.

I therefore believe that there is no justified reason for this proposal not to be SUPPORTED by the Shire of Murray.

Noel Nancarrow OAM

20 July 2020



File Ref: _____
Officer: _____

TO: Chief Executive Officer
Post to: PO Box 21, Pinjarra WA 6208
Email to: mailbag@murray.wa.gov.au

Submission

Proposed Kennels
Lot 11 (783) Greenlands Road, West Pinjarra

Submissions required by 4.30pm, 24 July 2020

Before completing this form, please refer to privacy statement at bottom of page

Name: WENDY SOFIELD Email: _____
Postal Address: _____ Phone: _____

Subject of Submission (State how your interests are affected, whether as a private citizen, on behalf of a company or other organisation, or as an owner or occupier of property)

OWNER OF

Address of Property Affected:

LOT 10 783 GREENLANDS RD. W/ PINJARRA

Submission: (Give in full your comments and any arguments supporting your comments - continue on additional sheets if necessary)

WE STRONGLY OPPOSE THIS DEVELOPMENT
WE HAVE ENCLOSED A COPY OF OUR SUBMISSION
OUTLINING OUR CONCERNS.
ALLOWING THIS DEVELOPMENT TO GO AHEAD OPENS
A PATHWAY FOR OTHERS TO PURSUE AND MAKES
THESE ISSUES EVEN GREATER.
WE ASK THE THE PLANNING DEPARTMENT AND EACH
COUNCILLOR TO PLEASE READ THE TRANSCRIPT IN
ITS ENTIRETY WITH FAIRNESS AND TRANSPARENCY,

Signature: _____ Date: 18/7/2020

PRIVACY STATEMENT

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14 July 2020

Mr Rhys Bloxsidge
Shire of Murray

Dear Mr Bloxsidge

**RE: Application for Development Approval of
GREYHOUND KENNELS at LOT 11 783
GREENLANDS RD. WEST PINJARRA**

We strongly oppose the proposed greyhound kennels for the following reasons:

1. LAND DEVALUATION OF PROPERTIES IN CLOSE PROXIMITY
2. NOISE POLLUTION
3. ENVIRONMENTAL ISSUES
4. MORAL ISSUES

Land Devaluation of Properties in Close Proximity

This proposed development is very close to the eastern boundary of LOT 10 783 Greenlands Rd. Within the next twelve months, the owners of LOT 10 783 have planned to submit housing plans to the council for the area directly opposite the proposed kennels. The noise and visual impact of many dogs for a commercial venture will be distressing and detrimental to the health and wellbeing of the occupants and other close neighbours. Any future plans for development would be compromised and more properties devalued. Pinjarra is moving forward with more people residing in the community. All future development needs to be considered. Population growth is already occurring on the north and east side of LOT 11 783.

The site plan sent by the Shire of Murray conveys that the proposed exercise yards are 111 metres from the LOT 10 783 boundary, and the proposed kennels are 149 metres from the LOT 10 783 boundary. The acoustics report outlines that the nearest noise sensitive receiver on LOT 10 783 is approximately 360 metres from the proposed buildings. It is very possible that future dwellings will be put on this lot.

LOT 11 783 is a large holding. The nearest neighbours on the west side are much further away with larger open paddocks between dwellings. The photograph shown in the report is not a true indication of the landscape. There is already a

for greyhounds. So, why is this development being encouraged when one establishment exists? It is clear that a development such as the one proposed will significantly devalue all neighbouring properties and destroy the tranquillity of the area.

Noise Pollution

The Acoustics Consultants have defined that twelve dogs will be housed in the proposed kennels. They propose to exercise the twelve dogs in groups of four each morning and afternoon for 10 to 15 minutes. Activities are proposed to take place between 7am and 7pm Monday to Saturday. Noise levels after these hours on Monday Saturday, and on Sundays, have been excluded from the report. Even with an insulated shed it is unrealistic to say that the noise from twelve large dogs would not penetrate the surrounding area. The recommendation of the consultants is that the kennel doors be closed whilst the dogs are kept indoors. They go on to say that they intend to keep the kennel doors open to a minimum at other times. It is unreasonable to assume that this arrangement will be vigilantly upheld.

Sheds get very hot in summer, even with insulation. We insist on knowing whether the kennels will be airconditioned. We fear that if not, the dogs may become severely uncomfortable and create more noise than what is depicted on the acoustics charts.

This is a quiet rural area with horses, cattle and sheep in surrounding paddocks including those in LOT 10 783. The noise of yelping dogs running around will have a detrimental effect on these animals' health and wellbeing, especially their breeding stock.

People live in rural areas for peace and quiet and the relaxing environment. This proposed development clearly will not uphold these qualities.

Environmental Issues

Surrounding our properties are very deep drains flowing into the peel estuary. We insist on knowing what measures will be taken to prevent effluent and cleaning chemicals from being leached into the surrounding countryside and ultimately into the estuary. This is assuming that the kennels will be kept clean. Is the shire going to spend ratepayer funds to investigate on a regular basis that these protocols are in place and upheld?

Moral Issues

The planned kennels indicate as being within the guidelines of

In 2015 the ABC Four Corners programme explosively revealed that the greyhound racing industry itself admitted to killing up to 17 000 healthy dogs each year, including 7000 pups and young dogs who never even made it to the track. Since this report, Animals Australia Organisation have stated that many unwanted young greyhounds continue to be killed. On track injuries and deaths also continued at rates that have not significantly changed over the past five years. Animals Australia Organisation and Animal Liberation Queensland have revealed that live baiting is a routine and is an accepted training method which is still used even though it is a cruel and illegal practice.

The social cost of problem gambling is huge and can lead to irresponsible behaviour. We absolutely do not want this brought into our area. Unfortunately, it seems that financial considerations are placed ahead of the welfare of animals. Greyhounds are not only athletes. They also have gentle and mature natures, and like all dogs, they enjoy human company. Housing the greyhounds in the proposed kennels does not appear to have any consideration for their wellbeing.

We acknowledge that the shire has the role of planning and looking after our community, not the role of defining rules and regulations of the greyhound industry. However, this does not mean the important issues we have raised should be ignored or accepted by the shire.

This submission is from the owners of the following properties –

- WENDY SOFIELD - [REDACTED]
- Russell EDDY [REDACTED]
- Steven Jelf [REDACTED]
- Linda Jelf [REDACTED]
- PAUL WILSON [REDACTED]
- NICOLA WILSON [REDACTED]
- Angelo Domarte [REDACTED]

MICHAEL HOWIE AD [REDACTED]

[REDACTED]



File Ref: _____
Officer: _____

TO: Chief Executive Officer
Post to: PO Box 21, Pinjarra WA 6208
Email to: mailbag@murray.wa.gov.au

Submission

Proposed Kennels
Lot 11 (783) Greenlands Road, West Pinjarra

Submissions required by 4.30pm, 24 July 2020

Before completing this form, please refer to privacy statement at bottom of page

Name: ROBERT GARDINER Email: [REDACTED]
Postal Address: 62 MARSHALL AVE PINSARRA Phone: [REDACTED]

Subject of Submission (State how your interests are affected, whether as a private citizen, on behalf of a company or other organisation, or as an owner or occupier of property)

OWNER OF AFFECTED PROPERTY

Address of Property Affected:

73 THOMPSON RD PINSARRA

Submission: (Give in full your comments and any arguments supporting your comments - continue on additional sheets if necessary)

WEST PINSARRA IS PRISTINE FARMING COUNTRY SUITABLE FOR CATTLE, SHEEP & HORSES NOT DOGS. WE HAVE BEAUTIFUL STILL DAYS + NIGHTS WHEN YOU COULD HEAR A PIN DROP. I DO NOT WANT TO LISTEN TO DOGS BARKING DAY + NIGHT, NOR DO I WANT OUR AREA SMELLING LIKE DOG KENNELS OFTEN DO.

I DO NOT SUPPORT ANY KENNELS IN THE WEST PINSARRA AREA

Signature: [REDACTED] Date: 24.7.2020

PRIVACY STATEMENT

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and Development Services

File Ref: _____
Officer: _____

TO: Chief Executive Officer
Post to: PO Box 21, Pinjarra WA 6208
Email to: mailbag@murray.wa.gov.au

Submission

Proposed Kennels
Lot 11 (783) Greenlands Road, West Pinjarra

Submissions required by 4.30pm, 24 July 2020

Before completing this form, please refer to privacy statement at bottom of page

Name: John Sutton Email: [Redacted]

Postal Address: [Redacted] Phone: [Redacted]

Subject of Submission (State how your interests are affected, whether as a private citizen, on behalf of a company or other organisation, or as an owner or occupier of property)

OWNER - PROPERTY DEVELOPER

Address of Property Affected:

LOT 13 AND LOT 14 GREENLANDS ROAD

Submission: (Give in full your comments and any arguments supporting your comments - continue on additional sheets if necessary)

PROPOSED KENNELS NOT CONSISTENT WITH RURAL RESIDENTIAL SUBDIVISION PLANS AND APPROVED FOR LOT 13, LOT 14, LOT 201, LOT 203, LOT 205, LOT 215 AND LOT 216 GREENLANDS ROAD.

SEE SUBMISSION GUID. PLAN ATTACHED

Signature: [Redacted]

Date: 16TH JULY 2020

PRIVACY STATEMENT

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Shire of Murray

Public Health Plan

2021 – 2025

DRAFT

About this document

This document has been prepared by the Shire of Murray in collaboration with South Metropolitan Health Service. This document provides a high-level overview of the strategies that the Shire of Murray can consider to increase health and wellbeing in the community.

Contents

Message from the Shire President	4
Integrated Planning & Reporting Framework.....	5
Introduction.....	6
Vision.....	6
Guiding Principles	6
Public Health Plan	8
About the plan.....	8
Developing the plan	8
Managing the plan.....	9
Link to Strategic Community Plan	9
Alignment to other plans	10
Health Profile.....	11
Snapshot.....	11
Prevalence of lifestyle and psychosocial behaviours and risk factors for Shire of Murray	11
Demographics.....	12
Socio-economic status	12
Health & Wellbeing Data.....	14
Chronic diseases.....	14
Lifestyle and physiological risk factors.....	14
Curbing the rise in overweight and obesity	14
Healthy eating.....	14
A more active Murray.....	14
Making smoking history.....	15
Reducing harmful levels of alcohol use	15
Preventing injury and promoting safer communities.....	Error! Bookmark not defined.
Physiological risk factors.....	17
Blood pressure.....	17
Cholesterol level.....	17
Body weight.....	17
Obesity	17
Mental health.....	19
Psychological distress	19
Feeling lack of control.....	19
Injury.....	20

Notifiable diseases 22

Key Focus Areas 23

 Key Focus Area 1: Healthy People & Community 24

 Key Focus Area 2: Healthy Places & Spaces 26

 Key Focus Area 3: Healthy Partnerships 27

Resourcing the Plan 28

 Aligning services Error! Bookmark not defined.

Measuring Success 28

Evaluation 29

DRAFT

Message from the Shire President

Local Governments have the ability to influence and provide resources that have the potential to impact on the health of its community. The Shire of Murray has been working for a number of years on initiatives that improve the overall health of its community. Overall health is represented by factors such as physical health, mental health and lifestyle.

Opportunities that can be facilitated by the local government can provide benefits to the community as a whole, groups and individuals. Our community has expressed the high value it places on the provision of infrastructure and services that support its health.

As part of its commitment to the health and wellbeing of its community, I am pleased to present the Shire of Murray Public Health Plan. Council has been working for a number of years to implement strategies that deliver quality outcomes for our community, including strategies for community health and wellbeing.

The Public Health Plan has been designed to focus on measures that enhance the health of residents, in a holistic manner. By enacting the proposed action plan that harnesses the strength of our people, local places and partnerships, I am confident the Shire of Murray will have a positive impact on community health, both now and in the future.

David Bolt
Shire of Murray President

Integrated Planning & Reporting Framework

In 2010, the Integrated Planning and Reporting (IPR) Framework and Guidelines were introduced in Western Australia (WA) as part of the State Government's Local Government Reform Program. All local governments were required to have their first suite of IPR documents in place by 1 July 2013.

This updated IPR Framework and Guidelines reflects current local government IPR practice and the lessons learned by the local government sector since 2010.

The Public Health Plan is an element of the IPR Framework.

The elements of Integrated Planning & Reporting Framework are illustrated below:

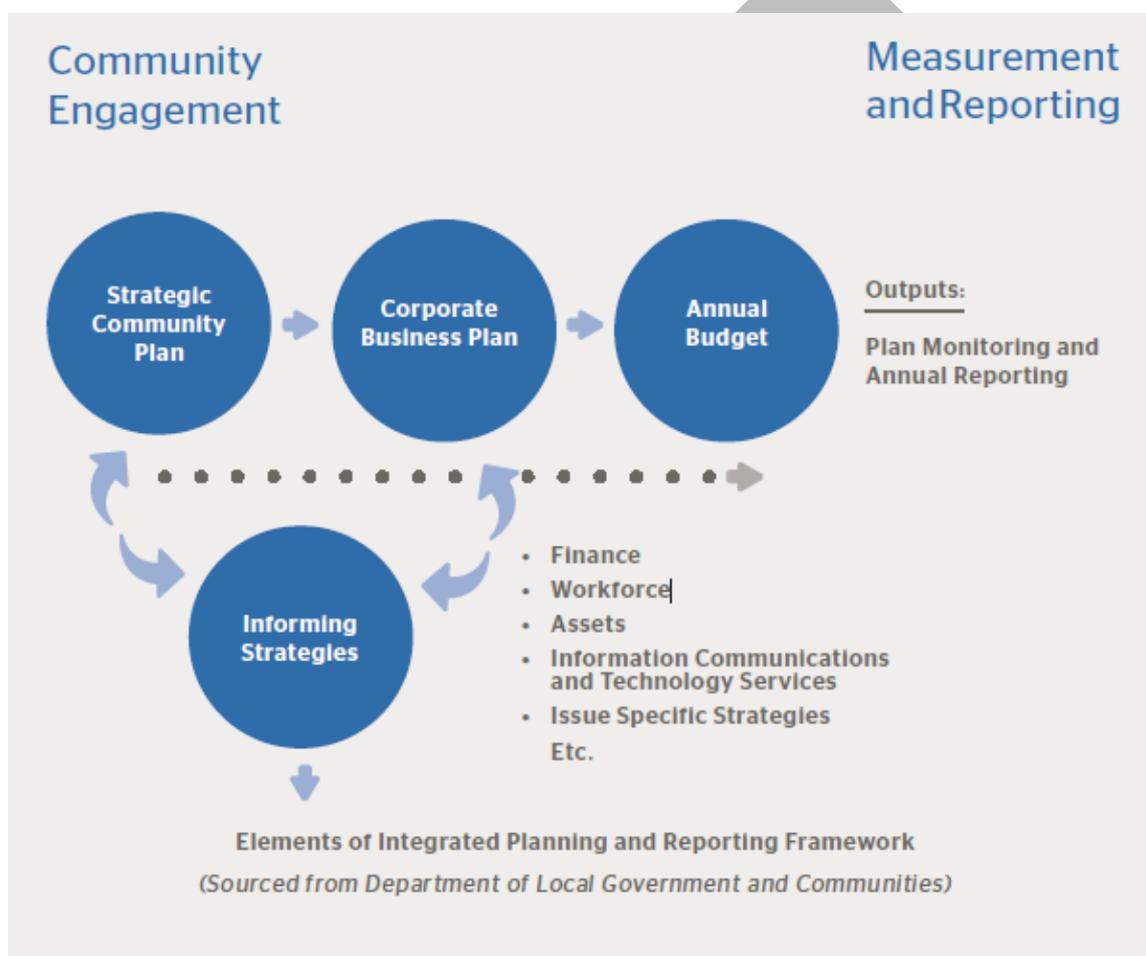


Figure 1 - Elements of Integrated Planning & Reporting Framework. Source: Shire of Murray Strategic Community Plan 2019 – 2030.

Introduction

This Plan is a five year strategic document that meets the Shire's legislative obligations for the development of a local Public Health Plan under the WA Public Health Act 2016. This plan is intended to integrate with and 'value-add' to the Shire's core functions rather than duplicate existing plans and strategies across the organisation.

Vision

To protect, promote and enhance the health, wellbeing and quality of life of our community.

Guiding Principles

The Shire aims to enhance the health, wellbeing and quality of life for the community through:

- Assessing, reviewing and responding to current and future public health and wellbeing needs, issues and emerging trends, based on best practice, sustainability and evidence-based decision making processes;
- Developing collaborative partnerships with internal and external key stakeholders;
- Integrating public health and wellbeing into existing services and programs;
- Facilitating the vision for a healthy and sustainable community through greater community participation and development on health issues; and
- Aligning with and providing strategic links and relationships with local, state and national strategic plans and policies that impact on health and wellbeing.

The approach adopted in developing this Plan has been guided by the '*Pathway to a Healthy community: a guide for councillors and local government*', South Metropolitan Health Service, Perth, and recognises local government as the tier of government closest to the community in supporting and influencing the health and wellbeing outcomes. It promotes the range of services delivered by the Shire which help to establish many of the necessary conditions upon which good health and wellbeing is determined, see Figure 2 below.

Public Health Plan

About the plan

This plan meets the Shire's legislative obligations under the WA Public Health Act 2016, which aims to establish an integrated health and wellbeing planning process that fits into existing planning frameworks and strategies within local government, and can support a wider local vision for a healthier community.

The aim of the Shire of Murray Public Health Plan is to:

- Identify the current status of health and wellbeing and the needs of the community;
- Establish priorities and strategies for a five year period;
- Implement strategies and initiatives;
- Form a framework for future decision making; and
- Deliver relevant activities, programs and projects designed to tackle community priorities, current health trends and to achieve the plan.

The key focus areas are:

1. Healthy People and Community

To guide and encourage our community to lead healthier lifestyles through the provision of lifestyle and educational opportunities.

2. Healthy Places and Spaces

To provide healthy places and spaces to encourage and support healthy lifestyle opportunities.

3. Healthy Partnerships

To develop collaborative partnerships with community, business, government, non-government and key stakeholders to improve health and wellbeing.

Developing the plan

This plan has been developed in partnership with the South Metropolitan Health Service and is informed by the ideas and feedback gathered from the community, service providers, local organisations, businesses and government agencies through the community consultation completed for the review of the Shire's Murray 2030 Strategic Community Plan and development of the Shire's Age-Friendly Communities Plan 2016 – 2021.

The Shire sought the views of as many members of the community as possible. The community shared their ideas through community consultation which consisted of surveys, interviews with key stakeholders and community groups, and engagement at high traffic areas and events.

Managing the plan

The Shire of Murray is committed to community health and wellbeing through the provision and facilitation of various projects and partnership with key stakeholders.

The underpinning philosophy for community health and wellbeing is that it is everyone's business to promote good health and therefore not the domain of any single agency or group. However the Shire and local health service providers play an important role in facilitating and implementing actions as leading agencies for the significant number of organisations, community groups and residents who also play a vital role in improving community health and wellbeing. For this reason, the Public Health Plan is considered a whole of community plan, with the Shire facilitating the collective actions of key government and non-government partners and delivering services and programs that are deemed core local government business.

Link to Strategic Community Plan

The Public Health Plan aligns with and supports Council's vision and mission as outlined in the Strategic Community Plan:

Vision: "By 2030, the Shire of Murray will be a place where business thrives, we protect our environment, and all people enjoy an outstanding quality of life."

Mission: "We will be an organisation with a can-do attitude that strives for service excellence, continued improvement and a commitment to outcomes."

The plan also contributes to the achievement of the focus areas and aspirations identified in the Murray 2030 Strategic Community Plan. These include:

Places for People: In 2030 Murray will have created great places for people through strong partnerships with the community; innovative urban design; and improved the well-being and quality of life for residents.

Thriving Economy: In 2030 Murray will have a diverse and prosperous economy that supports innovation, training opportunities and provides a variety of business, tourism and employment opportunities.

Environment, Character and Heritage: In 2030 Murray will be effective stewards of our environment, history, heritage, natural landscape and rural character.

Connected and Accessible: In 2030 Murray will have enhanced our transport linkages and opportunities to share information using a variety of travel and technology options.

Capable and Accountable: In 2030 Murray will have further developed strong leadership through good governance, effective communication and ensuring value for money.

Alignment to other plans

This plan provides a framework for an integrated and collaborative approach that will support and enhance the community's ability to lead healthy, active and rewarding lives. Consideration and comparison has been given to various local, regional and state plans, including, but not limited to, the following:

- Shire of Murray 2030 Strategic Community Plan
- Shire of Murray Community Safety and Crime Prevention Strategy 2016 – 2021
- Shire of Murray Age Friendly Communities Plan 2016 – 2021
- Peel Regional Investment Blueprint 2050, *Peel Development Commission*
- South Metropolitan Peel Sub-Regional Planning Framework, *Department of Planning, Lands & Heritage*
- Murray Youth Strategy 2016-2020

DRAFT

Health Profile

Snapshot

Prevalence of lifestyle and psychosocial behaviours and risk factors for Shire of Murray



Figure 3 Snapshot. Note: “Estimates are presented for persons aged 16 years and over except for physical activity where estimates are presented for persons aged 18 years and over.”

Source: Western Australian Health and Wellbeing Surveillance System, WA Department of Health: Shire of Murray self-reported measures of health and wellbeing for adults January 2010 – December 2016.

Demographics

The 2016 census released by the Australian Bureau of Statistics showed the population for the Shire to be 16,698 people, which is an increase of 2,549 since the 2011 census (14,149). The distribution of this population among the localities is illustrated in Table 1 below.

Socio-economic status

Although the overall level of health and wellbeing of Australians is relatively high compared with other countries, there are significant disparities in the health outcomes of different populations within Australia. In particular, people who live in areas with lower socio-economic condition tend to have worse health than people from other areas. Previous analysis has shown that disadvantaged Australian have higher level of disease risk factors and lower use of preventative health services than those who experience socio-economic advantage (ABS, 2016).

The Socio-Economic Indexes For Areas (SEIFA) scores are made up of four indices which summarise a variety of social and economic variables such as income, educational attainment, employment and number of unskilled workers. SEIFA scores are based on a national average of 1,000 and areas with the lowest scores are the most disadvantaged.

Based on the 2016 census data, the Murray Shire had a SEIFA Index of Disadvantage score of 962, the second lowest in the South Metropolitan Health Service (SMHS) – the range of scores for this SEIFA index for local government authorities within the SMHS was 945 to 1,088¹. Table 1 below shows the SEIFA scores for each suburb in the Shire of Murray.

Table 1: SEIFA Index of relative socio-economic disadvantage scores by suburb, Shire of Murray, 2016.

Suburb	SEIFA score	Usual resident population
Barragup	994	928
Birchmont	1022	73
Blythewood	1022	64
Coolup	981	386
Dwellingup	949	557
Fairbridge	1013	48
Furnissdale	886	1029
Holyoake	918	19

¹ The indexes and supporting material are found in the ABS publication *Census of Population and Housing: Socio-Economic Indexes For Areas (SEIFA). Australia 2016* (Cat. No. 2033.0.55.001).386

Inglehope	1007	38
Meelon	1008	201
Nambeelup	1034	318
Nirimba	1022	71
North Dandalup	1019	712
North Yunderup	974	849
Pinjarra	912	4910
Ravenswood	961	2176
South Yunderup	999	3114
Stake Hill	1068	485
Teesdale	1007	103
West Coolup	1022	155
West Pinjarra	1008	410

Socio-Economic Indexes For Areas. Source: ABS 2016 Census

Health & Wellbeing Data

Data from the WA Health and Wellbeing Surveillance System (HWSS), Australian Bureau of Statistics (ABS) Census and Australia Early Development Census (AEDC) are presented as the proportion of the population (or prevalence) reporting a particular attribute. While data from Census (ABS and AEDC) reports point prevalence, representing the proportion of the population who have a condition at the time of the survey, data from the HWSS reports period prevalence, measuring the proportion of the population who have a condition within a specified period of time.

Chronic diseases

Many of the health conditions included in the HWSS are chronic diseases which usually have a number of contributing factors, develop gradually and have long lasting effects. Diseases such as cardiovascular disease, type 2 diabetes, respiratory diseases and some cancers contribute significantly to the burden of illness and injury in the community. Considerable potential exists to reduce this burden of disease.

Lifestyle and physiological risk factors

The data for lifestyle risk factors shown in Tables 2 & 3, is based on responses to HWSS from adults (aged 16 years and older) in the Shire of Murray and adults within the state, who were surveyed over the period.

Curbing the rise in overweight and obesity

Being overweight or obese can contribute to the development of chronic conditions, such as cardiovascular disease, type 2 diabetes, osteoarthritis, some cancers and sleep apnoea. Getting an appropriate amount of sleep each day is essential to health and wellbeing. For children and young people, developing healthy sleep hygiene, and limiting screen time, is important for optimal growth and development. As excess body weight increases, so does the risk of chronic disease and mortality. Respondents were asked about their height and weight. Body mass index (BMI) was derived from these figures by dividing weight in kilograms by height in metres squared, after adjustment for errors.

Healthy eating

Eating fruit and vegetables is important for health and protects against the risk of various diseases, including coronary heart disease, type 2 diabetes, stroke and digestive system cancers. It is recommended that Australian adults eat two serves of fruit and five serves of vegetables daily.

A more active Murray

Physical inactivity is associated with several chronic health conditions, including coronary heart disease, stroke and diabetes. It is common for us to spend large amounts of time being sedentary when at school, at work, when travelling or during leisure time. Being physically active reduces the risk of developing such conditions and improves general physical and mental wellbeing. The Australian Physical Activity and Sedentary Guidelines for adults aged 18 to 64 years recommend accumulating 150 to 300 minutes of moderate intensity physical

activity or 75 to 150 minutes of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week.

Making smoking history

Smoking increases the risk of developing a number of health conditions, including respiratory disease, coronary heart disease, stroke and several cancers, such as lung and mouth cancers. Respondents were asked about their smoking status (including cigarettes, cigars and pipes). Current smoking status was re-categorised into those who smoke (daily or occasionally), ex-smokers and those who have never smoked regularly. Respondents who had tried cigarettes and had smoked 100 or more cigarettes in their lifetime were classified as ex-smokers, while those who had smoked less than 100 cigarettes classified as having never smoked.

Reducing harmful levels of alcohol use

Excessive alcohol consumption increases the risk of some health conditions, including coronary heart disease, some cancers, stroke, blood pressure, liver and pancreatic disease. It also increases the risk of accidents and mental illness.

Respondents were asked about their alcohol drinking habits, including how many days a week they usually drink and how many drinks they usually have. The information was categorised into risk levels based on the 2009 National Health and Medical Research Council guidelines (which categorise any drinking by children and young people under 18 years of age as risky drinking).

Lifetime risky drinking is the potential for alcohol-related harm over a lifetime of drinking, for healthy men and women drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol related disease or injury.

Single-occasion risky drinking is the risk of harm due to a single occasion of drinking and for healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.

For women who are pregnant, planning a pregnancy or breastfeeding not drinking is the safest option. (National Health and Medical Research Council, 2009)

Table 2 on the next page summarises risk factors and their prevalence in the Shire of Murray and Western Australia.

Table 2: Prevalence of lifestyle risk factors for adults (aged 16 years and over), Shire of Murray, LGA, and Western Australia, January 2010 – December 2016.

	Shire of Murray		WA
	Prevalence Estimate	Estimated population	Prevalence Estimate
Currently smokes	12.0*	1,633	13.1
Eats less than 2 serves of fruit daily	50.9	6,941	48.6
Eats less than 5 serves of vegetables daily	74.6	10,167	88.9
Eats fast food at least weekly	29.7	4,049	33.8
Risky/high risk drinking for long term harm (a)	38.6	5,263	31.5
Risky/high risk drinking for short term harm (b)	15.2*	2,075	12.9
Spends 21+ hours per week in sedentary leisure time	38.0	5180	32.4
Insufficient physical activity (c)	36.7	4,826	36.5
Injury (d)	27.4	3,732	23.3

Source: WA Health and Wellbeing Surveillance System, Epidemiology, DOH.

Notes:

This information is based on responses from 230 adults within the Murray (S) Local Government Authority and 44379 adults within the State.

* Prevalence estimate has a relative standard error between 25 per cent and 50 per cent and should be used with caution.

(a) As a proportion of all adult respondents 16 years and over. Drinks more than 2 standard drinks on any day. Any alcohol consumption by persons 16 or 17 years classified as high risk.

(b) As a proportion of all adult respondents 16 years and over. Drinks more than 4 standard drinks on any day. Any alcohol consumption by persons 16 or 17 years classified as high risk.

(c) Completes less than 150 minutes of physical activity per week (adults 18+ years)

(d) Injury in the last 12 months requiring treatment from a health professional.

Physiological risk factors

Physiological risk factors such as high cholesterol, high blood pressure, and overweight or obesity can be major contributors to ill health and chronic disease. These risk factors are expressed through physical changes in the body and are highly interrelated (Australian Institute of Health and Welfare, 2016). They can be managed through a combination of medications, population-based interventions and modification of lifestyle behaviours.

Blood pressure

High blood pressure is a major risk factor for the development of coronary artery disease, stroke and renal failure.

Cholesterol level

Cholesterol is a fatty substance produced by the liver and carried by the blood to the rest of the body. Its natural function is to supply material for cell walls and hormones, but high blood cholesterol can form plaque that clogs the blood vessels supplying the heart and certain other parts of the body. High blood cholesterol can be a major risk factor for coronary heart disease, ischaemic stroke and peripheral vascular disease (Australian Institute of Health and Welfare, 2016).

Body weight

Being overweight or obese can contribute to the development of chronic conditions, such as cardiovascular disease, type 2 diabetes, osteoarthritis, some cancers and sleep apnoea. Excess body weight increases the risk of chronic disease and mortality exponentially (Hruby et al 2016). Respondents were asked how tall they are and how much they weigh. A body mass index (BMI) was derived from these figures by dividing weight in kilograms by height in metres squared, after adjustment for errors in the self-reported height and weight. The BMIs were then categorised. Adults with a BMI greater than 25kg/m² are considered to be overweight, and those with a BMI greater than 30kg/m² obese. BMI may not be a suitable measure for athletes who have a muscular build, older people and some ethnic groups.

Obesity

Obesity is the result of many complex systems, these include food supply, transport, urban design, business, socio-cultural, marketing, communications, education, health, trade, legal, economic, and governance systems (World Obesity Federation, 2015). Rates of overweight and obesity among adults have increased over time, driven by a general increase in Body Mass Index (BMI). Since 2002, there has been a significant increase in the mean BMI for both men and women (Tomlin et al, 2015).

Table 3: Prevalence of physiological risk factors for adults (aged 16 years and over), Shire of Murray, LGA & Western Australian, January 2010 – December 2016.

Risk factors	Shire Murray		WA
	Persons (%)	Estimated population	Persons (%)
Current high blood pressure (a)	23.1	3,143	16.5
Current high cholesterol (b)	21.4	2,920	18.6
Overweight (C)	40.6	5,539	39.3
Obese (c)	34.8	4,738	27.5

Source: WA Health and Wellbeing Surveillance System, Epidemiology, DOH.

Notes:

This information is based on responses from 230 adults within the Murray (S) Local Government Authority and 44379 adults within the State.

(a) Currently have high blood pressure or take medication for high blood pressure. Of those who have had their blood pressure measured.

(b) Currently have high cholesterol or take medication for high cholesterol. Of those who have had their cholesterol measured.

(c) BMI of 25 to < 30 = overweight; BMI of 30+ = obese. Self-reported height and weight have been adjusted for under-reporting (i.e. over-estimating of height and under-estimating of weight).

Mental health

Mental health conditions include short-term conditions, such as depression and anxiety, and long-term conditions, such as chronic depression and schizophrenia. Mental health problems are associated with higher rates of death, poorer physical health and increased exposure to health risk factors.

Mental health involves the capacity to interact with people and the environment and refers to the ability to negotiate the social interactions and challenges of life without experiencing undue emotional or behavioural incapacity. Mental health is also referred to as psychosocial health, as it involves aspects of both social and psychological behaviour.

Psychological distress

Psychological distress may be determined in ways other than having been diagnosed or treated for a mental health condition. The Kessler 10 (K10) is a standardised instrument that measures psychological distress by asking ten questions about levels of anxiety and depressive symptoms experienced in the past four weeks. Each item on the K10 is scored and then summed, resulting in a range of possible scores from 10 to 50. These are then categorised into low, moderate, high and very high levels of psychological distress. Low level psychological distress is regarded as not requiring any intervention, moderate and high levels require self-help, and high and very high levels require professional help.

Feeling lack of control

Perceptions of control relate to an individual's belief as to whether outcomes are determined by external events outside their control or by their own actions. Feelings of lack of control have been found to have adverse effects on health and to increase the risk of mortality.

Table 4: Prevalence of psychosocial risk factors for adults (aged 16 years and over), Shire of Murray & Western Australia, 2016.

Risk factors	Shire of Murray		WA
	Persons (%)	Estimated population	Persons (%)
High/very high psychological distress	8.7*	1181	8.2
Mental health problem (a)	9.7*	1317	14.5
Stress related problem (b)	6.6*	898	9.1
Anxiety (b)	4.6*	633	8.0
Depression (b)	7.0*	957	8.2

Source: Epidemiology Branch, 2018, Murray (S) LGA Health Profile, 2010-2016, HWSS, WA. Department of Health: Perth.

Notes:

This information is based on responses from 230 adults within the Murray (S) Local Government Authority and 44379 adults within the State.

* Prevalence estimate has a relative standard error between 25 per cent and 50 per cent and should be used with caution.

(a) Diagnosed by a doctor with a stress related problem, depression, anxiety or any other mental health problem in the last 12 months.

(b) Diagnosed by a doctor in the last 12 months.

Injury

Injuries are often described as unintentional and intentional. Unintentional injuries include most transport, poisoning, falls, drowning, and fire and burn injuries. Intentional injuries include interpersonal violence, suicide and self-harm. In some cases it may not be possible to determine whether an injury has been intentional or unintentional.

Community injuries are those that are typically sustained in places such as the home, workplace or street. They do not include injuries due to complications of medical or surgical care, or other unclassified injuries.

The burden that injury places on the health care system, through hospitalisation, disability and premature death makes injury a serious public health issue. Table 5 on the next page shows the number and rates of hospitalisations due to injury and poisoning in the Shire of Murray and Western Australia.

Table 5: Number and rates of hospitalisations due to injury and poisoning by injury category and age groups, Murray LGA, WA, 2014 - 2018 (combined).

Injury category	Numbers by age group					Total	Age group specific rates					ASR	ASR LCI	ASR UCI
	0-14	15-24	25-44	45-64	65+		0-14	15-24	25-44	45-64	65+			
Transport accidents	37	78	99	49	45	308	208.6	840	464.2	211.3	244.6	383.4	339	427.8
Accidental falls	97	26	53	129	426	731	546.9	280	248.5	556.2	2316	677.8	626.7	728.8
Exposure to mechanical forces	88	78	119	121	72	478	496.2	840	558	521.7	391.4	561.8	509.3	614.2
Accidental drowning, submersion, threats to breathing	6	N/A	0	0	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exposure to electricity, radiation, extreme temperature/pressure	0	0	N/A	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exposure to smoke, fire, flames, hot substances	7	N/A	6	8	8	33	39.5	43.1	28.1	34.5	43.5	38.4	24.7	52.1
Exposure to venomous plants, animals, forces of nature	10	N/A	9	7	N/A	31	56.4	21.5	42.2	30.2	16.3	36.6	23.3	49.8
Accidental poisoning	11	N/A	6	8	6	33	62	21.5	28.1	34.5	32.6	37.8	24.4	51.2
Other external causes of accidental injury	19	67	99	93	56	334	107.1	721.5	464.2	401	304.4	389.7	346.1	433.3
Intentional self-harm	N/A	14	17	11	N/A	47	5.6	150.8	79.7	47.4	21.7	60.8	42.7	78.9
Assault & other injury caused by other person(s)	N/A	12	19	17	N/A	52	11.3	129.2	89.1	73.3	10.9	68.7	49.5	87.9
Event of undetermined intent	0	N/A	N/A	5	0	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Adverse effects due to drugs & other substances	7	5	6	5	12	35	39.5	53.8	28.1	21.6	65.2	36.3	23.5	49
Medical misadventure	N/A	0	N/A	10	5	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal reaction following procedure	25	20	102	188	301	636	141	215.4	478.3	810.6	1636	606.6	557	656.2
Total	307	300	535	651	931	2753	1714	3317	2508	2742	5083	2898	2566	3229

Source: WA Hospital Morbidity Data System, Epidemiology, DOH.

All rates are per 100,000 population. ASR = Age-standardised rate ; ASR LCI=95% lower confidence limit for ASR; ASR UCI=95% upper confidence limit for ASR.

Note 1: Counts less than 5 have been suppressed in this report to protect privacy and data confidentiality.

Note 2: Age standardised rates are not provided when the total event numbers for the population being studied are less than 20 due to unreliable rates that are derived.

Notifiable diseases

Under the Western Australian Health Act of 1911 and following the recent enactment of the Public Health Act 2016 (Part 9), any medical practitioner or nurse practitioner attending a patient who is known, or suspected, to have a notifiable disease has a legal obligation to report it to the WA Department of Health (DOH). In addition, laboratory notification is mandatory for all notifiable diseases.

Notifiable diseases are entered into the **Western Australian Notifiable Infectious Diseases Database (WANIDD)** and cross-checked for duplication. Some diseases, including suspected meningococcal disease and measles, require the practitioner to notify the DOH urgently by telephone and these are marked on the notification form.

Communicable disease notifications are used to inform public health interventions and enhance the prevention and control of these diseases. The data for notifiable diseases are shown in Table 6.

Table 6: Notifiable diseases, 2011 – 2015, Shire of Murray, Metropolitan area & Western Australia.

	Murray, LGA	Metro	WA State
Enteric disease	221.5	167.9	179.6
Vector borne diseases	269.3	76.6	87.8
STI's	582.4	482.5	541.6
Vaccine preventable diseases	337.9	386.3	397.2

Notifiable diseases (per 100,000 persons, 2011 - 2015). Source: WA Notifiable Infectious Diseases Database, Public Health Division, Department of Health WA.

Key Focus Areas

The overall aspirations and objectives of this Public Health Plan are to create an environment consisting of healthy people and community, healthy places and spaces, and healthy partnerships.

As a result of the findings, three key focus areas have been developed, each containing potential strategies to assist in the identified aspirations and objectives. These are:

1. **Healthy People & Community**
2. **Healthy Places & Spaces**
3. **Healthy Partnerships**

Each of these themes are set out in greater detail in this document, including the associated priority areas and strategies for each.

DRAFT

Key Focus Area 1: Healthy People & Community

The following potential strategies have been identified for future action:

“Support and encourage the community to lead healthier lifestyles by the provision of education and lifestyle opportunities”

Strategies	Actions
1.01 Reduced exposure to alcohol related harm in the community	<ul style="list-style-type: none"> - Continue to support low alcohol and no alcohol events and activities, both internally and in conjunction with event organisers. - Consider adopting a policy which influences environments supportive of alcohol risk minimisation strategies. - Support the Local Drug Action team in their initiatives.
1.02 Reduced exposure to tobacco smoke in public places	<ul style="list-style-type: none"> - Continue to promote all Shire events as smoke free. - Maintain smoke free signage at Shire facilities.
1.03 Reduced preventable communicable diseases	<ul style="list-style-type: none"> - Implement policies and promote strategies to prevent and manage the spread of preventable notifiable diseases. - Provide educational opportunities that raise community awareness of minimising pollutants i.e. impacts of illegal dumping, water contamination. - Maintain and grow existing partnerships with relevant organisations to further develop healthy environments. - Support and promote the WA immunisation schedule to increase vaccination rates for children.
1.04 Increase access to services for a healthy and active community for everyone’s needs	<ul style="list-style-type: none"> - Activate parks, ovals and walking trails, providing connections and shared pathways wherever possible. - Continue to deliver activities and programs that support healthy lifestyle behaviour changes at Shire facilities. - Investigate opportunities to increase healthy food options at Shire facilities and events. - Maintain and continue to strengthen partnerships with local community groups and sporting clubs to promote healthy environments i.e. healthy canteens, safe alcohol provision, smoke free environments. - Facilitate programs and services for young people that promote inclusiveness, participation and recognition within the community.

		<ul style="list-style-type: none">- Work closely with the local Aboriginal community to develop culturally appropriate, community-based initiatives that celebrate Aboriginal heritage.- Support the implementation of multicultural action plans to encourage the participation of Culturally and Linguistically Diverse (CaLD) communities in social, economic and cultural life.- Deliver programs that support disability access and inclusiveness.- Support community events that promote community inclusion and involvement.
1.05	Improved mental health	<ul style="list-style-type: none">- Strengthen the partnership with Act-Belong-Commit.- Support and promote community involvement in activities that encourage a connected and mentally healthy community.
1.06	Support the prevention of avoidable injuries	<ul style="list-style-type: none">- Raise awareness of family violence and continue to partner with referral services and WA Police.- Continue and promote swimming pool inspection barrier programs.- Support state and federal injury prevention campaigns and implement relevant initiatives locally.- Continue to monitor traffic surveys to identify areas of concern to minimise road injuries.
1.07	Improved nutrition	<ul style="list-style-type: none">- Promote healthy eating at Shire events- Promote healthy eating as part of food safety programs and food business inspections.- Support nutrition campaigns in partnership with local community groups and sporting clubs.

Key Focus Area 2: Healthy Places & Spaces

The following potential strategies have been identified for future action:

“Provide healthy places to support and encourage healthy lifestyle opportunities in the shire”

Strategies	Actions
2.01 Improved community safety and reduced crime levels	<ul style="list-style-type: none"> - Support the Community Safety & Crime Prevention Plan. - Support emergency services and continue to review the Local Emergency Management Plan. - Support best practice requirements for encouraging active transport. - Motivate creative design for open space in newly developed areas that meet community needs. - Support community groups to establish places that encourage community participation and involvement.
2.02 Conserve, maintain and enhance public areas and streetscapes through the shire	<ul style="list-style-type: none"> - Implement conservation of remnant vegetation policy. - Support the establishment of sustainable community fresh food initiative i.e. farmers market, local community gardens and edible verge gardens. - Continue to maintain public areas and streetscapes, to enable the community to be active for fun, sport, transport and leisure activities.
2.03 Protect and enhance environmental health	<ul style="list-style-type: none"> - Implement environmental health strategies and relevant legislation to protect and enhance the health of the community.
2.04 Future development	<ul style="list-style-type: none"> - Local Planning Strategy to create a comprehensive and strategic direction for the growing community. - Incorporate Health Impact Assessment into the local planning framework. - Consider health opportunities in planning decisions, policies and strategies, including walkability, active transport and liveability.
2.05 Adapt to climate change	<ul style="list-style-type: none"> - Continue to promote the use of renewable energy. - Encourage and exercise best practice water management. - Promote the waste education program and promote recycling strategies.

- Implement actions in the Climate Change Mitigation and Adaptation Plan.
- Consider the impact of climate change on mosquito breeding, and adapt the mosquito program accordingly.

Key Focus Area 3: Healthy Partnerships

The following potential strategies have been identified for future action:

“Work in partnership with government, non-government, community based organisations and members of the community to undertake/deliver/implement public health initiatives”

Strategies	Actions
3.01 Collaborative partnerships with businesses, government and service providers	<ul style="list-style-type: none"> - Support a local network of service providers to encourage greater collaboration and partnerships for continued growth, economic prosperity and health.
3.02 Develop a sustainable local economy	<ul style="list-style-type: none"> - Support local businesses including those that offer health promotion services eg personal trainers in public open space. - Provide support and incentive mechanisms for new and existing local businesses that enhance community health, including forums, development of hubs and shared office space.
3.03 Improve access to ample job opportunities locally	<ul style="list-style-type: none"> - Help identify gaps in service provision and support or partner programs and initiatives run to fill those gaps. - Support a local network of service providers to encourage collaboration and partnerships for sharing of information regarding opportunities.
3.04 Develop a healthy workplace	<ul style="list-style-type: none"> - Continue to provide a full package of support, training and engagement mechanisms to foster staff development and to support equality in the workplace. - Continue to offer staff a variety of health and wellbeing opportunities.
3.05 Demonstrate strong leadership and good governance	<ul style="list-style-type: none"> - Provide strong leadership through good governance to ensure public health is considered in operational and strategic decisions.

Resourcing the Plan

The objectives, strategies and actions developed in this plan have been reviewed and prioritised, whilst considering and balancing the finite resource capacity of the Council.

To address the strategies identified in the Public Health Plan, a review of current services and resources was undertaken. The majority of actions in the plan can be undertaken within existing resources across various Shire Departments. Where this is not possible individual budget submission will be made for Consideration on an annual basis.

Measuring Success

The Shire of Murray will regularly track the progress on the completion of the Plan's key focus areas including the period between each review and report to the community through:

- Annual Report

The annual report is produced at the end of each financial year and highlights the operations and achievements of the Shire during the prior 12 month period. It contains an indication of key priorities from the Strategic Community Plan, Corporate Business Plan, and informing strategies such as this plan.

- Financial Performance

The proportion of programs and projects funded by the Shire's annual budget will indicate how well the Shire is progressing with the completion of the Plan for a finance and resource perspective.

- Key Performance Indicators

The Shire's Corporate Business Plan contains key performance indicators and is reviewed annually by Council. These indicators include how the Shire is progressing on key projects, as well as reviewing its operational efficiencies and achievements.

Regularly tracking progress will allow the Shire and the community to keep updated on the Public Health Plan. Opportunity will then be provided for reassessment of key areas of emphasis at the review of the Plan scheduled for 2022.

Evaluation

The Shire's staff will review the Plan annually or as required in accordance with the *WA Public Health Act 2016* to ensure it continues to respond to the needs of the community, and that it remains current.

The Shire's staff will coordinate the annual review in partnership with the South Metropolitan Health Service.

An evaluation will occur towards the end of the Plan cycle, in 2024, consisting of:

- Assessment of progress against outcomes for each goal within the Plan;
- Assessment of performance measures for each priority area;
- Review of key data for the Shire including the social profile, health status, health risk factors, health behaviours and population risk groups; and
- Review of implementation mechanisms for the Plan including partnership terms and arrangements with key stakeholders.

The Shire's staff will prepare and submit an annual report on progress and evaluation findings to the Chief Health Officer of the Western Australian Department of Health.



Policy PS3 – Trading in Public Places

1. Policy Intention

- To develop a vibrant commercial and cultural environment for residents and visitors;
- To encourage the use of parks and reserves by commercial operators as a means of activating public spaces;
- To ensure approved trading activities do not significantly conflict with or prejudice the Shire's permanent retail and service base; and
- To ensure that the operation of trading activities are appropriate in particular areas and they do not result detrimentally impact on safety, amenity, convenience or cause a nuisance.

2. Policy

2.1 Applications for trading in public places will be considered on their individual merit having due regard for balancing the policy intentions and the following matters:

- a) the existing provision of similar services within a town or otherwise within proximity of the proposed trading and the potential for the loss of a community service or benefit;
- b) whether the proposal would add to the range or extent of services, or the hours or days a service would be available to the community;
- c) whether the proposal would be predominantly focused toward a key activity node that is not otherwise directly serviced by the goods or services to be offered by the proposed trading;
- d) The proximity of a shop or other place of business that sells the same goods or services proposed to be offered by the trading;
- e) The compatibility of the proposed trading within its setting, including but not limited to the positioning, height, bulk, scale, orientation and appearance of any vehicle or other item associated with the proposed trading;
- f) the likely effect of the proposed trading on the character and amenity of the locality, including the level of noise, disturbance or other nuisance likely to result;
- g) the amount of traffic likely to be generated by the proposed trading, the adequacy of pedestrian and vehicular access, and the effect on pedestrian and traffic flow and safety;
- h) the availability and adequacy of parking to service the needs of the proposed trading;
- i) the proposed means of servicing, and the storage, management and collection of any waste associated with the proposed trading;
- j) the extent, scale and design of any site signage proposed.

2.2 Trading in public places will not be permitted in the following circumstances:

- a) within the road reserve of or land adjacent to the Kwinana Freeway, Forrest Highway, Pinjarra Road, South Western Highway, Pinjarra Williams Road and Old Bunbury Road, unless supported by the relevant road management authority;

- b) within 200 metres of any shop or permanent place of business that sells the same goods or services proposed to be offered by the trading;
- c) within 300 metres of a school, between the hours of 8:00am to 9:00am and 2.45pm to 3:45pm, except during school holidays, weekends and public holidays;
- d) in the case of itinerant vendors on roads with a speed limit greater than 60 km/hr.

2.3 Consultation

- a) The Shire may advertise an application for a trading permit to nearby businesses and/or the community and may refer the application to any State agency for its comments where it considers this necessary or desirable;
- b) Where an application is advertised or otherwise referred to any State agency then any submission received will be considered in determining the application.

2.4 General Notes

- a) Any trading on privately owned or public land also requires permission of the land-owner, or where the land is leased, from the lease-holder;
- b) There is a general presumption against trading in road reserves unless the site has a formal parking area (such as rest areas);
- c) Any trading within a Shire approved event requires approval of the event manager;
- d) Nothing in this Policy implies that Council will approve the use of public land under the care and control of the Shire for use for commercial trading activities;
- e) Trading permits will be valid for a period up to 12 months, concluding on 30 June each year. Approval of a trading permit does not guarantee or infer the permit will be renewed, or renewed for the same location in the future, particularly for pre-eminent sites.

2.5 Annual Reporting

- a) An annual report will be presented to Council on the operation of the policy.

	PD03	
Previous Policy Reference		
Related Legislation	<i>Shire of Murray Consolidated Local Law 1999; Local Government Act 1995.</i>	
Related Policies	N/A	
Related Documents	Trading in a Public Places – Licence; Trading in Public Places Management Practice HE001.	
Last Reviewed	June 2020	
Next Review Date	2021	
Initial Adoption Date	26 November 2015	
Initial Adoption Resolution	OCM15/315	
Amendment Record	OCM18/008	22 February 2018

Draft Trading in Public Places Policy

File Ref: 3702-03

Closing Date: 6 August 2020

No.	Name of agency making submission and file number	Summary of Comments	Council Comment and Recommendation
1	Dome Pinjara D20/30636	<ul style="list-style-type: none"> We are an established business that has seen the detrimental effects of short term gain in the form of coffee vans being installed at events such as the Christmas Festival & Pinjarra Festival. These events originally provided us with increased trade and therefore, additional hours for our employees. This is no longer the case after the events were moved and contained with the Edenvale Gardens. I would propose: The 300 meter rule stays intact. The shire should advertise to businesses - any application within 300 meters - whether it deems necessary or not. The terminology of "considers necessary or desirable" leaves too much open for interpretation. Permits should not last 12 months - but for each event, or for 3 months. I think this might be a better alternative to design the right vendor for the right event - and give an opportunity to say no to a vendor should they not be the right fit for an event. 	<p>Noted the request to retain 300m separation from mobile vans to established businesses selling the same kind of product</p> <p>Noted the request to advertise all mobile traders that are proposing to trade within 300m of an established business selling the same kind of product.</p> <p>The proposal is only for traders outside of events to have 12 month permits. Mobile traders at events will only have approval for the event itself.</p>
2	Geoff Fuller, South Yunderup D20/31231	<ul style="list-style-type: none"> From what I have seen so far, food trucks bring a unique and innovative attraction which can bolster local events and attract a much greater number of attendees. In many cases their product does not compete with existing local outlets and only serve to complement them which is why they are attractive. In summary, I fully support the proposed changes in the interests of our community as a whole. 	<p>Noted the support for mobile traders.</p>
3	Pinjarra Primary School D20/32750	<ul style="list-style-type: none"> These small businesses are great for school community events. Having a coffee van at sports days and for staff during morning teas are a great boost to morale. When they attend our events they often make donations back to the school community, and I feel that they are a valuable community resource. 	<p>Noted the support for mobile trading.</p>
4	Michelle Boag, North Dandalup	<ul style="list-style-type: none"> I am a Shire resident and owner/ trader of the Dandy Bean, a mobile coffee van situated in North Dandalup. In October 2019 I was permitted (under probation) to 	<p>Noted the support for mobile trading.</p>

Ordinary Council Meeting 27 August 2020

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		<p>trade at the North Dandalup information bay on South West Hwy from 6-11 am Monday to Friday.</p> <ul style="list-style-type: none"> • Starting my business, I had hoped to provide myself with a local job and our community with a local gathering place, which we lacked as a small town. Since the Dandy Bean has been operating, my expectations have been exceeded. I have seen my business grow into a community hub, employing 2 locals, and have many local customers. • Being a small town there were no “bricks and mortar’ spaces that could be rented to have a coffee shop. The mobile trailer was the best opportunity for what I wanted to achieve. The information bay and oval were underused and having the Dandy Bean located here has activated this space. • After my 3-month probation period there was doubt over my license renewal due to an objection from a competitor. I was overwhelmed with the local support I received for my license to be reissued. The local school started a petition in support which had over 250 signatures within a 4-week period. A common comment to me in this time was, that as a small town we miss out on some things the bigger places have and it was a luxury they wanted to keep. My license has since been granted much to my relief and our locals. • I feel that the Dandy Bean has offered our community a safe friendly place to gather and this was particularly evident during the height of the Covid lockdowns in WA. Due to my outdoor situation locals were able to order coffee and gather at a safe distance. I know many community members felt less isolated during this time because of our presence. • Healthy competition is good for business. A variety of trading options offers a smaller competitor the opportunity to break into the trading community. If there is competition, no business small or large would survive without good product and great customer service. 	
5	Peel Chamber of Commerce & Industry	<ul style="list-style-type: none"> • The Peel Chamber supports such a policy in principle however wishes to pose the following amendments based on concerns and feedback received from our membership. • Item 1 - Policy Intention: The Peel Chamber fully supports all intentions of the policy outlined under item 1. • Item 2 – Policy: The Peel Chamber fully supports the proposal to evaluate all trading permit applications individually against the outlined criteria under Item 2 – Policy section 2.1. • We do however not support some of the changes to criteria under section 2.2 and propose the following amendments for your considerations. 2.2 b - Upon consultation with existing businesses within the Shire, we propose the proximity 	<p>Noted the support for the proposed policy.</p> <p>Noted the request to increase the distance that mobile traders should separate from</p>

Ordinary Council Meeting 27 August 2020

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		<p>be lifted to a minimum of 300 metres aligning with the proximity listed 2.2 c. Taking this into account and to assist with the assessment process of each application, we wish to suggest that the type of cuisine offered by the applicant be a consideration and propose the following equation for inclusion into the assessment process. Effect on percentage of offering = percentage of proximity increase to minimum proximity Eg: Coffee van would affect 50% of a business (based on direct consultation with the business) 350m away therefore approval will be for the van to operate in a designated zone (minimum proximity (300m) + 50% increase (150m) = 450m proximity approval).</p> <ul style="list-style-type: none"> An additional consideration we wish to suggest would be the inclusion of a 'Special Event Only' trading permit. We see this inclusion as a suitable compromise, providing trading stability for established businesses, whilst allowing for the inclusion of mobile traders for special limited place-making initiatives. We acknowledge the inclusion of these suggestions would increase the administrative burden on Shire Officers when undertaking the assessment process however, believe these suggestions would be well received by all parties as a robust and thorough assessment. We consider the proposed amendments to be in the best interest of all businesses in the Shire, both established and mobile alike. 	<p>established businesses to up to 600m.</p> <p>This can be implemented by conditions for a special event, rather than within a trading permit. Trading permits would not need to be separately issued for trading at events.</p>
6	Kylie Deans	<ul style="list-style-type: none"> Our local mobile food vendors are an integral part of our community, be it the regular coffee and food vendors or the events held in our local shire with local vendors of all business types. The Murray shire have always done an amazing job supporting locals, I can see no reason for current regulations to change. 	Noted the support for mobile trading.
7	Na'Dees Cuisine	<ul style="list-style-type: none"> We've reviewed, understand and are satisfied with the revised proposal to the Trading in Public Places Policy. 	Noted the support for the proposed policy.
8	Black Velvet & Honey Mobile Espresso Bar	<ul style="list-style-type: none"> As the owners of a local mobile coffee business, the policy changes are fair and within reason to create a balance for all. Whether the business be mobile or bricks and mortar, we are all permanent businesses trading within the Shire. Our family have been ratepayers in the Shire for past 11years and we have seen the limited choices for food and beverages in the area over this time and embrace the mobile traders who can offer more choices. Now being the owner operators of this successful and thriving business, we are so lucky to be well supported in the community. This has been built up over the last three and a half years of continued trade. We have nurtured and shaped this business since we have taken it on and have been consistent with our service 	Noted the support for mobile trading.

Ordinary Council Meeting 27 August 2020

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		<p>and product. Therefore the business's well known and reliable reputation has strengthened.</p> <ul style="list-style-type: none"> • We attend as many local based events like festivals, shows, markets, christmas events, school sports carnivals and support other businesses in providing a service to them when they are unable to leave their workplaces to seek their need for coffee elsewhere. • Mobile Traders are an important part of small business within this shire. We give a feeling of community, togetherness and familiarity to events and can be used to attract locals to these events rather than using traders from other areas outside of the shire. • We look forward to continuing to trade and provide a wonderful service and product in our established trading location on the banks of the Murray River. 	
Late	Pappy's Café & Drive Through	<ul style="list-style-type: none"> • Our concerns are the Mobile coffee and food vans that are unsuitably located opposite the Ravenswood hotel in the carpark on Pinjarra Rd. We believe they are clearly unfairly advantaged with location, cost of operating & over heads, being mobile (though staying in the one location at peak period) and getting first crack at customers from that direction with high visibility. We are a service center that relies on traffic from that very stretch of road to continue to operate. Unfortunately, we are not able to pick up and move to the next corner, nor are we located within walking distance to the town or residential areas. This road is critical to our success and with a further two Petrol stations currently being built nearby I fear for our longevity. Food vans on the Main road will not help us or other local fixed business nor are food vans needed to service the community on that road as there are and will be plenty of options. • As a start up company in these current times you may understand the difficulty we face, and the cost associated to survive let alone thrive. Our Brick & Mortar drive through has been struggling for a long period of time for several reasons - location, visibility, the current 100 km speed zone but the biggest impact is the mobile coffee van which is conveniently located for customers. Yet we continue to pour thousands into the drive thru monthly and this isn't sustainable for much longer. We pay in my view very high rate bills to be a brick and mortar business, have outlaid well over a million dollars on several shops in this shire, then it is all jeopardized by someone who has to pay a few hundred dollars to set up in a terrific location on the side of the road. In hindsight I should have done the same. • I believe in fair trade and wish no ill will against anyone personally but what started out as being a coffee van in a parking bay and 1 sign has slowly grown 	<ul style="list-style-type: none"> • It is difficult to assess based on the information provided whether the coffee van is affecting this business. The coffee van was operating in that location some 2 years before Pappy's commenced, and both existing food vans operate more than 3 kilometres from the business; • Customers have a general reluctance to cross major roads, particularly in high (100kph) speed zones, and given that you Pappy's is on the opposite side of the road to the coffee van, preventing the coffee van from operating would necessarily increase Pappy's sales; • Whilst food vans have advantages, fixed

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		<p>and moved to the center of the carpark with a tent and a two way car drive thru as well as 6 signs situated on Pinjarra road. We have clear reference as to when their business has got busier and ours has declined. This is only due to locality and accessibility of the vans, not service or quality as our loyal clients will attest to. As the boundaries are pushed, I get more frustrated with the lack of control and damage done to our business. Every brick & mortar business on Pinjarra road should be concerned that this is able to happen.</p> <ul style="list-style-type: none"> • Mobile food / coffee vans - How much do they pay for their Location compared to us? A fraction. Do they live local and pay local rates? Maybe. Does the business contribute back to the local economy? I doubt it. Do they employ local staff or just run it themselves? They have no employees. Do they support the local community in sports or school? We certainly do. Are they a necessity to the local community and that location? No. Are they a necessity to Pinjarra rd? No. Can they just turn the key and move to a new location? Yes. Can we? No. • The location - While I am aware of the 200m rule for food trucks (which works in a built up area) we are classified as a service center on a stretch of road that has no residential houses nearby. No walk by customers nor are we situated in town or near any sort of pedestrian access. We are 100% completely reliant on the traffic on that road and are also considered a safety stop for road users and as such should take priority over any food van on that stretch of road (in my belief, there should be No food Vans allowed on any major road, Pinjarra included). You would not have a mobile mechanic set up shop a few hundred meters from service station mechanic, the same should apply to mobile coffee and food. We also sit on the opposite side of the road to the morning traffic which customers when given the choice, like a van on their side of the road before our drive thru will always take that opportunity which doesn't leave us much hope considering there is a New fuel station opening on our side in the coming months which will take all west bound traffic before it gets to us. • Impact of mobile vans - By moving the vans to a new location I believe there will be no negative impact on those businesses, local community needs or the location itself. People will happily drive by and use the multiple options a little further up and this will keep jobs in our community. • The solution - Food vans are a great idea for bringing the community together and eating out cheap and I love eating from them myself, but they need to be community based and MOBILE. Take them off the main roads and group them 	<p>businesses also have advantages over food vans, including: no distance restrictions to other businesses; extended hours compared to the most food vans; and larger scope of goods.</p> <ul style="list-style-type: none"> • An increase in sales at a coffee van does not necessarily decrease the sales in another business (eg trucks may favour the location of a coffee van if there is better access). • We have spoken to the coffee van operator about trading in alternative locations, however these alternative locations have other issues such as unsealed carparks, more difficult access and closer proximity to other businesses compared to the current location. • In the Shire's current stage of its development, feedback from many food vans has indicated that if they cannot trade alongside a major road, then it is not viable for food vans to operate, for example in local parks, as there is not sufficient trade. • For compliance issues such as signage and traffic

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		<p>together in parks and open space like they do up in Perth or in areas that have no services. If Marketed well, many Family's will come down for dinner and enjoy something different and food vans will be successful. It brings everyone together when organized and done well, not like being parked in a carpark by yourself bringing no one and nothing together. They have SO many options available to them that we do not, including but not limited to business visits, Parks, community events & centers run by council, festivals, private functions, and the list goes on. Therefore, they are mobile and should not be stationed in the one spot and take the advantages away from a brick & mortar business.</p> <ul style="list-style-type: none"> • Conclusion - Please as a local community member and someone who has put their entire life savings on the line and more, help us by giving us a FAIR go to compete, it isn't fair that we pay big rate bills and everything that comes with setup and running of a business while also supporting staff and the community, when a MOBILE van can basically set up permanent shop during peak hour periods for a few pennies. Not only set up but given the best location to maximize sales for them and do further damage to us. 	<p>safety, these have been raised with the relevant Shire departments, and there are no outstanding compliance issues. The coffee van drive through arrangement was initiated in the Ravenswood carpark in response to the coronavirus restrictions, and when Shire staff attended at the time, it was operating safely.</p> <ul style="list-style-type: none"> • The food vans operating from the Ravenswood Carpark are operating with valid trading permits..

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
A1 Locksmiths WA Pty Ltd			\$1,976.55
EFT000112	22/07/2020	Keys cut - North Dandalup Bushfire Brigade	\$330.00
EFT000112	22/07/2020	Keys cut - Heritage Rail Station	\$33.00
EFT000112	22/07/2020	Padlock and master key - MALC	\$75.85
EFT000112	22/07/2020	Repair plant room locks MALC	\$145.85
EFT000112	22/07/2020	Keys cut - Dwellingup Hall and Multi Purpose	\$66.00
EFT000113	30/07/2020	Keys cut - Court House	\$33.00
EFT000113	30/07/2020	Padlocks and keys - Lovegrove Street Club rooms	\$177.85
EFT000113	30/07/2020	Re-pin locks at Edenvale Homestead	\$1,115.00
A2K Technologies Pty Ltd			\$4,400.00
EFT000113	30/07/2020	Architecture Engineering and Construction annual subscription	\$4,400.00
Air Liquide WA Pty Ltd			\$101.36
EFT000112	22/07/2020	Rental of gas cylinders at the Workshop Operations Centre	\$101.36
Alinta Electricity			\$13,227.63
EFT000111	14/07/2020	Electricity usage	\$1,333.58
EFT000111	14/07/2020	Electricity usage	\$9,919.29
EFT000111	14/07/2020	Electricity usage	\$1,974.76
Aus Clean WA			\$14,406.91
EFT000109	02/07/2020	Cleaning of all Shire buildings June 2020	\$14,406.91
Aussie Telecom Pty Ltd			\$3,238.40
EFT000112	22/07/2020	Deep Freeze Cloud ultimate subscription 3 years	\$3,238.40
Austral Pool Solutions Pty Ltd			\$2,607.57
EFT000110	08/07/2020	5 x lane ropes - Aquatic Centre	\$2,607.57
Australia Post			\$435.89
EFT000110	08/07/2020	Postage period ending 30/06/2020	\$435.89
Australian Safety Engineers			\$381.70
EFT000111	14/07/2020	Annual service of breathing apparatus sets	\$381.70
Australian Services Union			\$151.40
EFT000110	08/07/2020	Payroll deductions	\$75.70
EFT000112	22/07/2020	Payroll deductions	\$75.70
Australian Taxation Office			\$190,652.00
EFT000110	08/07/2020	PAYG deductions	\$5,624.00
EFT000110	08/07/2020	PAYG deductions	\$82,513.00
EFT000112	22/07/2020	PAYG deductions	\$5,582.00
EFT000112	22/07/2020	PAYG deductions	\$96,933.00
Auto One Pinjarra			\$490.27
EFT000109	02/07/2020	Fuel cap for utility	\$33.25
EFT000110	08/07/2020	Small automotive parts for Workshop	\$63.85
EFT000111	14/07/2020	Wheel clamps for CCTV trailers	\$120.00
EFT000112	22/07/2020	Small automotive parts for Workshop	\$273.17
Avalon Roof & Gutter Repairs			\$777.00
EFT000111	14/07/2020	Repair damaged roof sheet and downpipe	\$297.00
EFT000112	22/07/2020	Gutter cleaning	\$480.00
Bang the Table			\$17,116.00
EFT000110	08/07/2020	Digital marketing subscription - Year One renewal	\$17,116.00
Battery Force			\$39.00
EFT000113	30/07/2020	Head light replaced on light tanker	\$39.00
Black, Geoff			\$1,602.75
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$1,602.75
Boc Gases Australia Limited			\$42.12
EFT000110	08/07/2020	Medical oxygen cylinder rental	\$42.12
Bolt, Cr David			\$4,563.17
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$4,563.17
BP Placid Ark Roadhouse			\$194.80
EFT000113	30/07/2020	Refreshments for Coolup VFB 18/01/20 incident #465042	\$194.80
Brenda Lillian Beacham			\$1,602.75
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$1,602.75

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Payment No	Posting Date	Description	Amount
Brownes Food Operations Pty Ltd			\$27.26
EFT000109	02/07/2020	Administration Office weekly milk supply	\$27.26
Bunnings Building Supplies (Halls			\$80.61
EFT000112	22/07/2020	Light globes for Edenvale Tea Rooms	\$80.61
Bunnings Building Supplies			\$268.26
EFT000111	14/07/2020	Assorted hardware items	\$189.96
EFT000111	14/07/2020	Light globes for Edenvale Tea Rooms	\$78.30
Caltex Australia Starcard			\$2,503.30
EFT000111	14/07/2020	Fuel usage	\$2,503.30
Cardilini, Brad			\$1,602.75
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$1,602.75
Cleanaway Waste Management			\$166,580.74
EFT000113	30/07/2020	Empty Dwellingup skip bin June 2020	\$183.92
EFT000113	30/07/2020	Recycling collection June 2020	\$38,040.51
EFT000113	30/07/2020	Refuse collection June 2020	\$60,026.40
EFT000113	30/07/2020	Bulk bin collection March - June 2020	\$815.47
EFT000113	30/07/2020	Waste disposal March - June 2020	\$21,351.80
EFT000113	30/07/2020	Transfer Stations Management June 2020	\$37,417.64
EFT000113	30/07/2020	5000 recycle bin stickers	\$8,745.00
Cleaning Supplies WA			\$707.42
EFT000112	22/07/2020	Cleaning supplies	\$707.42
Coastline Lawn Services			\$7,890.27
EFT000109	02/07/2020	Mowing of Shire parks and ovals	\$7,890.27
Coca-Cola Amatil (Aust) Pty Ltd			\$156.38
EFT000112	22/07/2020	MALC Kiosk supplies	\$156.38
Coles Supermarkets Australia			\$574.42
EFT000109	02/07/2020	Catering CEO meeting at Operations Centre	\$76.45
EFT000109	02/07/2020	Administration Office milk	\$22.22
EFT000109	02/07/2020	General kitchen and catering supplies	\$43.70
EFT000109	02/07/2020	Refreshments for Council briefing session	\$123.70
EFT000109	02/07/2020	Operations Centre kitchen supplies	\$189.40
EFT000109	02/07/2020	MALC Kiosk supplies	\$33.00
EFT000109	02/07/2020	Refreshments for meeting with Minister	\$24.15
EFT000109	02/07/2020	Member refreshments for budget meeting	\$61.80
Connect Call Centre Services			\$1,006.72
EFT000112	22/07/2020	Overcalls fee - June 2020	\$1,006.72
Cleanaway Daniels Health Services			\$5.21
EFT000110	08/07/2020	Needle collection	\$5.21
DC Two Pty Ltd			\$970.99
EFT000110	08/07/2020	DC Two IT products and services	\$970.99
Dep of Biodiversity, Conservation & Attractions			\$693.00
EFT000110	08/07/2020	Firewood Permit collection fees - June 2020	\$693.00
Department of Mines, Industry Regulation & Safety			\$5,318.42
EFT000110	08/07/2020	BSL collection fees - June 2020	\$5,318.42
Dilate Digital			\$165.00
EFT000110	08/07/2020	Website updates	\$165.00
Dowsing Concrete			\$26,478.80
EFT000109	02/07/2020	Murray River Square foreshore path	\$1,799.16
EFT000109	02/07/2020	Footpath renewals Pinjarra Town Centre	\$24,679.64
DS Agencies Pty Ltd			\$13,574.00
EFT000109	02/07/2020	30 powder coated zinc plated bollards	\$13,574.00
Dunlop Electrics			\$9,858.42
EFT000109	02/07/2020	Install updated emergency exits and smoke detectors	\$3,064.60
EFT000109	02/07/2020	Install power outlets to verandah	\$909.70
EFT000110	08/07/2020	Fit new fan in the gym	\$116.60
EFT000111	14/07/2020	Repair faulty PE cell	\$214.06
EFT000111	14/07/2020	Re-engage east pool lights, check PE Cell and path	\$209.00
EFT000112	22/07/2020	Install emergency lights in Leisure Centre change rooms	\$801.35

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Payment No	Posting Date	Description	Amount
EFT000112	22/07/2020	Repair light circuit fault at Edenvale	\$938.30
EFT000112	22/07/2020	Emergency repairs to flood lights at Sir Ross McLarty Oval	\$1,782.00
EFT000112	22/07/2020	Install 2 data points at SES building	\$678.70
EFT000112	22/07/2020	Replace isolator on bench grinder	\$266.86
EFT000112	22/07/2020	Replace 2 fluoros with LED downlights	\$516.45
EFT000113	30/07/2020	Install new power outlet in Store Room	\$151.80
EFT000113	30/07/2020	Disconnect and reconnect HWS for renewal	\$209.00
Dwellingup Community Compact			\$4,000.00
EFT000110	08/07/2020	Alcoa Dwellingup Community Assistance Scheme - Dwellingup Teenz	\$4,000.00
Essential Refrigeration Services			\$2,722.50
EFT000109	02/07/2020	Recommission air conditioner at Edenvale	\$544.50
EFT000109	02/07/2020	Investigate fault in Meeting Room air conditioner	\$198.00
EFT000110	08/07/2020	Renew air conditioner in Technical Services administration area	\$1,980.00
Farlane			\$14,256.00
EFT000113	30/07/2020	Business case - Western Deviation	\$14,256.00
Fitz Gerald Strategies			\$11,864.34
EFT000110	08/07/2020	IT Consultancy - North Dandalup Fire Brigade	\$2,864.34
EFT000111	14/07/2020	Industrial Relations Service Agreement 2020/21	\$9,000.00
Foot Print (WA) Pty Ltd			\$84.70
EFT000111	14/07/2020	Agri-Innovation Precinct Flyers	\$84.70
Frontline Technology Services			\$6,688.00
EFT000109	02/07/2020	Planning and remediation work for DR test	\$2,970.00
EFT000113	30/07/2020	Install and configure Microsoft Office 365	\$3,718.00
Gilbert J & A			\$132.00
EFT000109	02/07/2020	Repair to railing at Face 2 Corio Road Transfer Station	\$132.00
GISSA			\$2,440.90
EFT000112	22/07/2020	A-Spec annual subscription 2020 - 2021	\$2,440.90
Graham Brown Auto Wreckers			\$160.00
EFT000112	22/07/2020	Towage of burnt out vehicle	\$160.00
Gray's Plumbing & Gas			\$2,332.00
EFT000109	02/07/2020	Investigate water leak West Murray Bushfire Brigade	\$660.00
EFT000110	08/07/2020	Plumbing works at Edenvale	\$979.00
EFT000111	14/07/2020	Unblock male toilet at Dwellingup Hall	\$308.00
EFT000111	14/07/2020	Install water tap and valve to emergency shower MALC	\$385.00
High Standard Systems			\$2,740.37
EFT000109	02/07/2020	Alarm monitoring July-September 2020 all Shire buildings	\$2,693.37
EFT000113	30/07/2020	Reprogram alarm zones at MALC	\$47.00
Holcim (Australia) Pty Ltd - Humes			\$11,573.10
EFT000109	02/07/2020	Liners, headwalls and manholes	\$8,625.10
EFT000110	08/07/2020	Liners and manhole covers	\$2,948.00
Hot Klobba			\$927.78
EFT000109	02/07/2020	Staff Uniforms	\$927.78
Infiniti Group			\$632.79
EFT000113	30/07/2020	MALC cleaning supplies	\$457.71
EFT000113	30/07/2020	MALC Kiosk supplies	\$175.08
Intelife Group			\$4,939.20
EFT000110	08/07/2020	Monthly rubbish pickup and path blow down	\$75.00
EFT000110	08/07/2020	Roadside litter pick September 2019 - June 2020	\$2,976.60
EFT000110	08/07/2020	Barbeque cleaning	\$1,887.60
Ironbark Environmental			\$350.00
EFT000110	08/07/2020	Mentorship payment for Hackathon 2020	\$350.00
Ixom Operations Pty Ltd			\$237.34
EFT000110	08/07/2020	Chlorine cylinders monthly rental fee	\$237.34
Josh Cowling Photography			\$5,150.00
EFT000113	30/07/2020	Tourism photo and film shoot, part payment	\$4,850.00
EFT000113	30/07/2020	Dwellingup Volunteer Bush Fire Brigade promo photo	\$300.00
Stuart Kirkham			\$1,602.75
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$1,602.75

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Payment No	Posting Date	Description	Amount
Kmart - Head Office			\$104.00
EFT000110	08/07/2020	Photo and video shoot props	\$104.00
Lake Preston Lime			\$2,217.05
EFT000109	02/07/2020	Supply 1000T of limestone	\$2,217.05
Lee Stephen Donald			\$1,602.75
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$1,602.75
Les Mills Body Training Systems			\$243.58
EFT000109	02/07/2020	Monthly license fees	\$243.58
LG Solutions			\$687.50
EFT000112	22/07/2020	Cloud leases - licence fee April to June	\$687.50
LGISWA			\$371,449.51
EFT000113	30/07/2020	Insurance renewal Management Liability 30/06/20 - 30/06/21	\$17,653.96
EFT000113	30/07/2020	Insurance renewal Personal Accident 30/06/20 - 30/06/2021	\$663.30
EFT000113	30/07/2020	Insurance renewal Marine Hull 30/06/20 - 30/06/21	\$1,891.87
EFT000113	30/07/2020	Insurance renewal Marine Cargo 30/06/20 - 30/06/21	\$660.00
EFT000113	30/07/2020	Insurance renewal Public Liability 30/06/20 - 30/06/21	\$85,545.90
EFT000113	30/07/2020	Insurance renewal Bushfire 30/06/20 - 30/06/21	\$38,802.50
EFT000113	30/07/2020	Insurance renewal Crime 30/06/20 - 30/06/2021	\$8,063.22
EFT000113	30/07/2020	Insurance renewal Property 30/06/20 - 30/06/21	\$89,736.67
EFT000113	30/07/2020	Insurance renewal Motor Vehicle 30/06/20 - 30/06/21	\$62,297.13
EFT000113	30/07/2020	Insurance renewal Corp Travel 30/06/20 - 30/06/21	\$1,100.00
EFT000113	30/07/2020	Insurance renewal Workers Compensation 30/06/20 - 30/06/21	\$65,034.96
LGRCEU			\$164.04
EFT000110	08/07/2020	Payroll deductions	\$82.02
EFT000112	22/07/2020	Payroll deductions	\$82.02
Lingard, John			\$85.16
EFT000112	22/07/2020	Reimbursement for Coopers Mill cottage repairs	\$85.16
Links Modular Solutions Pty Ltd			\$3,663.00
EFT000110	08/07/2020	Links software licence 2020 - 2021	\$3,663.00
Local Government Professionals			\$716.00
EFT000112	22/07/2020	2020/21 Membership	\$531.00
EFT000112	22/07/2020	2020/21 Affiliate membership T Unsworth	\$185.00
Local Health Authorities Analytical			\$2,246.54
EFT000112	22/07/2020	Analytical Services 2020/21	\$2,246.54
Lucky Charm Pinjarra			\$299.26
EFT000109	02/07/2020	Assorted stationery	\$243.36
EFT000109	02/07/2020	West Australian - 31/05/2020 - 27/06/2020	\$55.90
Maia Financial Pty Ltd formerly			\$45,033.36
EFT000109	02/07/2020	Copier lease 01/07/20 - 30/09/20	\$36,168.71
EFT000109	02/07/2020	Cardio equipment lease 01/07/20 - 30/09/20	\$8,864.65
Mandurah Cellarbrations			\$465.97
EFT000111	14/07/2020	Refreshments for Councillors Lounge	\$325.99
EFT000112	22/07/2020	Props for photo shoot 10-12 July 2020	\$139.98
Mandurah Mitsubishi			\$90,464.76
EFT000110	08/07/2020	Mitsubishi Pajero Sport GLX 2.4L automatic	\$39,401.30
EFT000112	22/07/2020	Mitsubishi Pajero Sport GLX automatic	\$39,402.36
EFT000112	22/07/2020	Mitsubishi Triton GLX 2.4L Dual Cab Pickup less trade in	\$11,661.10
Mandurah Tree Lopping & Stump			\$47,410.00
EFT000109	02/07/2020	Tree Works as part of Resheeting - 3 Days	\$9,240.00
EFT000109	02/07/2020	Haulage Road Maintenance and Tree Works	\$3,080.00
EFT000109	02/07/2020	Tree Works for the Month of June 2020	\$6,160.00
EFT000109	02/07/2020	Regional Road Maintenance	\$12,320.00
EFT000109	02/07/2020	Emergency Tree Works Storm Damage	\$3,080.00
EFT000109	02/07/2020	Extra Tree Works June 2020	\$6,160.00
EFT000113	30/07/2020	Tree Works for the Month of July as per Tender	\$1,210.00
EFT000113	30/07/2020	Tree Works for the Month of July as per Tender	\$6,160.00
Marketforce Productions			\$5,833.04

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
EFT000110	08/07/2020	5 branded pack - SEEK	\$4,513.04
EFT000110	08/07/2020	5 branded pack - SEEK	\$1,320.00
McGrath Pest Management			\$4,939.00
EFT000111	14/07/2020	Tearooms cockroach and rodent baiting	\$275.00
EFT000111	14/07/2020	Rodent Baiting to Complex	\$275.00
EFT000111	14/07/2020	Termite inspection and external spray to all buildings	\$4,389.00
McLarty, Douglas			\$2,342.83
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$2,342.83
McLeods			\$11,203.91
EFT000109	02/07/2020	Agri Innovation Precinct - Peel Business Park	\$1,526.25
EFT000110	08/07/2020	Legal fees - unauthorised landfill	\$1,156.29
EFT000110	08/07/2020	Lot 302 Del Park Road dust	\$2,981.31
EFT000110	08/07/2020	Lodgement of Section 70A notification.	\$100.11
EFT000113	30/07/2020	Point Grey development	\$5,439.95
Miracle Recreation Equipment			\$225.50
EFT000110	08/07/2020	Replacement playground equipment	\$225.50
MM Electrical			\$425.04
EFT000112	22/07/2020	4 stainless steel downlights	\$425.04
Morris Pest & Weed Control			\$1,360.00
EFT000109	02/07/2020	Re-inspection of 8 treated bridges	\$1,360.00
MDE Electrical			\$1,694.43
EFT000110	08/07/2020	Repair 5 streetlights Murray River Country Estate	\$1,694.43
Murray District Rangers Soccer Club			\$2,519.00
EFT000112	22/07/2020	Community Assistance Fund	\$2,519.00
Murray Engineering			\$9,715.02
EFT000110	08/07/2020	Repairs to Dwellingup VBFB 3.4 - tanker	\$6,645.76
EFT000110	08/07/2020	Repair and reinforce hose reel frame and associated parts	\$2,302.67
EFT000113	30/07/2020	Air conditioner repairs on South Yunderup/Ravenswood tanker	\$766.59
Murray River Auto Repairs			\$2,059.30
EFT000110	08/07/2020	70,000km service 4007MY Toyota RAV4	\$270.70
EFT000110	08/07/2020	24,000km service 4016MY Holden Colorado	\$426.25
EFT000110	08/07/2020	90,000km service 4031MY Isuzu D-Max	\$1,053.45
EFT000110	08/07/2020	60,000km service Toyota RAV4 4018MY	\$308.90
Murray Shire Social Club			\$459.00
EFT000110	08/07/2020	Payroll deductions	\$10.00
EFT000110	08/07/2020	Payroll deductions	\$234.00
EFT000112	22/07/2020	Payroll deductions	\$10.00
EFT000112	22/07/2020	Payroll deductions	\$205.00
National Trust Of Australia (WA)			\$3,850.00
EFT000109	02/07/2020	Pinjarra Courthouse - Rent 06 June 2020 - 2021	\$3,850.00
Neverfail (WA) Pty Limited			\$17.60
EFT000113	30/07/2020	Monthly cooler rental for the Operations Centre	\$17.60
Open Office Pty Ltd			\$4,114.00
EFT000109	02/07/2020	Addition of fee calculator to planning module	\$3,630.00
EFT000109	02/07/2020	Add phone numbers to current owners	\$484.00
Our Community Yoga			\$1,081.00
EFT000109	02/07/2020	2 yoga classes	\$113.00
EFT000111	14/07/2020	4 yoga classes	\$242.00
EFT000111	14/07/2020	4 yoga classes	\$242.00
EFT000112	22/07/2020	4 yoga classes	\$242.00
EFT000113	30/07/2020	4 yoga classes	\$242.00
Peel Bearings, Tools & Filters			\$622.49
EFT000112	22/07/2020	20ft 08B1SS Chain	\$622.49
Peel Bus Hire & Charters			\$165.00
EFT000112	22/07/2020	Bus hire for youth excursion 13 July 2020	\$165.00
Peel Mini Earthmovers			\$3,467.20
EFT000110	08/07/2020	Resheeting drain and batter finishing	\$3,080.00
EFT000111	14/07/2020	Excavator to clean drains Inlet Boulevard	\$387.20
Phoenix Foundry			\$324.50

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
EFT000110	08/07/2020	Plaque for cemetery	\$324.50
Pinjarra Meat Supply			\$256.35
EFT000110	08/07/2020	Catering Operations Centre meeting	\$256.35
Pisconeri AM			\$41,079.50
EFT000110	08/07/2020	Transport green waste to Waroona June 2020	\$5,808.00
EFT000110	08/07/2020	Corio Road Transfer Station management	\$30,974.90
EFT000110	08/07/2020	Transfer Station management 2019-20	\$3,801.60
EFT000110	08/07/2020	Remove illegally dumped asbestos from Hougham Road	\$495.00
Platinum Tyre Services Pty Ltd			\$825.00
EFT000112	22/07/2020	Supply and fit tyres	\$825.00
PSI Audio (WA) Pty Ltd			\$695.00
EFT000112	22/07/2020	Install control cable for scoreboard	\$695.00
Puma Energy			\$740.02
EFT000109	02/07/2020	Fuel usage	\$740.02
Quality Traffic Management Pty Ltd			\$6,819.48
EFT000109	02/07/2020	Traffic Control - Del Park Road - Tree works	\$4,303.20
EFT000109	02/07/2020	Traffic Control - Old Bunbury Road - Tree works	\$2,516.28
Raeco International Pty Ltd			\$490.99
EFT000110	08/07/2020	Book coverings and tapes for Library	\$490.99
Rheem Australia P/L			\$854.70
EFT000112	22/07/2020	Boiler service, gas flow & temperature issue	\$854.70
Risk Management Institution of			\$330.00
EFT000110	08/07/2020	12 month membership subscription	\$330.00
Rivers Regional Council			\$13,322.10
EFT000109	02/07/2020	Annual contribution for 2020/21	\$13,322.10
Rogers, Cr Angela			\$1,602.75
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$1,602.75
Rose, Casey			\$1,602.75
EFT000112	22/07/2020	Meeting, IT & Communications Allowance	\$1,602.75
Royal Life Saving Society			\$1,272.00
EFT000109	02/07/2020	Lifeguard and resuscitation group requalification	\$1,272.00
Scope Business Imaging			\$2,676.14
EFT000110	08/07/2020	Copier charges - Library from 31/05/2020	\$52.18
EFT000110	08/07/2020	Copier charges - Fax room from 31/05/2020	\$153.61
EFT000110	08/07/2020	Copier charges - DHVIC from 31/05/2020	\$176.87
EFT000110	08/07/2020	Copier charges - Depot from 31/05/2020	\$38.39
EFT000110	08/07/2020	Copier charges - Binding room from 31/05/2020	\$1,479.24
EFT000110	08/07/2020	Copier charges - Technical Services from 31/05/2020	\$146.47
EFT000110	08/07/2020	Copier charges - Accounts from 31/05/2020	\$69.54
EFT000110	08/07/2020	Copier charges - Records from 31/05/2020	\$29.28
EFT000110	08/07/2020	Copier charges - Reception from 31/05/2020	\$66.70
EFT000110	08/07/2020	Copier charges - Rangers from 31/05/2020	\$98.68
EFT000110	08/07/2020	Copier charges - MALC from 31/05/2020	\$122.92
EFT000110	08/07/2020	Copier charges - Planners from 31/05/2020	\$223.00
EFT000110	08/07/2020	Copier charges - SES Building June 20	\$19.26
Shire of Waroona			\$6,936.00
EFT000109	02/07/2020	FER payment	\$40.00
EFT000110	08/07/2020	Green waste disposal from Corio Road Transfer Station	\$2,544.00
EFT000112	22/07/2020	Green waste disposal from Dwellingup Transfer Station	\$2,592.00
EFT000113	30/07/2020	Green waste disposal at Shire of Waroona	\$1,760.00
Soft Landing			\$7,280.00
EFT000111	14/07/2020	Collect mattresses from Corio Road Transfer Station	\$1,008.00
EFT000111	14/07/2020	Mattress collection from Corio Road Transfer Station	\$6,272.00
South Metropolitan TAFE			\$405.35
EFT000112	22/07/2020	Certificate 3 Accounts Administration course fees	\$405.35
South West Fire Solutions			\$251.90
EFT000112	22/07/2020	Replacement water fire extinguisher Dwellingup	\$251.90
Sports Power - Pinjarra			\$300.00
EFT000110	08/07/2020	Prizes for Hackathon activity with Pinjarra Senior High School	\$300.00

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
Spyker Business Solutions Pty Ltd			\$3,449.18
EFT000112	22/07/2020	July 2020 CCTV maintenance	\$3,449.18
J & J Steele Plumbing and Gas			\$668.24
EFT000109	02/07/2020	Repair to tap sullage unit Pelicans South Yunderup	\$668.24
Stewart & Heaton Clothing			\$1,295.69
EFT000111	14/07/2020	Bush Fire Brigade uniforms and PPE	\$193.97
EFT000112	22/07/2020	Bush Fire Brigade uniforms and PPE	\$1,101.72
Subway Pinjarra			\$260.80
EFT000112	22/07/2020	Catering Bush Fire Brigade meeting	\$260.80
Surveying South			\$6,347.00
EFT000112	22/07/2020	Feature and Setout for Design and Construction	\$6,347.00
Talis Consultants			\$15,125.00
EFT000112	22/07/2020	Variation to design of Corio Road Transfer Station	\$14,025.00
EFT000112	22/07/2020	Redesign tip face wall Corio Road Transfer Station	\$1,100.00
Telstra Corporation Limited			\$1,422.40
EFT000111	14/07/2020	Phone usage - Coopers Mill	\$34.95
EFT000112	22/07/2020	Phone usage - Rangers	\$1,075.93
EFT000112	22/07/2020	Phone usage - DHVIC	\$69.89
EFT000112	22/07/2020	Phone usage - Murray SES	\$91.64
EFT000112	22/07/2020	Phone usage - Administration Building	\$149.99
Thompson Surveying Consultants			\$5,500.00
EFT000112	22/07/2020	Land Acquisition for Lot 10 Burnside Road Meelon	\$5,500.00
Total Packaging			\$858.00
EFT000112	22/07/2020	Cartons of dog waste bags	\$858.00
Toyota Financial Services			\$480.23
EFT000111	14/07/2020	Lease vehicle - MY12336 June 2020	\$480.23
TPG Network Pty Ltd			\$3,224.57
EFT000110	08/07/2020	Phone usage monthly	\$3,224.57
Truck Centre (WA) Pty Ltd			\$2,565.92
EFT000109	02/07/2020	Warranty service and repairs	\$2,565.92
Tuckey's Hardware			\$7,302.78
EFT000109	02/07/2020	Items for General Parks	\$102.06
EFT000109	02/07/2020	Assorted plants for Parks	\$380.50
EFT000109	02/07/2020	Items for Edenvale landscaping	\$15.00
EFT000110	08/07/2020	Items for General Parks	\$242.98
EFT000110	08/07/2020	Post hole digger and assorted items	\$2,501.10
EFT000110	08/07/2020	Jarrah stakes 2000 25x25x900	\$2,050.00
EFT000111	14/07/2020	Animal Control hardware supplies	\$129.00
EFT000111	14/07/2020	Items for Road Maintenance	\$59.99
EFT000111	14/07/2020	Items for Cemetery Gardens	\$7.64
EFT000111	14/07/2020	Items for General Parks	\$71.90
EFT000111	14/07/2020	Items for Edenvale Precinct Gardens	\$15.96
EFT000112	22/07/2020	Items for General Parks	\$42.99
EFT000112	22/07/2020	Items for Edenvale Precinct Gardens	\$57.49
EFT000112	22/07/2020	Items for Drainage Maintenance	\$23.25
EFT000112	22/07/2020	Items for General Parks	\$8.54
EFT000112	22/07/2020	Items for General Parks	\$83.75
EFT000112	22/07/2020	Item for the Operations Centre	\$17.46
EFT000112	22/07/2020	Purchase tools and tool box for Gym	\$64.97
EFT000112	22/07/2020	Items for Drainage Maintenance	\$36.15
EFT000112	22/07/2020	Items for Road Maintenance	\$51.31
EFT000112	22/07/2020	Mortar for drainage works	\$1,112.90
EFT000113	30/07/2020	Items for General Parks	\$125.79
EFT000113	30/07/2020	Items for Edenvale Precinct Gardens	\$19.95
EFT000113	30/07/2020	Small hardware supplies	\$3.56
EFT000113	30/07/2020	Animal Control hardware supplies	\$63.99
EFT000113	30/07/2020	Small hardware supplies	\$14.55
Tutt Bryant Equipment Pty Ltd			\$3,661.28
EFT000112	22/07/2020	Travel, parts and labour 2000 hour service BW25RH	\$3,661.28
Tyrecycle Pty Ltd			\$1,516.65

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
EFT000110	08/07/2020	Collect tyres from Corio Road Transfer Station	\$1,516.65
Tyrepower Pinjarra			\$2,898.50
EFT000112	22/07/2020	Supply and fit Yokohama steer tyres	\$948.20
EFT000112	22/07/2020	Supply and fit new Michelin X Multi tyres	\$1,757.80
EFT000113	30/07/2020	Puncture repair flatop trailer Parks	\$38.50
EFT000113	30/07/2020	Fit new steer tyres (Shire supplied) and disposal	\$154.00
Ulverscroft Large Print Books			\$165.00
EFT000112	22/07/2020	Library book stock	\$165.00
Veolia Environmental Services			\$3,003.00
EFT000110	08/07/2020	Vacuum loading and jetting of stormwater drains	\$3,003.00
Vibe Pinjarra			\$3,210.53
EFT000110	08/07/2020	Fuel usage	\$3,210.53
Vorgee Pty Ltd			\$686.40
EFT000112	22/07/2020	Aquatic pro shop stock	\$686.40
WA Tool and Trade Supply			\$239.64
EFT000111	14/07/2020	Workshop tools and consumables	\$239.64
WALGA			\$26,828.91
EFT000113	30/07/2020	WALGA Professionally Speaking training	\$1,092.00
EFT000113	30/07/2020	WALGA Membership 2020/2021	\$25,736.91
Waroona Septics & Liquid Waste			\$495.00
EFT000112	22/07/2020	Quarterly clean of grease trap MALC	\$495.00
Waste Water Services Pty Ltd			\$1,204.50
EFT000109	02/07/2020	MREC WWTP servicing - 4th quarter	\$1,204.50
Waterlogic Australia Pty Ltd			\$570.90
EFT000110	08/07/2020	Water cooler rental	\$570.90
Westbooks			\$331.01
EFT000109	02/07/2020	Library book stock	\$331.01
Western Rural Fencing			\$220.00
EFT000111	14/07/2020	Supply and program 2 remotes for auto sliding	\$220.00
Whitcroft IT Pty Ltd			\$2,069.50
EFT000109	02/07/2020	Dwellingup PC and Software Installation	\$2,069.50
Wilson Security			\$97.90
EFT000113	30/07/2020	Alarm callout 28/6/2020	\$97.90
Wine Tree Cidery			\$120.00
EFT000112	22/07/2020	Purchases made during Dwellingup photo shoot	\$120.00
Easi Packaging Pty Ltd			\$6,223.08
EFT000110	08/07/2020	Payroll deductions	\$3,111.54
EFT000112	22/07/2020	Payroll deductions	\$3,111.54
Jenni Brown			\$9,240.00
EFT000111	14/07/2020	Project Management Agri-Innovation Precinct	\$9,240.00
Telair Pty Ltd			\$1,631.78
EFT000110	08/07/2020	Service charges - July 2020	\$1,631.78
Toll Transport Pty Ltd			\$71.12
EFT000109	02/07/2020	Courier charges	\$33.06
EFT000111	14/07/2020	Courier charges	\$27.28
EFT000112	22/07/2020	Courier charges	\$10.78
Wayne Rogers			\$1,500.00
EFT000112	22/07/2020	Overpayment rates - Assessment A11371	\$1,500.00
Spacecubed Ventures Pty Ltd			\$27,500.00
EFT000110	08/07/2020	Design and Delivery of Your Business, Digital Program	\$27,500.00
Crisp Wireless Pty Ltd			\$8,514.00
EFT000110	08/07/2020	Annual Site Licence - North Dandalup June 30 2021	\$8,514.00
Fiona Ferguson			\$930.00
EFT000112	22/07/2020	Overpayment of rates - Assessment A10988	\$930.00
Sterling's Office National			\$88.25
EFT000110	08/07/2020	General stationery	\$88.25
Forms Express			\$326.15
EFT000109	02/07/2020	Interim Notice Stock - Design and Supply x 1000	\$326.15
Construction Training Fund			\$1,198.74
EFT000110	08/07/2020	BCITF Collection Fees - June 2020	\$1,198.74

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
Quicklee Express			\$82.50
EFT000110	08/07/2020	Courier charges	\$82.50
Macquarie Bank Limited			\$19,486.26
EFT000110	08/07/2020	Leases IT Equipment 01/07/20 - 30/09/20	\$19,486.26
Mandurah Bolt Supplies			\$367.06
EFT000112	22/07/2020	Bolts for toilet roll holders	\$367.06
Anneke Scheepers			\$536.80
EFT000110	08/07/2020	Study Assistance - reimbursement library staff	\$536.80
Jarra Infusion			\$345.00
EFT000113	30/07/2020	Refreshments - Strategy Planning Day	\$345.00
The West Australian			\$205.00
EFT000112	22/07/2020	Advertising Murray Coastal Times - 2020	\$205.00
Access Office Industries			\$11,045.10
EFT000113	30/07/2020	Eclipse lab stools	\$11,045.10
Action Interiors Pty Ltd			\$57,440.06
EFT000110	08/07/2020	Interior Fit out - customer service & brochure	\$57,440.06
Elevage Lighting Group			\$34,433.30
EFT000113	30/07/2020	Conversion of lights MALC to LED	\$34,433.30
Sandra Michelle Lapworth			\$300.00
EFT000110	08/07/2020	Herron Point Caretakers allowance - 29 June to 13 July	\$300.00
Alexander Derry			\$2,429.00
EFT000112	22/07/2020	Repairs to Community Meeting Rooms	\$1,208.00
EFT000113	30/07/2020	Prepare and fit skirting to Courts 1 & 2 and Cardio Room	\$1,221.00
Placid Waters Concrete Service			\$2,970.00
EFT000111	14/07/2020	Concrete footings for stage structure foreshore	\$2,970.00
Place Laboratory Pty Ltd			\$26,730.00
EFT000112	22/07/2020	Pinjarra Rail Heritage Precinct	\$14,630.00
EFT000112	22/07/2020	Edenvale Heritage Precinct	\$12,100.00
Lynda Caccetta			\$2,800.00
EFT000110	08/07/2020	Design Landscape Concept Plan - Edenvale Stage 1A	\$2,800.00
Patrick Cole			\$166.86
EFT000112	22/07/2020	Reimbursement - Nightowl Ravenswood - fuel for youth excursion	\$166.86
Open Cities Pty Ltd			\$41,250.00
EFT000110	08/07/2020	OpenCities License fee 2020/2021	\$41,250.00
Repeat Plastics (WA)			\$840.17
EFT000111	14/07/2020	Sign for Bill Cook & Derk Luiten Park	\$840.17
Seminars Australia			\$275.00
EFT000110	08/07/2020	Seminar - Casual contracts 2020	\$275.00
Growise			\$1,287.00
EFT000110	08/07/2020	Tree guards	\$1,287.00
Mandurah Mazda			\$92.25
EFT000109	02/07/2020	New vehicle registration Mazda2 4033MY	\$92.25
Maker + Co			\$4,620.00
EFT000110	08/07/2020	First payment for Hackathon 2020	\$4,620.00
JMG Building Surveyors			\$1,980.00
EFT000110	08/07/2020	Schematic design - Agri-Innovation Project	\$1,980.00
Internature			\$350.00
EFT000111	14/07/2020	Mentorship payment for Hackathon 2020	\$350.00
Adrian Brant			\$1,980.00
EFT000109	02/07/2020	Land acquisition compensation	\$1,980.00
Riverside Building Approvals			\$605.00
EFT000112	22/07/2020	Site inspection and sign off following practical completion	\$605.00
CA & RG Weaire			\$1,979.83
EFT000110	08/07/2020	Cancelled private works -15 Broadhurst Avenue	\$1,979.83
Dwellingup Transfers			\$65.00
EFT000112	22/07/2020	Transfers for Photo Shoot Friday 10 - Sun 12 July	\$65.00
Pinjarra Lunch Bar & Cafe			\$400.00
EFT000112	22/07/2020	Catering for Rangers meeting	\$400.00
Norma Salamon			\$613.50

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
EFT000111	14/07/2020	Overpayment of rates - Assessment 5135	\$613.50
Ultimate Automotive WA			\$200.00
EFT000113	30/07/2020	Vehicle detailing 4009MY Subaru	\$200.00
John & Karran Kunzel			\$613.50
EFT000112	22/07/2020	Overpayment of rates - Assessment A1467	\$613.50
Richard Hicks & Jennifer Evans			\$792.00
EFT000112	22/07/2020	Overpayment of rates - Assessment A3056	\$792.00
Quenton & Jennifer Rae			\$1,645.65
EFT000112	22/07/2020	Overpayment of rates - Assessment A7383	\$1,645.65
Unique Binding			\$560.50
EFT000113	30/07/2020	Binding supplies	\$560.50
Lockdown Security Solutions			\$3,298.90
EFT000112	22/07/2020	Installation of new alarm system and 12 months	\$3,298.90
Robert & Sharon Lipscombe			\$795.00
EFT000113	30/07/2020	Overpayment rates - Assessment A10133	\$795.00
Michelle & Raymond Hourihane			\$232.75
EFT000113	30/07/2020	Overpayment rates - Assessment A6668	\$232.75
		EFT Total	\$1,657,168.02
Cornerstone Legal Pty Ltd			\$4,410.00
101103	22/07/2020	Ongoing preparation for Court Prosecution	\$4,410.00
Shire of Murray			\$5,415.70
101093	08/07/2020	Payroll deductions - Rates	\$120.00
101093	08/07/2020	Payroll deductions - Gym memberships	\$2,396.80
101093	08/07/2020	Firewood Commission June 2020	\$77.00
101093	08/07/2020	BSL Commission - June 20	\$240.00
101093	08/07/2020	BCITF Commission - June 20	\$49.50
101104	22/07/2020	Payroll deductions - Rates	\$120.00
101104	22/07/2020	Payroll deductions - Gym memberships	\$2,412.40
Synergy			\$38,453.46
101094	08/07/2020	Electricity - Fire tank	\$115.63
101094	08/07/2020	Electricity - Riverland Ramble	\$1,886.51
101094	08/07/2020	Electricity - Riverland Ramble	\$926.76
101094	08/07/2020	Electricity - North Dandalup Hall	\$409.72
101094	08/07/2020	Electricity - Streetlights	\$30,615.51
101094	08/07/2020	Electricity - CCTV Town Square	\$115.87
101094	08/07/2020	Electricity - Fire tank Barragup	\$112.13
101094	08/07/2020	Electricity - DHVIC	\$37.26
101094	08/07/2020	Electricity - DHVIC	\$354.17
101094	08/07/2020	Electricity - Fire tank	\$666.04
101094	08/07/2020	Electricity - Rodereda Crescent	\$80.08
101094	08/07/2020	Electricity - Ravenswood Toilets	\$310.08
101094	08/07/2020	Electricity - Scouts Shed & Toilets	\$171.89
101094	08/07/2020	Electricity - Fire tank	\$112.13
101094	08/07/2020	Electricity - Murray Lakes Toilets	\$142.51
101094	08/07/2020	Electricity - Kingfisher Park Toilets	\$127.45
101094	08/07/2020	Electricity - Pelican Point Toilets	\$90.75
101094	08/07/2020	Electricity - Murray Bend Toilets	\$112.20
101094	08/07/2020	Electricity - Boat Ramp Toilets	\$130.32
101094	08/07/2020	Electricity - West Murray Fire Brigade	\$792.33
101094	08/07/2020	Electricity - Centenary Park	\$110.35
101094	08/07/2020	Electricity - Lucie Hunter Park	\$106.76
101100	14/07/2020	Electricity - Sandy Cove Playground	\$114.96
101100	14/07/2020	Electricity - South Yunderup Oval	\$212.75
101100	14/07/2020	Electricity - Gowman Park	\$121.72
101105	22/07/2020	Electricity - Coolup Fire Station	\$251.86
101105	22/07/2020	Electricity - Don Spark Reserve	\$107.29
101105	22/07/2020	Electricity - Tennis Courts	\$118.43
Alinta Gas			\$11,152.40
101095	08/07/2020	Gas - Leisure Centre - Aquatic Centre	\$11,152.40
Water Corporation			\$13,208.97

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
101096	08/07/2020	Water: Leisure Centre	\$1,290.60
101096	08/07/2020	Water: Camp Road (12) rental house	\$285.07
101096	08/07/2020	Water: Camp Road (14) rental house	\$248.72
101096	08/07/2020	Water: 28 George Street	\$136.07
101096	08/07/2020	Water: George Street Toilets	\$292.85
101096	08/07/2020	Water: Exchange Hotel	\$291.95
101096	08/07/2020	Water: 6 George Street	\$55.56
101096	08/07/2020	Water: Cantwell Park	\$129.85
101096	08/07/2020	Water: CWA Building	\$68.78
101096	08/07/2020	Water: Edenvale Toilet block	\$483.40
101096	08/07/2020	Water: Edenvale Rose Gardens	\$82.30
101096	08/07/2020	Water: Old School Building	\$5.20
101096	08/07/2020	Water: Liveringa	\$5.20
101096	08/07/2020	Water: Administration Office	\$215.90
101096	08/07/2020	Water: Records Office	\$58.16
101096	08/07/2020	Water: Murray House	\$157.81
101096	08/07/2020	Water: Old SES Building	\$68.78
101096	08/07/2020	Water: Cemetery	\$171.40
101097	08/07/2020	Repair burst leaking pipe, water main damaged	\$1,014.21
101097	08/07/2020	Water: James Street rental house	\$241.41
101097	08/07/2020	Water: Kindergarten	\$92.40
101097	08/07/2020	Water: Civic Centre	\$278.96
101097	08/07/2020	Water: Library	\$149.91
101097	08/07/2020	Water: Hotham Valley Railway	\$556.11
101097	08/07/2020	Water: North Pinjarra Hall	\$197.49
101097	08/07/2020	Water: Administration Building	\$234.35
101097	08/07/2020	Water: Culeenup Road Boat Ramp Toiles	\$131.60
101097	08/07/2020	Water: Operations Centre	\$179.82
101097	08/07/2020	Water: George Beacham Pavillion	\$723.92
101097	08/07/2020	Water: Tennis Courts / Clubhouse	\$5.19
101097	08/07/2020	Water: Roe Avenue rental house	\$57.69
101097	08/07/2020	Water: SES Building	\$10.39
101097	08/07/2020	Water: Kingfisher Park	\$572.36
101101	14/07/2020	Water usage - St Johns Church	\$31.16
101101	14/07/2020	Water:11 Peel St Hall	\$68.78
101101	14/07/2020	Water usage - South Yunderup Fire Brigade	\$76.34
101101	14/07/2020	Water usage - Murray Lakes Toilet	\$91.92
101101	14/07/2020	Water usage - Yunderup Oval Toilets	\$1,056.09
101101	14/07/2020	Water usage - Sandy Cove Playground	\$25.97
101101	14/07/2020	Water usage - Boat Ramp Toilets	\$100.19
101101	14/07/2020	Water: Waste - Boat Ramp	\$241.84
101101	14/07/2020	Water usage - LGA Standpipe	\$238.92
101101	14/07/2020	West Murray Hall	\$166.21
101101	14/07/2020	York Street Toilet	\$134.19
101101	14/07/2020	Canoe Club usage	\$41.55
101101	14/07/2020	Ravenswood Toilet usage	\$72.72
101101	14/07/2020	Murray Bend Toilet usage	\$160.16
101106	22/07/2020	Water: Waste - Railway Station	\$241.84
101106	22/07/2020	Water usage - Dwellingup Hall	\$64.93
101106	22/07/2020	Water usage - Dwellingup Oval	\$828.44
101106	22/07/2020	Water usage - Dwellingup Fire Station	\$5.19
101106	22/07/2020	Water usage - Marinup Park	\$153.22
101106	22/07/2020	Water usage - North Dandalup Hall	\$28.57
101106	22/07/2020	Water usage - Coopers Mill	\$781.70
101106	22/07/2020	Water usage - Pelican Point	\$105.63
Department of Transport			\$22,126.95
101108	23/07/2020	12 month fleet vehicle registrations - expiry 31 July 2021	\$22,126.95
Optus			\$2,772.64
101102	14/07/2020	Phone usage	\$2,630.89
101107	22/07/2020	Phone usage	\$141.75

List of Accounts Paid in July 2020 to be Received			
Payment No	Posting Date	Description	Amount
Elgas Ltd			\$20.00
101098	08/07/2020	Collect gas bottles	\$20.00
Australian Communications and Media Authority			\$228.00
101099	08/07/2020	Renewal of two way radio licences	\$228.00
Please Pay Cash			\$830.00
065486	14/07/2020	Umpire recoup as at 10 July 2020	\$830.00
		Cheque Total	\$98,618.12
Commonwealth Bank Direct Debit	06/07/2020	Corporate Credit Cards - detail in attachment	\$9,919.37
		Credit Card Total	\$9,919.37
		Payment Total	\$1,765,705.51

This schedule of accounts paid for the Municipal Fund totalling **\$1,765,705.51** which was submitted to each member of the Council on **27 August 2020** has been checked and is fully supported by vouchers and invoices which are submitted herewith and which have been duly certified as to the receipt of goods and the rendition of services and as to prices, computations and costings. Total creditor accounts outstanding as at 31 July 2020 is **\$381,695.89**. The accompanying attachment forms part of this report, which details the expenses paid by Cash and Corporate Credit Card for the month of **July 2020**.

 CHIEF EXECUTIVE OFFICER

Attachment of List of Accounts Paid in July to be Received				
Cheque	Date	Name	Description	Amount
Direct Debit	6/07/2020	CommBank	Corporate Credit Card Usage	\$9,919.37
		Lauren Williams		\$84.30
		Dilate Digital	Monthly eNewsletter	\$53.90
		Facebook Ads	Facebook advertising	\$30.40
		Leanne McGuirk		\$1,398.26
		Google	Google G Suite monthly subscription	\$22.56
		Officeworks	Notebook	\$51.00
		Squarespace Inc.	Squarespace monthly subscription	\$19.00
		Squarespace Inc.	Squarespace app monthly subscription	\$16.80
		Kounta	Kounta POS system Edenvale Tea Rooms	\$60.00
		Temple & Webster	Vintage style festoon lights for photo shoot	\$544.90
		Department of Biodiversity	Dwellingup camp fees for photo shoot	\$60.00
		Longriders Woodfired Pizzas	Catering DHVIC	\$69.00
		Planning Institute of Australia	Membership renewal 2020 -2021 L McGuirk	\$555.00
		Rodney Peake		\$2,042.60
		Coles Express Bullcreek	Fuel for 4003MY	\$81.11
		Ravenswood Night Owl	Fuel for 4003MY	\$72.41
		Coles Express Bullcreek	Fuel for 4003MY	\$70.08
		Planning Institute of Australia	Membership renewal 2020 -2021 R Bloxsidge	\$555.00
		Planning Institute of Australia	Membership renewal 2020 -2021 R Peake	\$632.00
		Planning Institute of Australia	Membership renewal 2020 -2021 B Flugge	\$632.00
		Sally Donkin		\$800.33
		Links Modular	Monthly subscription June 2020	\$414.35
		Myzone	Monthly subscription June 2020	\$218.90
		The Reject Shop	2020 - 2021 Diaries	\$119.00
		Facebook Ads	Facebook advertising	\$13.08
		Shutterstock	Stock images - monthly subscription	\$35.00
		Dean Unsworth		\$1,219.60
		Superloop Broadband	Home broadband June 2020	\$89.95
		Dome Westralia Plaza	Refreshments - Agri-innovation meeting 03/06/20	\$21.55
		Hummingbird Café	Refreshments - PDC meeting 06/06/20	\$76.00
		Dome Pinjarra	Refreshments - PDC meeting 09/06/20	\$10.60
		Dome Pinjarra	Refreshments - meeting 10/06/20	\$8.60
		Dome Pinjarra	Refreshments - PDC, Murdoch and Project Manager meeting 11/06/20	\$51.95

Attachment of List of Accounts Paid in July to be Received				
Cheque	Date	Name	Description	Amount
		Hummingbird Café	Refreshments - PDC meeting 16/06/20	\$82.50
		Booking.com	CEO accommodation Agri-innovation meeting in Fremantle	\$149.00
		National Hotel	Refreshments - Agri-innovation meeting Fremantle	\$81.00
		Doodle	Annual subscription June 2020 - June 2021	\$538.45
		Australian Water Association	Registration - WA Water Industry breakfast	\$110.00
		Gavin Stevens		\$35.95
		Dominoes	Refreshments for meeting	\$35.95
		Daniel Bingham		\$776.31
		Google G suite	G Suite monthly subscription for Council	\$6.42
		Google G Suite	G Suite monthly subscription for Councillors	\$172.79
		Internode P/l	Wireless NBN	\$351.63
		Avtech	Room alert upgrade June 2020 - June 2021	\$147.84
		Zettanet Pty Ltd	Monthly subscription - voice backup	\$97.63
		Ben Jordan		\$1,370.76
		Tuckey's Hardware	Extension leads	\$11.00
		Good Guys	Replacement TV for Gym	\$450.00
		Tuckey's Hardware	Painting supplies	\$24.35
		WOW Health	Floor standing anti bacterial wipe dispensers	\$744.70
		Vibe	Milk	\$3.50
		Para Mobility	Bracket for water wheelchair	\$17.85
		JB Hifi	Audio cable	\$12.95
		Bunnings	Toilet door sign and hinges	\$36.31
		Jaycar	Duress alarm box fittings	\$39.60
		Tuckey's Hardware	Key safe and keys cut	\$30.50
		David Arkwright		\$106.00
		Tods Café	Refreshments - Mandurah Eco Strategy meeting	\$14.80
		Dome Westralia Plaza	Refreshments - Agri-innovation meeting	\$12.90
		Jarra Infusion	Refreshments Rob Clayton meeting	\$11.00
		Fairbridge Village	Murdoch University and Shire visit	\$27.00
		Hummingbird Café	Refreshments - Facilitator meeting	\$36.00
		Dome Westralia Plaza	Refreshments - Agri-innovation meeting	\$4.30
		Dale Burton		\$269.00
		Good Guys	Replacement microwave for staff kitchen	\$269.00
		Martin Harrop		\$236.49

Attachment of List of Accounts Paid in July to be Received				
Cheque	Date	Name	Description	Amount
		Shire of Murray	Building fees	\$168.50
		Blue Wren Café	Refreshments - meeting	\$11.00
		Coles Pinjarra	Gift card and card	\$56.99
		Kane Morley		\$15.84
		Tradelink	Small hardware parts	\$15.84

MONTHLY FINANCIAL REPORT
(Containing the Statement of Financial Activity)
FOR THE PERIOD ENDED 31 JULY 2020



TABLE OF CONTENTS

Statement of Financial Activity	1
Monthly Summary Information	2 - 3
Significant Account Policies	4
Net Current Funding Position	5
Cash and Investments	6
Receivables	7
Capital Acquisitions	8 - 10
Disposal of Assets	11
Operating Grants and Contributions	12
Non Operating Grants and Contributions	13
Cash Backed Reserves	14

**STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2020**

BY NATURE OR TYPE

	Adopted Annual Budget	YTD Budget (a)	YTD Actual (b)	Var. \$ (b)-(a)	Var. % (b)-(a)/(b)
Operating Revenues	\$	\$	\$	\$	%
Specified area rates	192,416	0	0	0	
Operating grants, subsidies and contributions	5,438,915	453,243	446,664	(6,579)	(1.47%)
Non-operating grants, subsidies and contributions	19,761,372	695,182	715,396	20,214	2.83%
Fees and charges	5,554,546	165,258	145,622	(19,636)	(13.48%)
Interest earnings	372,250	0	0	0	
Other revenue	215,575	158,255	144,245	(14,010)	(9.71%)
Profit on asset disposals	1,041,005	0	0	0	
	32,576,079	1,471,938	1,451,927	(20,011)	
Operating Expense					
Employee costs	(11,985,880)	(998,823)	(1,037,311)	(38,488)	(3.71%)
Materials and contracts	(12,034,624)	(409,325)	(401,041)	8,284	2.07%
Utility charges	(914,233)	(11,592)	(8,577)	3,015	35.15%
Depreciation on non-current assets	(6,479,266)	0	0	0	
Interest expenses	(146,419)	0	0	0	
Insurance expenses	(446,457)	(254,820)	(254,820)	0	0.00%
Other expenditure	(2,060,683)	(26,425)	(19,902)	6,523	32.77%
Loss on asset disposals	(47,763)	0	0	0	
	(34,115,325)	(1,700,985)	(1,721,651)	(20,666)	
Non-cash amounts excluded from operating activities					
Add back Depreciation	6,479,266	0	0	0	
Adjust (Profit)/Loss on Asset Disposal	(993,242)	0	0	0	
Movement between current & non-current	45,000	0	0	0	
Net Operating (Excluding Rates)	3,991,778	(229,047)	(269,725)	(40,677)	
Capital Revenues					
Proceeds from Disposal of Assets	2,337,674	49,597	53,409	3,812	7.14%
Proceeds from Loan Borrowings	120,000	0	0	0	
Repayment of Self Supporting Loan	41,243	0	0	0	
Transfer from Reserves	4,635,036	0	0	0	
	7,133,953	49,597	53,409	3,812	
Capital Expenses					
Land and Buildings	(13,728,592)	(58,205)	(61,391)	(3,186)	(5.19%)
Furniture and Equipment	(260,385)	(11,548)	(5,245)	6,303	120.15%
Plant and Equipment	(1,157,135)	(83,541)	(68,835)	14,706	21.36%
Infrastructure Assets - Roads	(3,094,447)	(57,845)	(50,674)	7,171	14.15%
Infrastructure Assets - Other	(6,758,280)	(31,547)	(23,817)	7,730	32.46%
Repayment of Debentures	(573,604)	0	0	0	
Advances of Self Supporting Loans	(120,000)	0	0	0	
Transfer to Reserves	(6,946,092)	0	0	0	
	(32,638,535)	(242,686)	(209,962)	32,724	
Net Capital	(25,504,582)	(193,089)	(156,553)	36,536	
Total Net Operating + Capital	(21,512,804)	(422,136)	(426,278)	(4,141)	
Add: Net Current Assets July 1 B/Fwd	5,632,372	5,632,372	12,008,638	6,376,266	
Less: Net Current Assets Year to Date	1,315,485	5,210,236	11,582,360	6,372,124	
Amount Raised From General Rates	(17,195,917)	0	0	0	

**MONTHLY FINANCIAL REPORT
FOR THE PERIOD ENDED 31 JULY 2020**

**MONTHLY SUMMARY
INFORMATION**

PREPARATION TIMING AND REVIEW

Date prepared: All known transactions up to 12 Aug 2020
Prepared by: Manager Finance
Reviewed by: Director Corporate Services

BASIS OF PREPARATION

REPORT PURPOSE

This report is prepared to meet the requirements of Local Government (Financial Management) Regulations 1996, Regulation 34 . Note: The Statements and accompanying notes are prepared based on all transactions recorded at the time of preparation and may vary due to transactions being processed for the reporting period after the date of preparation.

BASIS OF ACCOUNTING

This statement comprises a special purpose financial report which has been prepared in accordance with Australian Accounting Standards (as they apply to local governments and not-for-profit entities), Australian Accounting Interpretations, other authoritative pronouncements of the Australian Accounting Standards Board, the Local Government Act 1995 and accompanying regulations. Material accounting policies which have been adopted in the preparation of this statement are presented below and have been consistently applied unless stated otherwise. Except for cash flow and rate setting information, the report has also been prepared on the accrual basis and is based on historical costs, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and liabilities.

THE LOCAL GOVERNMENT REPORTING ENTITY

All Funds through which the Council controls resources to carry on its functions have been included in this statement. In the process of reporting on the local government as a single unit, all transactions and balances between those funds (for example, loans and transfers between Funds) have been eliminated. All monies held in the Trust Fund are excluded from the statement.

SIGNIFICANT ACCOUNTING POLICIES

GOODS AND SERVICES TAX

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). Receivables and payables are stated inclusive of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with receivables or payables in the statement of financial position. Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the ATO are presented as operating cash flows.

CRITICAL ACCOUNTING ESTIMATES

The preparation of a financial report in conformity with Australian Accounting Standards requires management to make judgements, estimates and assumptions that effect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances; the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

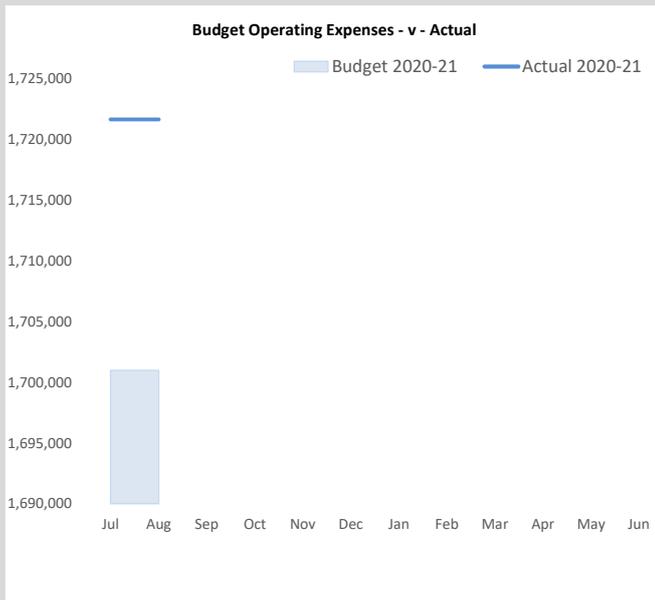
ROUNDING OFF FIGURES

All figures shown in this statement are rounded to the nearest dollar.

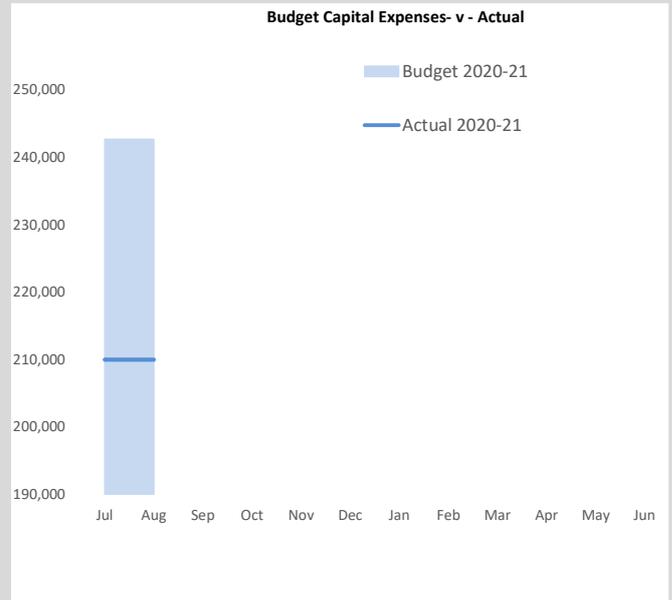
**MONTHLY FINANCIAL REPORT
 FOR THE PERIOD ENDED 31 JULY 2020**

**MONTHLY SUMMARY INFORMATION
 GRAPHS**

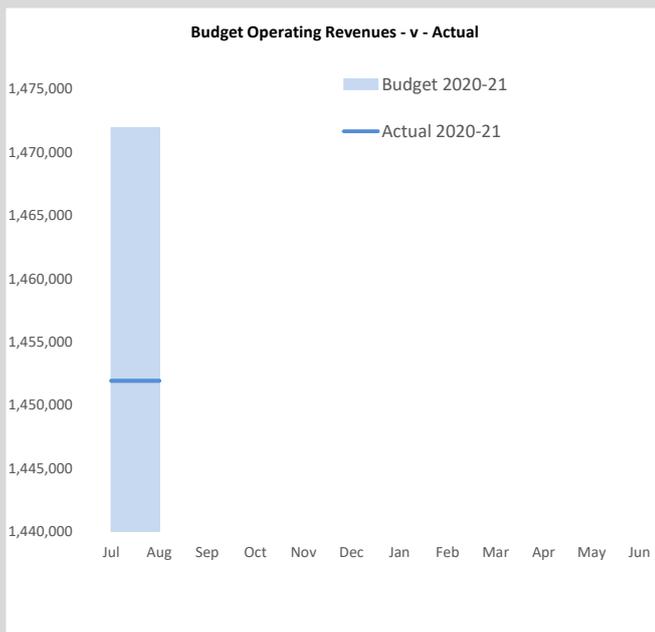
OPERATING EXPENSES



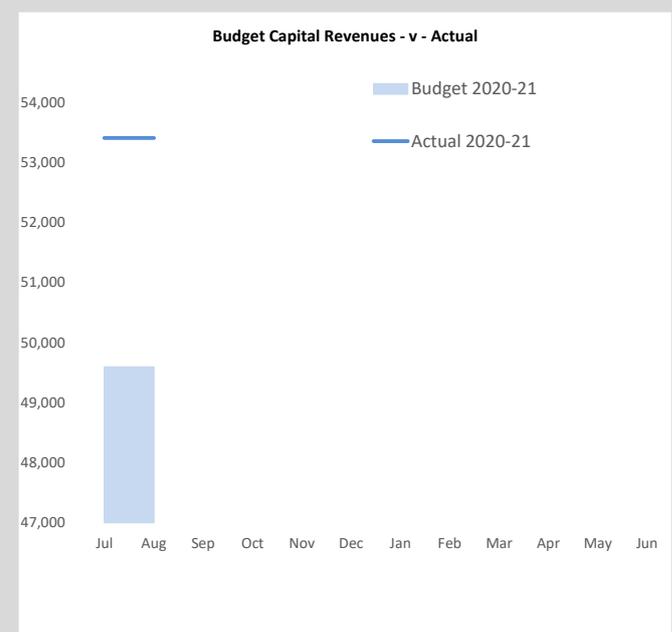
CAPITAL EXPENSES



OPERATING REVENUE



CAPITAL REVENUE



This information is to be read in conjunction with the accompanying Financial Statements and Notes.

**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2020**

NET CURRENT ASSETS

SIGNIFICANT ACCOUNTING POLICIES

CURRENT AND NON-CURRENT CLASSIFICATION

In the determination of whether an asset or liability is current or non-current, consideration is given to the time when each asset or liability is expected to be settled. The asset or liability is classified as current if it is expected to be settled within the next 12 months, being the Council's operational cycle. In the case of liabilities where Council does not have the unconditional right to defer settlement beyond 12 months, such as vested long service leave, the liability is classified as current even if not expected to be settled within the next 12 months. Inventories held for trading are classified as current even if not expected to be realised in the next 12 months except for land held for resale where it is held as non current based on Council's intentions to release for sale.

EMPLOYEE BENEFITS

The provisions for employee benefits relates to amounts expected to be paid for long service leave, annual leave, wages and salaries and are calculated as follows:

(i) Wages, Salaries, Annual Leave and Long Service Leave
(Short-term Benefits)

The provision for employees' benefits to wages, salaries, annual leave and long service leave expected to be settled within 12 months represents the amount the City has a present obligation to pay resulting from employees services provided to balance date. The provision has been calculated at nominal amounts based on remuneration rates the City expects to pay and includes related on-costs.

(ii) *Annual Leave and Long Service Leave (Long-term Benefits)*

The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the project unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match as closely as possible, the estimated future cash outflows. Where the City does not have the unconditional right to defer settlement beyond 12 months, the liability is recognised as a current liability.

PROVISIONS

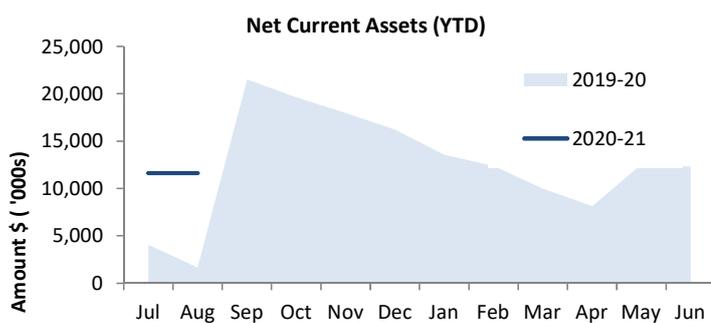
Provisions are recognised when: The council has a present legal or constructive obligation as a result of past events; it is more likely than not that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognised for future operating losses. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one of item included in the same class of obligations may be small.

INVENTORIES

Inventories are measured at the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

	2020-21		
	This Period	Last Period	Same Period Last Year
	\$	\$	\$
Current Assets			
Cash Unrestricted	11,335,130	11,500,531	6,154,411
Cash Restricted	8,213,848	8,213,848	8,445,920
Receivables - Rates and Rubbish	2,178,747	2,376,195	1,145,709
Receivables - Other	1,695,044	2,378,562	544,534
Inventories	25,338	28,175	25,521
	23,448,108	24,497,312	16,316,095
Less: Current Liabilities			
Payables	(1,882,675)	(2,180,423)	(2,301,656)
Provisions	(2,366,226)	(2,366,226)	(2,366,226)
	(4,248,901)	(4,546,648)	(4,667,882)
Less: Cash Restricted	(8,213,848)	(8,213,848)	(8,445,920)
Add: Cash Restricted - Matching Liability	597,002	597,002	597,002
Net Current Funding Position	11,582,360	12,333,817	3,799,295

KEY INFORMATION



Year YTD Actual
Surplus(Deficit)
\$11.58 M
Last Period Actual
Surplus(Deficit)
\$12.33 M

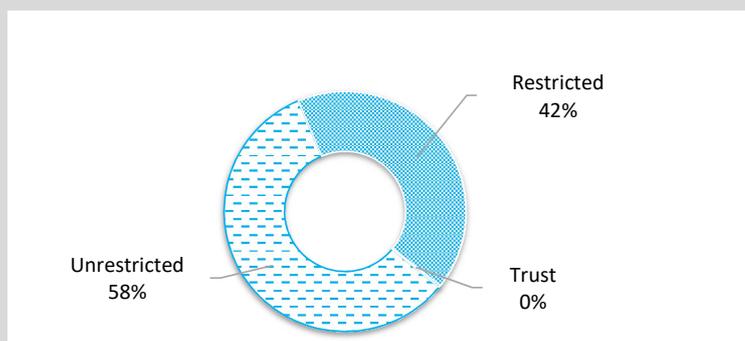
**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
 FOR THE PERIOD ENDED 31 JULY 2020**

**OPERATING ACTIVITIES
 CASH AND FINANCIAL ASSETS**

	Unrestricted	Restricted	Total Cash	Trust	Institution	Interest Rate	Maturity Date
	\$	\$	\$	\$			
Cash Deposits							
Operating Accounts	11,086,134	8,213,848	19,299,982	45,524	Commbank		On Call
Operating Account	243,356		243,356		Bendigo		On Call
Cash on Hand	5,640						On Call
Total	11,335,130	8,213,848	19,543,338	45,524			

KEY INFORMATION

Cash and cash equivalents include cash on hand, cash at bank, deposits available on demand with banks and other short term highly liquid investments highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value and bank overdrafts. Bank overdrafts are reported as short term borrowings in current liabilities in the statement of net current assets.



Total Cash	Unrestricted
\$19.54 M	\$11.34 M

**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
 FOR THE PERIOD ENDED 31 JULY 2020**

**OPERATING ACTIVITIES
 RECEIVABLES**

	Current	30 Days	60 Days	90+ Days	Total
	\$	\$	\$	\$	\$
Receivables - General	921,943	705,653	28,358	39,090	1,695,044
Percentage	54%	42%	2%	2%	

Accounts Above \$5,000 Over 30 Days

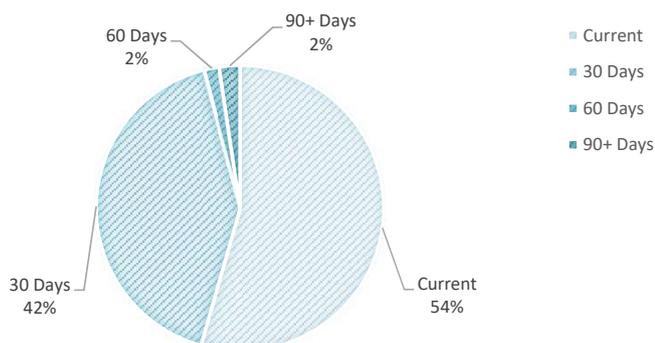
1010 - Alcoa of Australia - Dwellingup Community Assistance Scheme	33,000
1105 - Dept Water & Environmental Regulation - Better Bins & Kerbside Collection	24,475
1199 - Keysbrook Leucoxene Pty Ltd - Annual maintenance contribution	34,035
1741 - Shire of Serpentine-Jarrahdale - Harvest Highway Project	11,000
	102,510

KEY INFORMATION

Trade and other receivables include amounts due from ratepayers for unpaid rates and service charges and other amounts due from third parties for goods sold and services performed in the ordinary course of business. Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current. Collectability of trade and other receivables are reviewed on an ongoing basis.

Debts that are known to be uncollectible are written off when identified. An allowance for doubtful debts is raised when there is objective evidence that they will not be collectible.

NOTE 4 - ACCOUNTS RECEIVABLE (NON-RATES)



Debtors Due

\$1,695,044

Over 30 Days

46%

Over 90 Days

2%

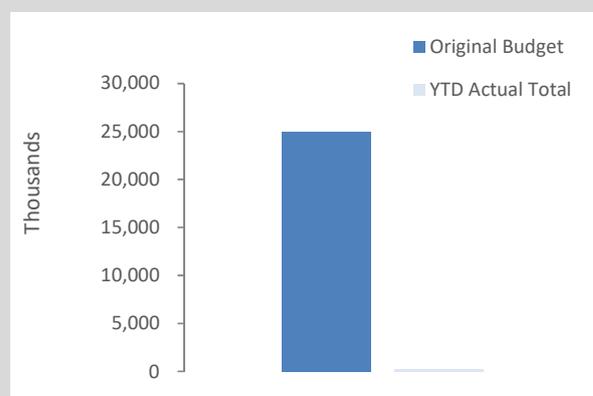
**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2020**

**INVESTING ACTIVITIES
CAPITAL ACQUISITIONS**

	Original Budget	YTD Actual Total	YTD Budget Variance
	\$	\$	\$
Land and Buildings	13,728,592	85,198	13,643,394
Plant & Equipment	1,157,135	67,988	1,089,147
Furniture & Equipment	260,385	0	260,385
Roads	3,094,447	50,674	3,043,773
Other Infrastructure	6,758,280	4,764	6,753,516
Capital Expenditure Totals	24,998,839	208,623	24,790,216

SIGNIFICANT ACCOUNTING POLICIES

All assets are initially recognised at cost. Cost is determined as the fair value of the assets given as consideration plus costs incidental to the acquisition. For assets acquired at no cost or for nominal consideration, cost is determined as fair value at the date of acquisition. The cost of non-current assets constructed by the local government includes the cost of all materials used in the construction, direct labour on the project and an appropriate proportion of variable and fixed overhead. Certain asset classes may be revalued on a regular basis such that the carrying values are not materially different from fair value. Assets carried at fair value are to be revalued with sufficient regularity to ensure the carrying amount does not differ materially from that determined using fair value at reporting date.



Acquisitions	Annual Budget	YTD Actual	% Spent
	\$25. M	\$.21 M	1%

**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2020**

**INVESTING ACTIVITIES
CAPITAL ACQUISITIONS (CONTINUED)**

% of Completion

	Original Budget	YTD Actual	Variance Under(Over)
	\$	\$	\$
Capital Expenditure			
Land and Buildings			
Pinjarra Court House	12,742	0	12,742
MALC Building Renewal	128,000	4,145	123,855
MALC Refurbishment of Basketball Courts	7,647	0	7,647
Dwellingup Hall	49,953	0	49,953
Edenvale Liveringa	20,000	0	20,000
Edenvale Old Schoolmaster's House	15,000	0	15,000
George Beacham Pavilion	6,663	0	6,663
James Street 22 Residence	30,000	0	30,000
Sir Ross McLarty Changerooms	20,000	0	20,000
Dwellingup National Adventure & Trails Centre	521,992	35,006	486,986
Agri-Innovation Precinct	12,665,019	46,047	12,618,972
Exchange Hotel	132,816	0	132,816
Edenvale Building Conservation Works	118,760	0	118,760
	13,728,592	85,198	13,643,394
Plant and Equipment			
4009MY Light Vehicle - Director P&C	28,980	36,107	(7,127)
4017MY Light Vehicle - Mgr Rangers & Emergency	28,000	31,880	(3,880)
4025MY Utility - Parks Maintenance Supervisor	35,000	0	35,000
4026MY Utility - Reticulation	46,575	0	46,575
4031MY Utility - Chief Bushfire Control Officer	39,330	0	39,330
4034MY Utility - Development Engineer	39,330	0	39,330
4036MY Drainage Truck (with Hiab)	245,000	0	245,000
4044MY Light Vehicle - Place Leader	23,805	0	23,805
4045MY Light Vehicle - Manager AIP	28,980	0	28,980
4050MY Grader	435,600	0	435,600
4063MY Zero Turn Mower	27,500	0	27,500
4065MY Zero Turn Mower	27,500	0	27,500
4088MY Trailer - Tipper	113,975	0	113,975
Trailer Refurbishments	37,560	0	37,560
	1,157,135	67,988	1,089,147
Furniture and Equipment			
Corporate Business System - OpenOffice	122,206	0	122,206
Computer Software	43,978	0	43,978
Murray Aquatic & Leisure Centre Pool Equipment	45,650	0	45,650
Murray Aquatic & Leisure Centre Capital Equipment	48,551	0	48,551
	260,385	0	260,385
Infrastructure - Roads			
Municipal Funded			
Boyd Road	40,000	0	40,000
Murray Street (Coolup)	10,000	0	10,000
Road Shoulder Improvements	50,000	0	50,000
Bus Routes	15,000	7,772	7,228
Reseals - Intersections	50,000	0	50,000
Reseals - Rural	60,000	0	60,000
Resheeting	95,333	0	95,333
Traffic Management	40,000	5,770	34,230
Kerbing Improvements	32,508	0	32,508
Regional Road Group			
Burnside Road	375,000	12,105	362,895
Lakes Road	105,000	0	105,000
Hopeland Road	60,000	0	60,000
Paterson Road	375,000	8,807	366,193
Del Park Road	375,000	0	375,000

**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2020**

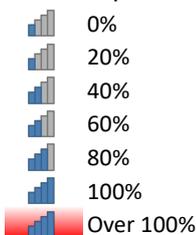
**INVESTING ACTIVITIES
CAPITAL ACQUISITIONS (CONTINUED)**

% of Completion

	Original Budget	YTD Actual	Variance Under(Over)
State Blackspot			
 Paterson Road	350,000	0	350,000
 Carrabungup Road	400,000	0	400,000
 Nanga Road	110,000	0	110,000
Roads to Recovery			
 Coolup Road South	200,000	0	200,000
 Marinup Street	300,000	4,331	295,669
 Resheeting	51,606	11,890	39,716
	3,094,447	50,674	3,043,773
Infrastructure - Other			
 Pinjarra Cemetery Upgrade	15,000	0	15,000
 Murray River Foreshore Works	465,908	3,101	462,807
 Cantwell Park	100,000	0	100,000
 York Road Park	45,000	0	45,000
 Gowman Reserve	50,000	0	50,000
 Minor Parks Development	35,000	0	35,000
 Murray River Country Estate Irrigation	35,000	0	35,000
 Parks & Reserves Renewal Works	44,573	0	44,573
 Sir Ross McLarty Cricket Wicket	78,930	0	78,930
 Pinjarra Bowling Club Green Upgrade	26,500	0	26,500
 Lot 102 Lakes Road Landscape Works	10,000	0	10,000
 Corio Road Tip Face	607,097	0	607,097
 Annual Pathway Renewal	195,615	0	195,615
 Path Upgrades	100,000	0	100,000
 Drainage Program	36,340	0	36,340
 James Street Drainage	28,045	0	28,045
 North Yunderup Rd Bridge #3537A	3,677,000	0	3,677,000
 Regional Road Bridge Program	265,646	0	265,646
 Redcliffe Pedestrian Bridge	100,000	0	100,000
 Pelicans Reserve Pedestrian Bridge	205,000	0	205,000
 James Street Pedestrian Bridge	600,000	0	600,000
 Burnside Road Traffic Bridge - 3530	0	1,663	(1,663)
 Edenvale Complex Ground Upgrades	37,626	0	37,626
	6,758,280	4,764	6,753,516
Grand Total	24,998,839	208,623	24,790,216

Capital Expenditure Total

Level of Completion Indicators



Percentage YTD Actual to Original Budget
Expenditure over budget highlighted in red.

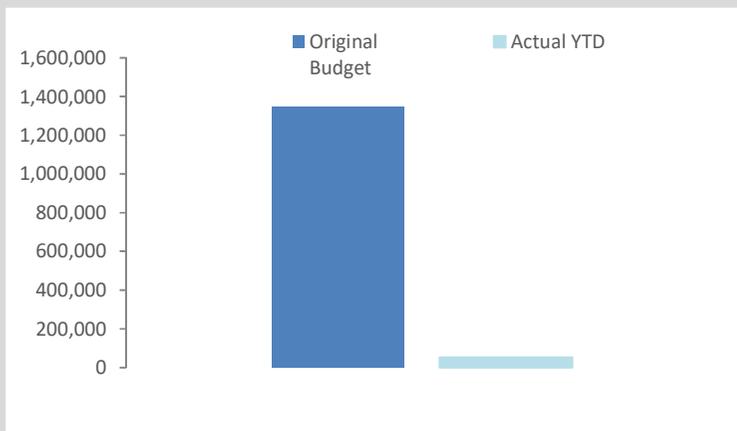
Variance is calculated on:
Original Budget vs YTD Actual

**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
 FOR THE PERIOD ENDED 31 JULY 2020**

**OPERATING ACTIVITIES
 DISPOSAL OF ASSETS**

	BUDGET			YTD Actual			Profit (Loss)
	Original Budget	YTD Budget	Actual	Cost	Accum Depr	Proceeds	
4015MY Utility - Exec Manager Strategic Development	\$ 20,500	\$ 20,500	\$ 21,136	\$ 32,000	\$ 11,500	\$ 21,136	\$ 636
4017MY Light Vehicle - Manager Rangers & Emergency	21,117	21,117	21,364	37,424	16,308	21,364	247
4025MY Utility - Parks Maintenance Supervisor	17,100						0
4026MY Utility - Reticulation	10,700						0
4027MY Utility - Manager Governance	17,100						0
4031MY Utility - Chief Bushfire Control Officer	19,496						0
4033MY Light Vehicle - Manager Community Development	7,980	7,980	10,909	17,000	9,020	10,909	2,929
4034MY Utility - Development Engineer	15,094						0
4036MY Drainage Truck (with Hiab)	70,500						0
4044MY Light Vehicle - Place Leader	8,000						0
4050MY Grader	186,246						0
4063MY Zero Turn Mower	7,050						0
4065MY Zero Turn Mower	7,680						0
4088MY Trailer - Tipper	30,780						0
Part lots of 102 Lakes Road	905,090						0
	1,344,433	49,597	53,409	86,424	36,827	53,409	3,812

KEY INFORMATION



Proceeds on Sale		
Budget	YTD Actual	%
\$1,344,433	\$53,409	4%

NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2020

OPERATING GRANTS AND CONTRIBUTIONS

	Annual Budget	YTD Revenue Actual
	\$	\$
Operating Grants and Subsidies		
General purpose funding		
Grants Commission - General Purpose Grant	443,396	
Grants Commission - Untied Roads Grant	397,662	
Law, order, public safety		
Bushfire Brigade Grants	249,861	0
Bushfire Brigade Grants	16,572	0
Murray State Emergency Service	42,708	0
Community Emergency Services	54,525	48,794
Fire Control Administration	1,000	0
Bushfire Risk Management	174,505	174,505
Education and welfare		
Seniors Week	1,000	0
Dwellingup Seniors Village Hub	8,000	0
Drug Aware Y Culture	3,777	0
Community amenities		
Dwellingup Trail Town COVID-19 Recovery Project	5,000	0
Delta Monitoring	569	0
Sustainable Agriculture Tool	5,606	0
Pinjarra Wetlands Project	2,925	0
Grant Funded Progams	500	0
Community Infrastructure Plan	3,388	0
Coastal Hazard Risk Planning Strategy	75,000	0
Recreation and culture		
Thank a Volunteer	1,010	0
Peel Business Park Environmental Impact Assessment	44,260	0
Pinjarra Festival	39,784	10,800
Christmas Carnival	14,500	0
Back to Pinjarra Commemoration - Bindjareb Boodja	5,000	0
Warma Way Jetty & Boat Ramp	30,000	0
STEM Project	20,000	0
Children's book week	2,150	0
Regional Sporting Precinct	16,470	0
Transport		
Main Roads WA Direct Grant	213,095	212,565
Economic services		
Transform Peel	225,618	0
Dwellingup Futures	109,037	0
Harvest Highway Feasibility	65,000	0
SME Innovation Voucher Project	1,500,000	0
BBRF Trails Project (DBCA)	1,324,679	0
	5,096,597	446,664
Operating Contributions		
Governance		
IT Penetration Testing	11,200	0
General purpose funding		
Alcoa Community Partnership Funding	262,135	0
Community amenities		
Alcoa Community Grants	18,000	0
Recreation and culture		
Sir Ross McLarty Recreation Complex	13,703	0
Transport		
Contributions to Road Maintenance	5,000	0
Heavy Haulage Contributions	30,240	0
	340,278	0
TOTALS	5,436,875	446,664

NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2020

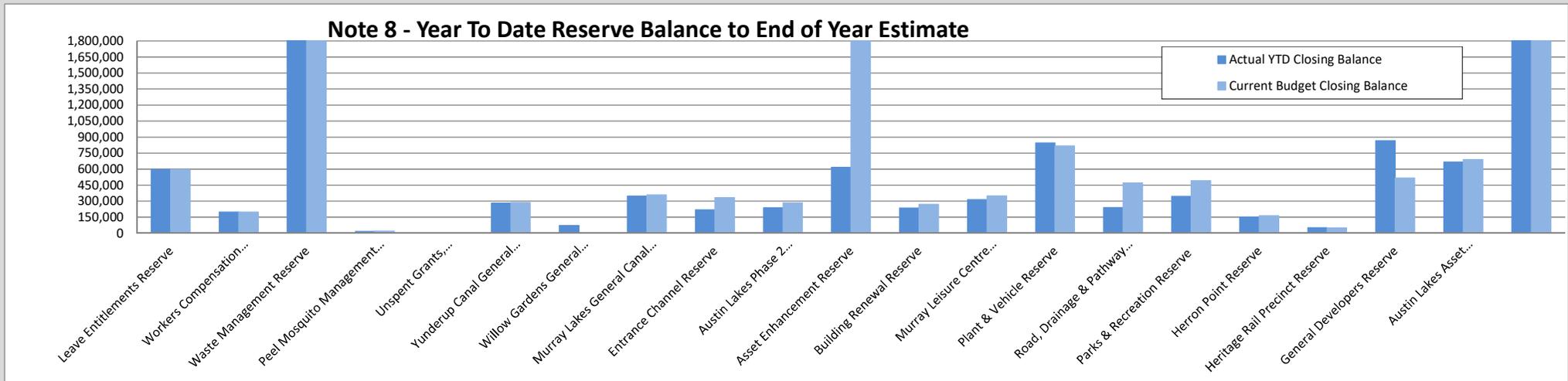
NON-OPERATING GRANTS AND CONTRIBUTIONS

Provider	Annual Budget	YTD Revenue Actual (b)
	\$	\$
Non-Operating Grants and Subsidies		
Recreation and culture		
Murray River Foreshore Project	200,000	100,000
Sir Ross McLarty Cricket Wicket	24,000	0
Dwellingup National Adventure & Trails Centre	521,992	0
Transport		
North Yunderup Road Traffic Bridge - 3537	3,677,000	0
Burnside Road (RRG)	250,000	100,000
Lakes Road (RRG)	70,000	0
Hopeland Road (RRG)	40,000	0
Paterson Road (RRG)	250,000	100,000
Del Park Road (RRG)	250,000	100,000
Paterson Road (Blackspot)	233,333	0
Carrabungup Road (Blackspot)	266,667	0
Nanga Road (Blackspot)	73,333	0
Coolup Road South (R2R)	200,000	0
Marinup Street (R2R)	300,000	0
Resheeting (R2R)	51,606	0
Economic services		
Agri-Innovation Precinct	12,665,019	0
James Street Pedestrian Bridge	588,422	294,211
	19,661,372	694,211
Non-Operating Contributions		
Recreation and culture		
Edenvale Old Schoolmaster's House	10,000	0
Sir Ross McLarty Cricket Wicket	10,000	0
Austin Lakes Asset Replacement Contributions	10,000	0
Transport		
Del Park Road	70,000	0
Old Mandurah Road upgrade for subdivision		21,185
	100,000	21,185
Total Non-operating grants, subsidies and contributions	19,761,372	715,396

Cash Backed Reserves

Reserve	Opening Balance	Current Budget Interest Earned	Actual Interest Earned	Current Budget Transfers In (+)	Actual Transfers In (+)	Current Budget Transfers Out (-)	Actual Transfers Out (-)	Current Budget Closing Balance	Actual YTD Closing Balance
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Leave Entitlements Reserve	597,002			0		0		597,002	597,002
Workers Compensation Reserve	198,003			0		0		198,003	198,003
Waste Management Reserve	2,732,981			3,155,447		(3,740,772)		2,147,656	2,732,981
Peel Mosquito Management Reserve	16,828			2,300		0		19,128	16,828
Unspent Grants, Contributions & Loans Reserve	0			0		0		0	0
Yunderup Canal General Maintenance Reserve	281,377			51,274		(46,520)		286,131	281,377
Willow Gardens General Canal Maintenance Reserve	73,355			6,431		(75,033)		4,753	73,355
Murray Lakes General Canal Maintenance Reserve	347,094			32,062		(20,086)		359,070	347,094
Entrance Channel Reserve	218,370			116,178		0		334,548	218,370
Austin Lakes Phase 2 Maintenance Reserve	238,225			44,560		0		282,785	238,225
Asset Enhancement Reserve	617,609			2,980,000		(295,434)		3,302,175	617,609
Building Renewal Reserve	235,060			36,351		0		271,411	235,060
Murray Leisure Centre Capital Reserve	315,269			34,217		0		349,486	315,269
Plant & Vehicle Reserve	845,869			0		(28,980)		816,889	845,869
Road, Drainage & Pathway Reserve	240,031			230,240		0		470,271	240,031
Parks & Recreation Reserve	344,180			147,768		0		491,948	344,180
Herron Point Reserve	152,331			43,494		(32,529)		163,296	152,331
Heritage Rail Precinct Reserve	52,633			44,270		(47,190)		49,713	52,633
General Developers Reserve	865,826			0		(348,492)		517,334	865,826
Austin Lakes Asset Replacement Reserve	667,103			21,500		0		688,603	667,103
	9,039,146	0	0	6,946,092	0	(4,635,036)	0	11,350,202	9,039,146

Note 8 - Year To Date Reserve Balance to End of Year Estimate



'THE EXCHANGE' COVID-19 RECOVERY PROJECT



INTRODUCTION

THE SHIRE OF MURRAY IS EXPERIENCING A PERIOD OF SIGNIFICANT GROWTH WITH SEVERAL PROJECTS EMERGING THAT WILL SHAPE THE ECONOMIC FUTURE OF THE AREA.

By 2050, the Peel Region is anticipated to reach a population of 444,000 people (source: draft Perth and Peel @ 3.5 million, May 2015) with a significant portion of this growth expected to be accommodated within the Shire of Murray, which will increase its current population from around 18,000 people to an estimated population of 164,256.

Such growth will position the Shire of Murray as the 'Secondary Centre' of the Peel Region and with Pinjarra being the Shire's largest town and situated only 80km south of Perth and 20km south-east of Mandurah, it has a major economic role to play in the Peel Region. Long term planning is therefore critical to ensure it is appropriately positioned to provide the range and intensity of activity required to support the significant growth for the Region.

A holistic and sustained effort is needed to diversify the economy and to create an environment to invest and it is essential that implementation of a range of interventions are undertaken by the Shire and key funding partners to provide Pinjarra with the opportunities necessary for a strong local economy, increased social capital and the foundations of a prosperous and sustainable regional town.

A key action of the Shire's *Pinjarra Town Centre Revitalisation Strategy* and draft Activity Centre Plan is to build on the community's aspirations and to strengthen and concentrate activity nodes within the Town Centre. The Strategy also seeks to celebrate the rural heritage town character and landscape setting of the Town Centre to provide vibrant, inclusive and intergenerational spaces and visitor destinations.

With \$21.75m from the Commonwealth Government for the development of Stage 1 of the Western Australian Food Innovation Precinct and associated university-based research, business incubation space, food laboratories, kitchen facilities, warehousing and cold storage, primary food production will catalyse positioning of the Peel Region as the State's Food Bowl.

PINJARRA AND THE EXCHANGE HOTEL ARE PERFECTLY PLACED TO BENEFIT FROM THE WAFIP & OFFER A FOOD + CULTURAL EXPERIENCE NOT OFFERED ELSEWHERE IN THE PEEL OR SOUTH WEST REGIONS.



STRATEGIC CONTEXT

State

- | | |
|---|--|
| Diversify WA 2019 | <ul style="list-style-type: none">• Seeks to balance the Western Australian economy and focuses on priority sector growth in regional Western Australia and job creation while establishing Brand WA to communicate what a vibrant, innovative place Western Australia is and reinforce our reputation for premium, quality goods and services. |
| State Planning Strategy 2050 | <ul style="list-style-type: none">• Outlines Western Australia's vision for sustained growth and prosperity and an integrated whole-of-government view to respond to opportunities with a focus on an innovation, economy and regional development |
| State Government Strategy for Tourism in Western Australia 2020 | <ul style="list-style-type: none">• Strives to broaden the visitor economy encouraging strategic, tactical and operational initiatives to expand infrastructure, encourage regional travel noting that unique, creative and innovative experiences will strengthen the Western Australia destination brand |
| WA Recovery Plan 2020 | <ul style="list-style-type: none">• Aims to drive economic and social recovery in Western Australia with driving industry development, boosting local manufacturing, building infrastructure, supporting small business, buying local, investing in regional Western Australia, revitalising culture and the arts identified as priority streams and focus areas |

Regional

- | | |
|--|---|
| Peel Regional Investment Blueprint | <ul style="list-style-type: none">• Reinforces the vision for the Peel Region as a progressive, prosperous and dynamic region and identifies thriving industry, agriculture and food innovation, tourism excellence, capable people and strong and resilient communities as the themes to achieve the Region's vision |
| Mandurah and Murray: A Shared Economic Future 2018 | <ul style="list-style-type: none">• Focus on urban regeneration, place-based integrated planning and development and development of projects that seek to increase the value of activity and competitiveness of the region's economy |

Local

- | | |
|---|--|
| Shire of Murray Economic Development Strategy 2018-2022 | <ul style="list-style-type: none">• Centred around 7 key priority areas: tourism and visitation, centres and place-making, science and research, food and agriculture, arts, culture and events and resources and community building |
| Pinjarra Town Centre Revitalisation Strategy and Activity Centre Plan | <ul style="list-style-type: none">• Delivers strategic planning framework to establish land use and development frameworks and balance the economic, housing, employment, transport, education, community services and infrastructure required to support projected growth and a sustainable town centre |
| Shire of Murray Tourism Marketing and Communications Plan 2020-2023 | <ul style="list-style-type: none">• References the importance of balancing economic development, sustainable tourism and community quality of life through the delivery of place experiences with Pinjarra's brand focus being on its heritage, cultural experiences and links to food and agriculture |

MURRAY'S NEXT GENERATION ECONOMY

THE SHIRE OF MURRAY ADOPTS A PLACE-BASED APPROACH TO DEVELOP LOCAL STRATEGIES AND TO MOBILISE ITS ECONOMIC POTENTIAL AND RESOURCES

FOOD

The Murray Region's locational advantages, substantial and varied natural asset base and \$21.75m investment in the Western Australia Food Innovation Precinct (WAFIP) which is expected to create 3,900 jobs by 2030 and introduce a new Bachelor of Food Science and Nutrition degree delivered by Murdoch University means Murray has robust propensity to become Western Australia's economic powerhouse and strategic agriculture and jobs hub.

TOURISM

Western Australia's economy is growing faster than any other in Australia with tourism playing a key role as it diversifies economic growth, supports a large number of workers and is integrated in investment attraction, export development, strategic land development and regional growth. Having secured \$13.2m for the Dwellingup Trails project, \$3m for the Pinjarra Foreshore development and actively seeking additional funding for transformational projects such as the, Pinjarra Harness Racing Centre of Excellence, Pinjarra Paceway expansion, additional trails in Dwellingup and short stay accommodation opportunities, Murray is positioning itself as a major tourism destination in Western Australia.

CREATIVE INDUSTRIES

The creative industries sector is one of the most dynamic sectors and a diverse contributor to the Australian economy. Creative industries have the capacity to revitalise local spaces, create wealth and jobs and stimulate local economies. Murray's creative and collaborative culture, innovative thinking and its pursuit for a knowledge-based economy is shaping its economic future with Pinjarra's reputation as an emerging arts and cultural hub.





THE EXCHANGE

COLLECTION OF MICRO-BUSINESSES



MICROBREWERY / TAVERN

"A VENUE THAT EMBRACES THE PLACE CHARACTER OF THE EXCHANGE HOTEL AND PINJARRA - CELEBRATING THE OLD + NEW WITH A PADDOCK-TO-PLATE INSPIRED MENU USING LOCAL PRODUCE + FEATURING BESPOKE CRAFT BEERS THAT TELL OUR LOCAL STORY.



MICROBREWERY / TAVERN

The Exchange Hotel site has the potential to provide a unique eating experience within an iconic building with river views overlooking an activated public amphitheatre.

Patrons can enjoy a "paddock to plate" inspired menu using locally sourced products from the food and makers co-op with a range of specially crafted beers.

This distinct eating experience within an iconic building can be enjoyed by locals and visitors enjoying the best craft beer, wine and produce that Western Australia has to offer.



The Guildford Hotel, Perth, WA

PRODUCE + MAKERS CO-OP

"A SPACE FOR LOCAL MICRO-BUSINESSES AND START-UPS TO CREATE, DISPLAY + SELL THEIR PRODUCTS IN THE HEART OF THE MURRAY REGION AND MAIN STREET OF PINJARRA

With the challenges that family sized farming operations and small scale manufacturers face to remain profitable, co-ops provide a way to help producers and makers achieve greater economies of scale and improve profitability.

The Exchange will provide producers, makers, creators + innovators with an opportunity to showcase + sell their products, launch a product, try a concept or test the location with little investment

Case study: Adelaide Central Market

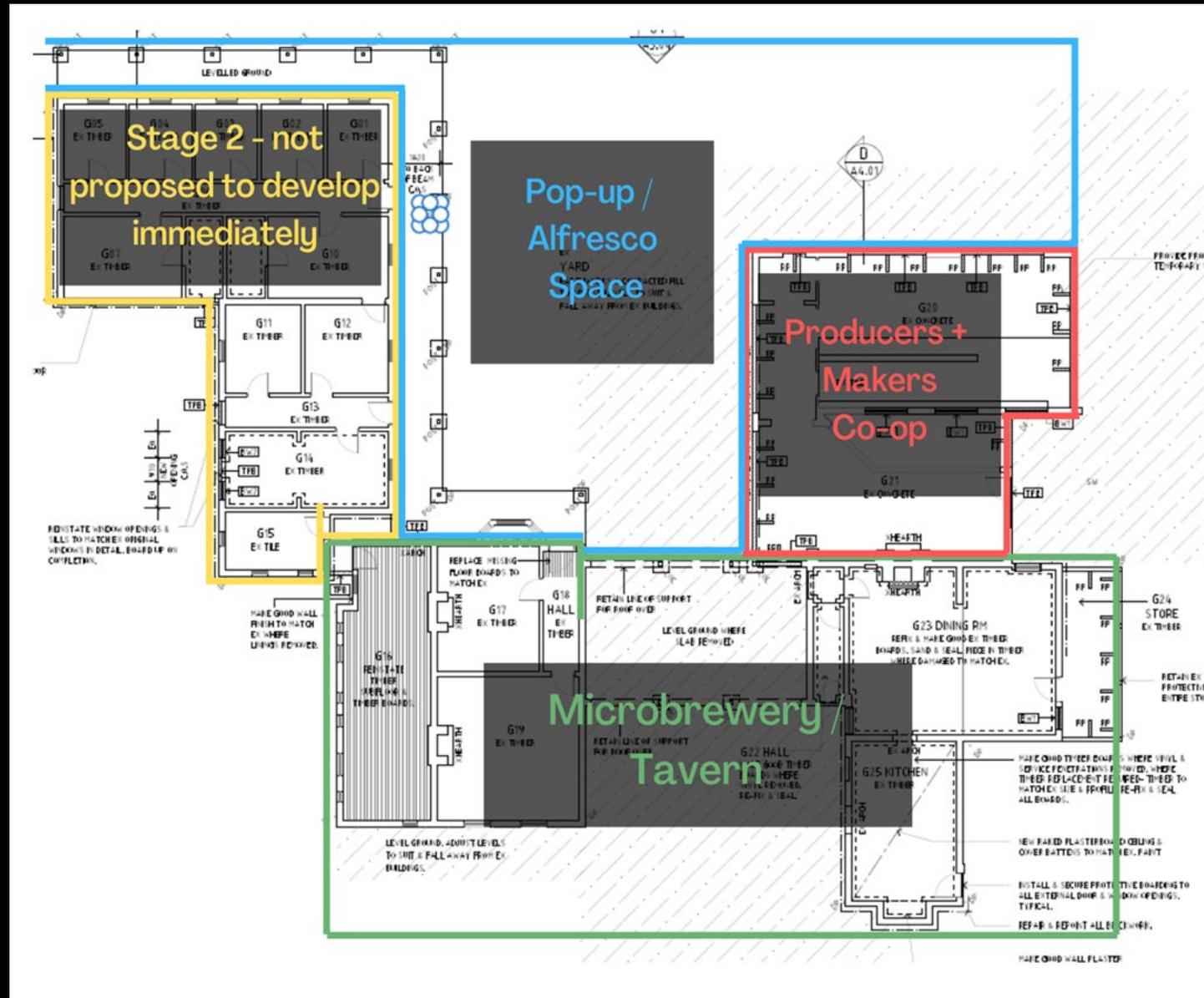
The Adelaide Central Market is one of the largest undercover fresh produce markets in the southern hemisphere, buzzing with life and colour all year round, it is South Australia's most visited tourist attraction with over nine million visitors every year.

Elevate, Creative Industries Showcase, Economic Development Australia



PRODUCE + MAKERS CO-OP





LOCAL PRODUCERS & MAKERS

- Caraholly Orchard
- Vergone's Fruit Stall
- Hamlet Pork
- Midway Farm Stall
- Grubs Up
- St Blaise Honey
- Drakesbrook Wines
- Wine Tree Cidery
- Decadent C
- The Hive Wholefoods
- Buzzy Wraps
- Contrive Creations
- The Sugarless Bakery
- Roar Creations
- Various Artisans + Makers



Disclaimer: Potential micro-businesses have been added for context and conceptual purposes only. Listed SME's have not been contacted regarding the concept or level of interest determined.

MADE IN MURRAY

'Made in Murray' has the potential to evolve into an established brand and campaign growing out of 'The Exchange' and serve as a collaborative platform for promoting the Murray Region's quality products.

Consistent branding of locally sourced and made products will provide opportunity for the "Murray" brand to expand intrastate, interstate and internationally showcasing the Murray Region's products while promoting our Region and places gaining place recognition leading to economic benefits to our local economy.

An established 'Made in Murray' brand can provide opportunity for the Murray Region to become synonymous with their products, strongly associating quality produce and artisan products with Pinjarra and the Murray Region. By creating a strong 'Made in Murray' brand, the curated products can strongly influence the popularity of the products sold at the Exchange, propel start-ups and microbusinesses in scaling and encourage intrastate, interstate and international visitors to the Murray Region.

Such a branding strategy has more typically been engaged by creative industries for economic renewal of regions (eg. MTNS Made – Blue Mountains and Portland Made – Portland) for the sustainable promotion of regions looking to catalyse their economies through the promotion of creative industries and cultural tourism.



Case study: MTNS Made

MTNS Made is the cultural identity for the creative industries in the Blue Mountains and promotes the region and its world-class talent. It was created to raise the standards and expectations of the creative professionals in the Blue Mountains and unite the creative community.

19,585

In the 18/19 financial year 19,585 actions were taken on MTNS Made website to engage with Blue Mountain professionals (click to website, email, call or social media)

88.7%

In the 18/19 financial year, of the 23,677 visitors to the online directory, 88.7% were new users.

\$450,000

Over \$450,000 worth of products using the MTNS Made logo have been sold in 4 retail stores since 2017, with sales increasing annually

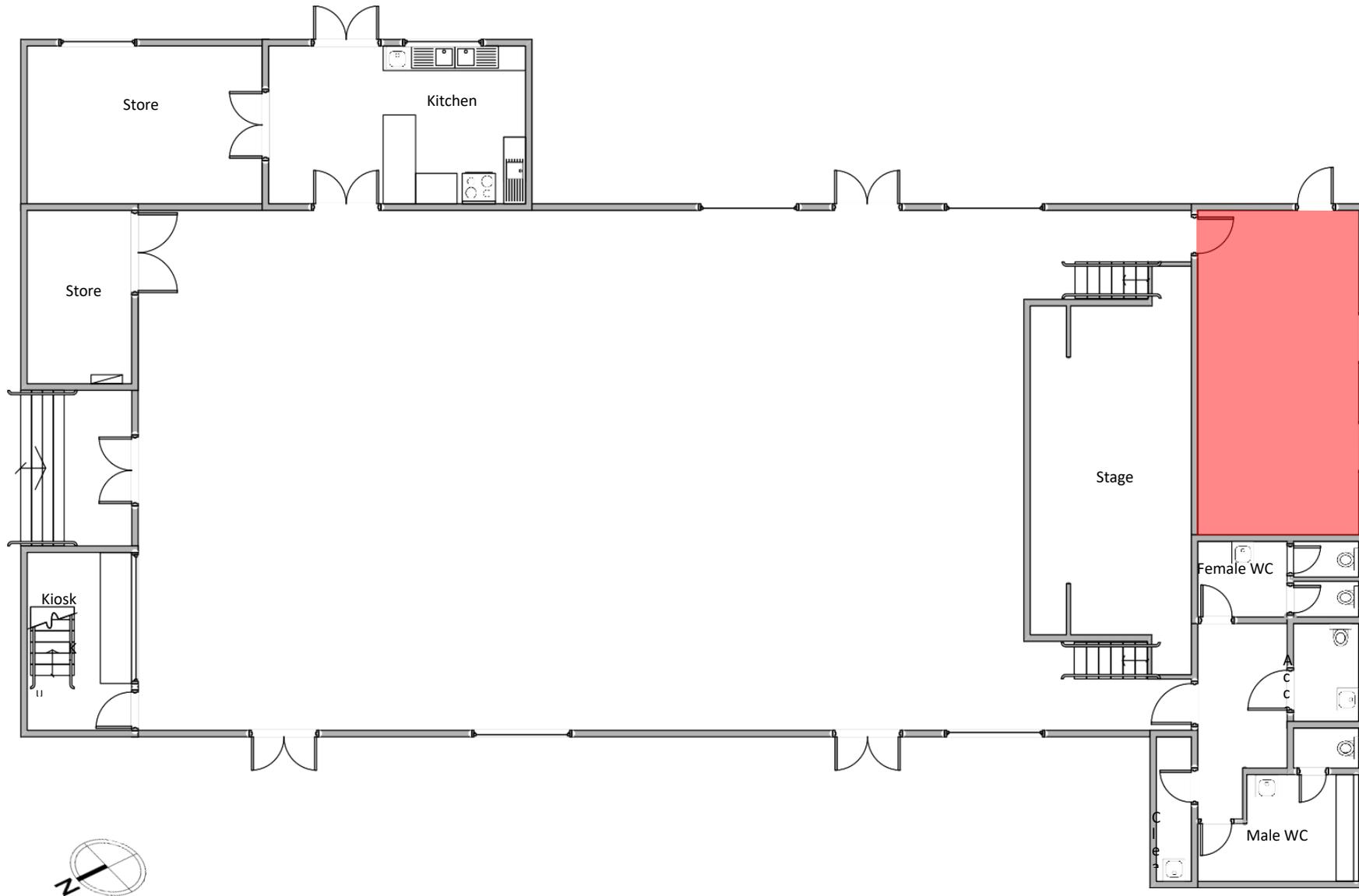
THE EXCHANGE & MURRAY RIVER FORESHORE

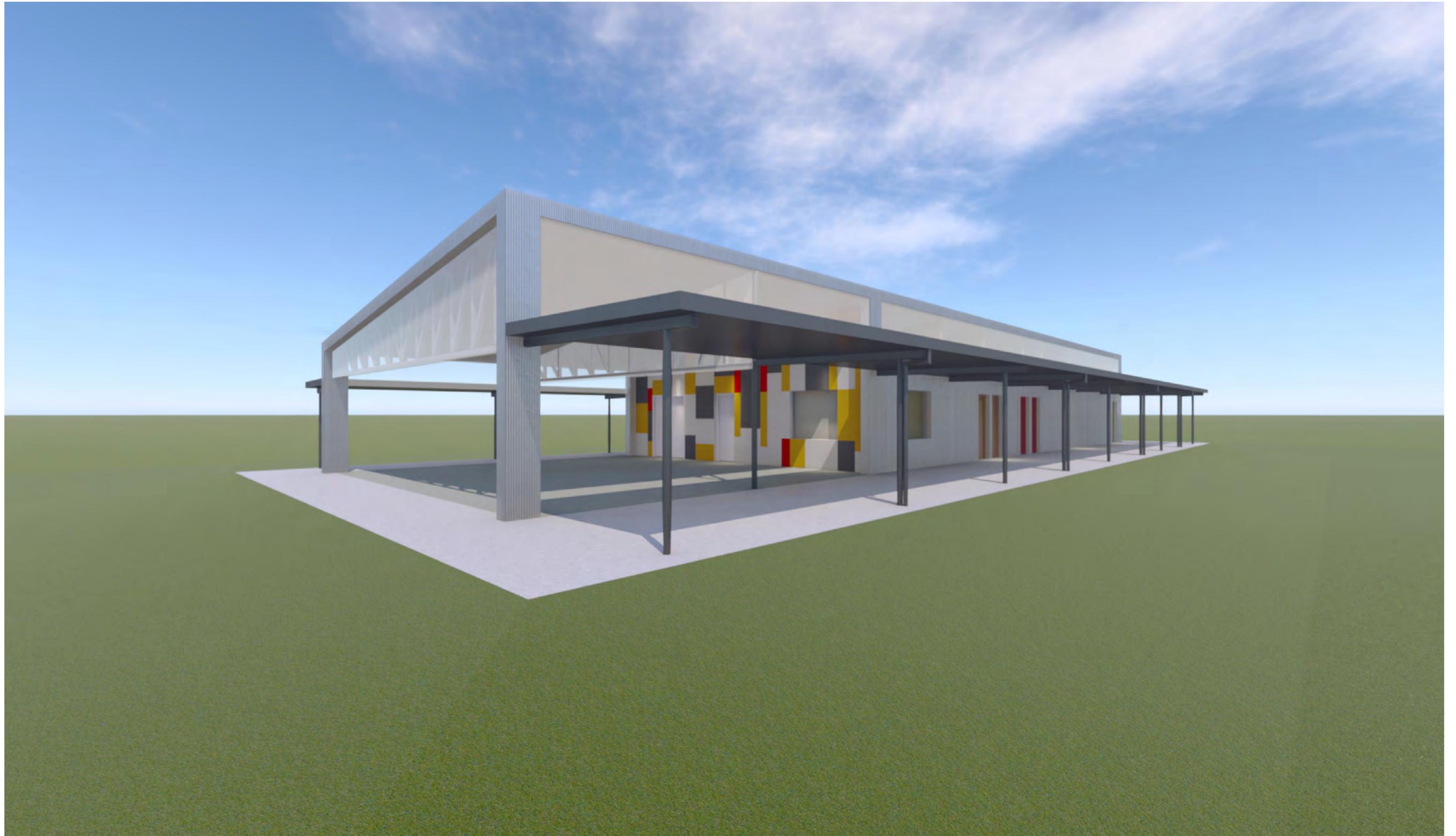
"VIBRANT, INCLUSIVE + ACTIVATED SPACES WHERE FRESH PRODUCE, QUALITY FOOD & BEVERAGE, ARTS, CULTURE, KNOWLEDGE, EVENTS + COMMUNITY COME TOGETHER "



Dwellingup Community Hall
Leased area highlighted red (not to scale)

Annexure A





SHIRE OF MURRAY CHANGEROOMS

CONCEPT DESIGN REPORT

SITE Architecture Studio | 22018 | 05.08.2020

REVISION STATUS

Rev.No.	Description of Revision	Date	Approved
A	Draft Issued for Review and Comment	09.06.2020	
B	Amended Draft Issued for Comment	02.07.2020	
C	Final Report Issued for Approval	05.08.2020	

CONTENTS

1.0 INTRODUCTION	04
1.1 DESIGN TEAM	
1.2 USER GOURPS/ STAKEHOLDERS & ACKNOWLEDGEMENTS	
2.0 THE BRIEF	04
2.1 SITE & LOCATION BRIEF	
2.2 CHANGEROOM FACILITY BRIEF	
2.3 DEVELOPED BRIEF & AREAS	
2.4 BUDGET	
2.5 PROJECT TIMLEINE	
3.0 THE SITE & CONTEXT SIR ROSS MCLARTY OVAL 3	08
3.1 THE SITE & FEATURES	
3.2 TRANSPORT, SITE ACCESSIBILITY & PARKING	
3.3 SITE SERVICES	
3.4 SURVEY	
3.5 GEOTECHNICAL REPORT	
3.6 ZONING AND APPROVALS	
3.7 BUILDING CLASSIFICATION AND AMENITIES	
4.0 THE SITE & CONTEXT SOUTH YUNDERUP OVAL	12
4.1 THE SITE & FEATURES	
4.2 TRANSPORT, SITE ACCESSIBILITY & PARKING	
4.3 SITE SERVICES	
4.4 SURVEY	
4.5 GEOTECHNICAL REPORT	
4.6 ZONING AND APPROVALS	
4.7 BUILDING CLASSIFICATION AND AMENITIES	
5.0 BUILDING CONCEPT DESIGN PRINCIPLES	14
5.1 PLANNING PRINCIPLES	
5.2 ARCHITECTURE AND MATERIALS	
5.3 BUILDING STRUCTURE	
6.0 PROGRAMME	16
7.0 COST PLAN	17
7.1 COST REPORT	
7.2 LIFE CYCLE COST ANALYSIS	

APPENDIX 1 ARCHITECTURAL DRAWINGS 43

SK-02	SITE PLAN - SRM03
SK-03	SITE PLAN - SYO
A1.00	BUILDING SITE PLAN - SRM03
A1.10	BUILDING SITE PLAN - SYO
A2.00	CONCEPT FLOOR PLAN
A4.00	BUILDING ELEVATIONS
	3D PERSPECTIVE - FUNCTION AREA (COLOUR OPTION 1)
	3D PERSPECTIVE - CHANGEROOM SIDE (COLOUR OPTION 1)
	3D PERSPECTIVE - FUNCTION AREA (COLOUR OPTION 2)
	3D PERSPECTIVE - CHANGEROOM SIDE (COLOUR OPTION 2)
A2.00	FLOOR PLAN - COST REDUCTION OPTION

APPENDIX 2 CONSULTANTS REPORTS 55

9.01	MECHANICAL
9.02	ELECTRICAL
9.03	HYDRAULIC
9.04	GEOTECHNICAL

APPENDIX 3 OTHER REPORTS 116

01	PCG MEETING - INDUCTION MEETING MINUTES (DATED 19/05/2020)
02	FUNCTIONAL USE REQUIREMENTS
03	FEEDBACK & CHANGE LOG

1.0 INTRODUCTION

This Concept Design Report has been prepared by SITE Architecture Studio (SAS) for the Shire of Murray to describe the concept of a proposed Change Room Facility (the Facility) located at Sir Ross McLarty Oval 3 (SRMO3) and South Yunderup Oval (SYO).

A Needs & Feasibility Report prepared by the Shire of Murray in February 2020 identified the need for a basic changeroom, toilet, storage, kiosk and shelter amenities at the Sir Ross McLarty Sports Precinct and the South Yunderup Sport & Recreation Precinct. This Concept Design Report is a progression of the Needs and Feasibility Report with the following objectives:

- The design of a standard changeroom and kiosk facility to meet national sporting code facility guidelines for AFL, cricket, and soccer, and sporting club needs;
- The provision of a total project cost estimate to build the Facility at the two locations: Sir Ross McLarty Oval 3 and South Yunderup Oval
- Determine if there are cost savings associated with constructing both Facilities concurrently

The Facilities located at each site are required in the short term to address a gap in basic infrastructure provision and to replace aging facilities.

Through the Concept Design, SAS have developed a building design and site plan to achieve the objectives including any additional requirements identified by key stakeholder organisations. The proposed Concept Design will be developed further in the future next phase of the project with further consultation between the Shire, key stakeholders and user groups.

This Report summarises the status of the project at the end of the Concept Design stage including: initial planning input from the key user groups and stakeholders, finalisation of the preliminary planning design and the definition of an architectural design intent (building mass, form and materiality). Service Consultants have also prepared site investigation and schematic services design input.

1.1 DESIGN TEAM

Client/Project Manager	Shire of Murray
Architects	SITE Architecture Studio
Quantity Surveyor	Owen Consulting
Quantity Survey (LCC)	Altus Group
Electrical	Focus Consulting
Hydraulic	Construction Hydraulic Design (CHD)
Mechanical	Stevens McGann Willcock & Copping (SMWC)

1.2 USER GROUPS / STAKEHOLDERS & ACKNOWLEDGMENTS

The project has involved the support and participation of numerous key user groups and stakeholders, coordinated by the Shire of Murray. The design team acknowledge the contribution made by the following organisations:

- Shire of Murray (Client),
- Pinjarra Junior Football Club (PJFC)
- Piinjarra Football and Netball Club (PFNC)
- Pinjarra Cricket Club (PCC)
- Yunderup Sport and Recreation Club (YSRC)
- Murray District Range Soccer Club (MDRSC)

The Shire of Murray has gathered preliminary requirements from the user groups / stakeholders and identified the AFL facility guidelines within the Project Brief Document under Appendix 2 - Indicative Room Specifications.

SAS have produced a Schedule of Accommodation based on this initial Project Brief together with further more detailed information provided by the key sporting user groups. Refer Section 2 for the Schedule of Accommodation and summary of User Group input.

The draft concept report has been presented to the user groups & stakeholders by the Shire of Murray. These comments have been captured in a feedback & change log with SAS commentary and actions against each item. Refer Appendix 3 for more information.

2.0 THE BRIEF

2.1 BACKGROUND

The Shire of Murray have defined the project in the Concept Design & Cost Estimates Project Brief Document. The Project Brief references other relevant reports and previous investigations which have been used to inform this Concept Design Report. These include:

- Needs and Feasibility Report - Change room Facility Construction 28 February 2020.
- Community Infrastructure Plan 2013 Shire's Asset Management Policy
- Sir Ross McLarty Sports Precinct Master Plan 2014
- SRMO Ovals Masterplan-Rev A, 19 October 2019
- South Yunderup Sport and Recreation Precinct Master Plan 2009
- South Yunderup Sports Precinct Masterplan (2019) v1 - Reserve 40736 - Lot 1852 South Yunderup Road South Yunderup
- Needs and Feasibility Report - Sir Ross McLarty Oval 3 and South Yunderup Changerooms - Progressive development of sporting precincts
- DBYD services and Maximum Demand information for both SYO and SRMO3 sites,
- Needs and Feasibility Report - Lifecycle costings - Sir Ross McLarty Oval 3 and South Yunderup Oval Changerooms
- SRMO & SYO Changeroom Floor Plan - concept

SAS and the Electrical and Hydraulic Services Consultants have reviewed the above information and carry out our own investigations to clarify and determine the Project Brief as follows:

2.2 SITE & LOCATION BRIEF

As outlined in the Project Brief Document, the Sir Ross McLarty Sports Precinct & South Yunderup Sports Precinct are district sports facilities home to various community sports clubs. The areas have been developed as part of a Sports Precinct Master Plans developed by EPCAD dated 29/10/2019 (Refer Figure 1 & 2 over).

The Project Brief Document references the Master Plan and proposed location for the Facility based on consultation with the key user groups. In addition, the following general requirements have been identified for each facility at each site:

- Orientation regarding Natural Light & Ventilation to be considered
- Building to be sited to allow for clear and protected viewing onto ovals
- Car & pedestrian access to be site to be clear and easily accessible (including universal access). Realignment of pathways & fencing required to be shown.

The following key notes on each site were observed and discussed at an initial site meeting between SAS and the Shire of Murray on 19th May 2020. Refer to Meeting Minutes in Appendix 3 of this Report.

SIR ROSS MCLARTY OVAL 3

- Oval used by various sports clubs as well as school use (Pinjarra Primary School) currently
- Users of facility will be Football (PJFC), Cricket (PCC) and Primary School (PPS)
- Cricket Pitch & Nets to be built in 2021
- Shared Use arrangement with DoE/ Shire of Murray
- Facility to service both ovals, but primarily Oval 3
- Covered Shared viewing options to be considered

SOUTH YUNDERUP OVAL

- Current users include Soccer (MSRDC)
- Future users to include soccer & a summer sport use
- Existing old asbestos transportable on site with Brick walls added with toilet, kiosk & storage facilities

For detailed site analysis descriptions, refer to Section 4 and 5.

2.3 CHANGE ROOM FACILITY BRIEF

The Project Brief document has outlined the initial functional requirements for the changeroom facility. These requirements have been further developed in consultation with the Shire of Murray as per the below

- Facility to meet the requirements of the key user groups including notably national sporting code facility guidelines for AFL, cricket and soccer..
- Gender Neutral Facilities to be provided
- Allow for expansion of future clubroom / Function space
- Details of construction (including structural & services) method,
- Materials to be low maintenance and resilient
- Design to reflect the surrounding natural and built environment
- Sustainable design principles to be demonstrated including natural light & ventilation.
- Deep weather protected verandahs on viewing side.

2.4 DEVELOPED BRIEF & AREAS (SCHEDULE OF ACCOMMODATION)

An initial schedule of areas has been provided by the Shire of Murray in the Project Brief. SAS have developed this area schedule and prepared a Schedule of Accommodation as per the following table.

The table outlines the briefed areas and the Areas achieved in the Concept Plan of the new facility with comments specific to each functional area based on the Concept Design planning that has been completed to date.

Additionally, user group and stakeholder requirements regarding the specific use of the Facility, namely the Kiosk, has been summarised in the Functional Use Requirements table outlined in Appendix 3 of this report.

2.5 BUDGET

At the project outset, the Total Project Commitment has been estimated at \$1,500,000 (excl GST) based on the Needs and Feasibility Report and as further clarified by the Shire of Murray.

A more detailed cost estimate prepared by Owen consulting and Life Cycle Cost Analysis prepared by Altus Group is included under Section 7 of this report The cost estimate will include an estimate of cost savings if facilities were to be built at the same time and will be broken down by:

- Base Facility Construction,
- Fit-out,
- Site works (including upgrades, design contingency and recommended construction contingency.
- Proposed Covered Spectator Area (unclosed extension of the main facility.

An additional cost reduction option has also been provided in the Cost Estimate at the Shire's request with a reduced scope.

2.6 PROJECT TIMELINE

It is the Shire's preference to have the Facilities at each site location, constructed and operational by 2024, with the Facility located at SRM03 the priority Facility.

The following timeline has been prepared to demonstrate key milestone months required for completion key activity to achieve this time frame. There may be some enabling projects required before the Facility located at each site is fully functional, for example the new ring road and parking or the SRM03 site which is subject to other priorities within the Precinct Master Plan. completion. Further, the project completion dates may be aligned to suit key dates in the sport calendar for the User Groups, including a suitable contingency.

Activity	End Date
Completion of Concept Design	August 2020
Shire Approval	September 2020
DSR funding application	February 2021
Engagement of Lead Consultant	May 2021
Design & Documentation	September 2021
Construction Tender (1 or both sites)	November 2021
Construction Commences	February 2022
Practical Completion & Occupation	August 2022

SCHEDULE OF ACCOMMODATION

Room	Initial Brief Area	Concept Plan Area	Notes
Change Rooms - dry (2 of)	45-50m2	44 - 45 sqm	<ul style="list-style-type: none"> • Bench Seating & Clothes Hooks • Floor - 2 pac epoxy • Water Hose cock (lockable) located externally. • Aluminium benches, • Face brickwork internally.
Change Rooms - Wet (2 of)	20-25m2	19 -22 sqm	<ul style="list-style-type: none"> • 2WCs, 4 showers (all cubicle with doors), antivandal shower heads and fixtures throughout. • 2 x basins w mirrors (anti-vandal). • Unisex • Full height tiling to walls. tiled floor. • Paper Towel dispensers • Power provision only for wall Hand Dryers (future). • Electric storage HWU's in duct.
Club Storeroom (2 of)	30-35m2	34 sqm	<ul style="list-style-type: none"> • Internal fit out by club. • Dimensions to be confirmed by Clubs (to suit any specific equipment requirements, i.e. goal posts, pads, etc). • Powerpoints
UAT	7m2	6 - 7sqm	<ul style="list-style-type: none"> • Typical including baby change. 2 facilities required.
Umpires Change	11m2	13 sqm	<ul style="list-style-type: none"> • 1xWC & 1xshower within cubicles, 1x basin, bench seat and clothes hooks • Unisex suitable so partitions to be full height / enclosed shower /change room and WC and hand basin.
Kiosk & Dry Store	20-25m2	30 sqm	<ul style="list-style-type: none"> • External servery - aluminium roller door and security door • Stainless steel kitchen exhaust hood • Evaporative cooling unit - TBC / comment on by SMWC • Stainless steel benchtops • Lockable cabinetry - provide full height cleaning equipment cupboard. • Provide 2 serveries to cater for food and beverages (licensed area). • Electric griddle and oven (Shire to confirm size / requirement) • Wall hand basin • Clubs to provide kitchen equipment including deep fryers, bain marie / pie warmer, coffee machine Fridges (no off and type / size) - TBC by Shire • Coved vinyl floor. • Full height wall tiles. • Grease trap required.
Bin store / Cleaners Store	8 m2	8 sqm	<ul style="list-style-type: none"> • External & Internal Access Separate bins enclosure in accessible location from car park. Roofed / secured.
Cleaners Store	4 sqm	4 sqm	<ul style="list-style-type: none"> • Separate and accessible externally. Shire access/ use only. • Tiled floor and walls to 1200. 2 x fixed shelves.
External Verandah	3-5m wide	4m wide	<ul style="list-style-type: none"> • Orientate to provide covered & weather protected viewing. Nominally to full length. Confirm with clubs • 4m wide preferred.
Future Meeting Space	120-150m2	123 sqm	<ul style="list-style-type: none"> • Allowance for expansion for clubrooms etc. Provide provision for this as a roofed area (unenclosed) as a separate item in costings.



Sir Ross McLarty Sports Precinct Masterplan - Rev A



SCALE: 1:1000 @ A1 date: 29 October 2019
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 ☎ 08 9481 4410 ✉ info@epcad.com.au



FIGURE 1: SIR ROSS MCLARTY SPORTS PRECINCT MASTERPLAN
 (PREPARED BY EPCAD, DATED 29/10/2019)



FIGURE 2: SOUTH YUNDERUP SPORTS PRECINCT MASTERPLAN
 (PREPARED BY EPCAD, DATED 29/10/2019)

3.0 SITE & CONTEXT SIR ROSS MCLARTY OVAL 3 (SRM03)

3.1 THE SITE & FEATURES

The following site analysis & design has been completed based on briefing information provided by the Shire, and SAS investigations including site inspection on the 19/05/2020.

The proposed siting of the facility is based on Option C from the Project Brief as per user group preference. This has been further developed by SAS with the following outcomes:

1. The Facility is shown mirrored to the option shown in the brief and the Sports Precinct Master Plan. This will allow the future expansion for the Social / Function space to have better viewing to both ovals and to move potential noise away from neighbouring (northern) residents.

Secondly, the Social / Function Space can be a designated licensed area serviced from the kiosk on Main Oval Game days to provide alternative spectator amenity to the east of the Main Oval.

2. The building has been located at a slight angle to North-South orientation. This allows for the best viewing outcome for both ovals. The main, 4m deep spectator verandah is facing Oval 3 and the minor circulation veranda is located on the western side, providing some protected spectator viewing and weather protection for the Main Oval.
3. The facility is to be built on approximately 500mm of fill to allow the eastern main spectators verandah to be elevated to the main viewing oval and the western minor spectator verandah to be level with the Main Sports Oval.
4. Realignment of the fence is proposed to allow AFL users for the main Sport oval to provide secure ticketed access to the facility on game days, as required.
5. The Changeroom access is from the northern side of the Facility and has easy views from the Car Park for passive surveillance

Secondly, the Change rooms can be designated for Women's teams using the Main Oval when the Main Oval Change rooms are being used by Male players. The fencing and gate configurations and management will need to be considered in the future stages for this to be effective.

6. Future playground are shown as per the Precinct Master Plan with more exact setout to show the relationship to the proposed changerroom facility. The location of Play Ground allows supervision by spectators.
7. The location of the cricket nets has been moved to the south of the facility as per feedback provided by the Shire of Murray, and the Pinjarra Cricket Club. The nets will face onto the oval in the same orientation as the existing nets for the main oval.
8. A Bin Store is proposed as a stand alone roofed structure, located in the carpark for ease of access and serviceability.

9. There are no existing trees on the site which will be affected by the site location. Final location and extent of pedestrian paths will need to be determined in the next stage to suit the outcomes of the Site Feature Survey and staging of the car park and ring road works.

3.2 TRANSPORT, SITE ACCESSIBILITY & PARKING

Access to SRM03 is expected to be primarily by vehicle with pedestrian traffic from the adjacent Pinjarra Primary School, the adjacent sports Precinct and the neighbouring residential area.

Vehicle access will be provided through the existing gravel carpark to the north of the proposed changerooms. This carpark can be accessed by the existing Longo Avenue with some minor modifications to the existing fence and vehicle gates. As the proposed Facility bin store is located within the car park area and provision of an accessible car bay will be required, some formalisation of the hard stand car parking will be required within the Facility Works and has been included in the cost plan.

The longer term solution for access to the car parking area is the installation of a ring road around the Oval 3 from Roe Avenue, which is also to be modified as part of a broader Sports Precinct Traffic management development.

Pedestrian access is provided via a new path that diverts the existing path to suit the location of the changerooms. This path will also provide a link to the Pinjarra Primary School, carpark, and future cricket nets. As the building is proposed to be raised above the oval to create a better viewing angle, the pathway will be sloped (min 1:20) at both ends, as required to suit AS 1428 accessibility compliance.

3.3 SITE SERVICES

Existing site services will be diverted and utilised to accommodate the new changerroom facilities.

Power

Power is proposed to be diverted from an existing SMSB located to the south of the site with a 180m length (approx) of new conduit. The SMSB will be modified to suit the new development and a local Distribution Board will be installed to the new building

Capacity of existing power supply to allow for the Facility is confirmed as not requiring a power upgrade to the chageroom facility. However if/ when flood lights are installed, the power requirements for the lights will exceed the current capacity of the SMSB. It is therefore proposed to install conduits to the nominated lighting locations for the flood lights now. The SMSB can then be upgraded when the flood lights are installed separate to the changerroom facility project. Refer Elec Consultant report for more information and detailed breakdown of options.

Communications

Currently, there is no requirement in the brief for dedicated communication to the new building. To future proof the building, the design team has recommended installing underground communication conduits with draw wire from Dixon Avenue. This has been included in the cost estimates

Sewer

There is an existing gravity sewer running along the north east boundary at approximate depth of 1.75m. At the current change room location it is considered at a suitable depth to apply for a new junction and connect by gravity. This new junction will also enable the existing Sports Buildings to be connected to the deep sewer through a pump station, at a future date.

Water

Water is proposed to connect into existing mains located to the north east of the oval. Meter to be provided at connection point in a anti vandal cage.

Fire Service

A fire hydrant system or Hose reels are not required as the facility is under 500sqm, including allowance for the future extension and enclosure of the roof to create a Function / Social Space. Fire services will be limited to Extinguishers and Blankets to meet Australian Standards.

Gas

The Shire has stated that gas provision within the Facility will not be provided at this stage. Gas is available to service the site, if required, it is proposed to connect into existing mains located to the north east of the oval. Meter to be provided at connection point in a anti vandal cage.

Oval Lighting

The Main Oval lighting tower is in close proximity to the proposed Facility site however should not be affected. Some viewing of the Main Oval will be partially obscured due to the location of the existing Light Tower however the Facility is primary function is to service Oval 3, not the Main Oval.

Oval 3 is currently unlit however future lighting is planned for the future and provision for control is allowed for in the current Facility design and cost estimate. Oval Lighting (and the upgrade to the SMSB it requires) has not been allowed for in the costing estimate, however there is allowance for cabling and reuse of the existing conduits to reduce the amount of future works required.

Mechanical Services

Toilets, showers, changerooms and cleaners store exhaust ventilation will comprise of ducted roof/wall mounted exhaust fan complete with ceiling mounted grilles.

A ducted commercial rangehood mounted over stovetop complete with wall mounted discharge louvre is allowed for, as per advice from the user groups that they will be using chip fryers and a large stovetop & oven.

Irrigation

The Shire of Murray have identified there is an existing bore main that will run under the proposed location for the changerroom facility. Refer to SK04 over for the location of the irrigation pipes overlaid on the proposed site plan for SRM03.

The design team have investigated the cost implications of diverting the pipe to suit the current location of the changerroom facility and believe the cost to divert the main will be roughly \$5k to \$10k. This has been confirmed to be acceptable based on the preferred location and has been included in the cost estimate for the SRM03 site works.

Refer Appendix 02 for further detailed services consultants reporting on the site service requirements.

3.4 FEATURE SURVEY

Currently the design team has been provided with an aerial high level survey for both sites. This is sufficient for the current Concept Design activities, however a site specific title and feature survey will need to be procured for both sites prior to commencement of the next stage of design.

Both sites are relatively flat and do not present any significant level challenges for access in regard to servicing and compliance of DDA and AS1428.

3.5 GEOTECHNICAL REPORT

A geotechnical report has been prepared for the site by Structerre and provided to SAS by the Shire of Murray. Refer Appendix 2 for reports and a high level summary as below.

There are no significant issues identified. This will need to be confirmed by a structural/ civil engineer for the detailed design of the project (and further geotechnical information may be required).

- Groundwater not encountered to a depth of 2.5m and on-site drainage will be suitable
- Site classified as equivalent to Class A with some minor remediation works and as such will be suitable for proposed steel framed and brick construction and concrete slab on ground.

The site is proposed to be raised by 500mm of clean fill which will further improve the ground conditions for construction.

Storm water can be managed through localised soak wells or connection to the car park storm water system which will be designed to Shire requirements in the next stage of Design.

3.6 ZONING AND APPROVALS

Site Ownership & Zoning

The site is currently owned by the Shire of Murray and is zoned as Public Recreation/ Conservation. No rezoning will be required.

Planning Approval

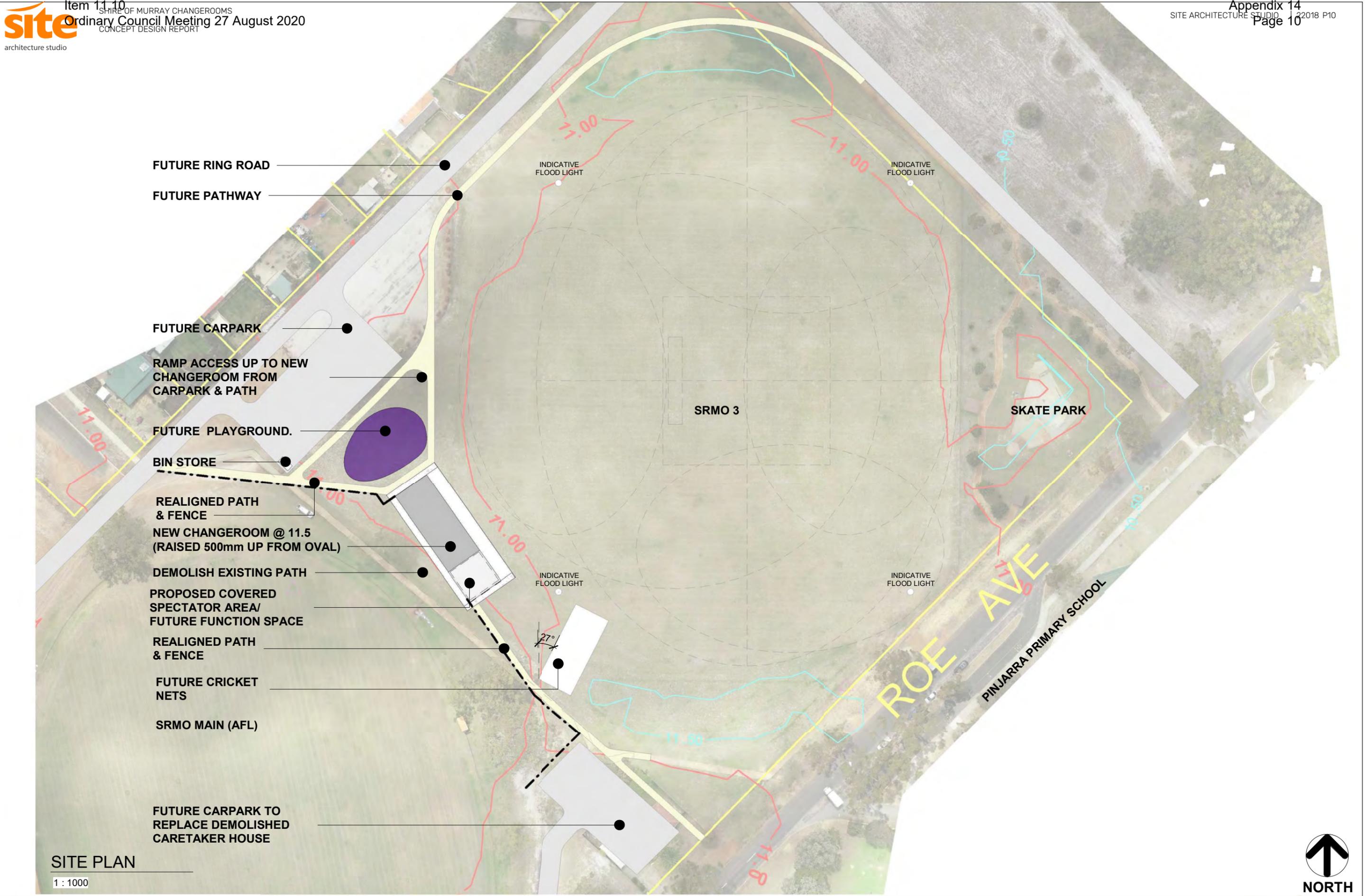
This requirement is expected to be managed by the Shire of Murray as part of the next stage of the design.

Building Permit

The Building Act 2011 requires that this project has a certificate of Design Compliance undertaken by a registered Building Certifier, and a Building Permit is granted by the Shire of Murray as the permit authority. This will occur in the next stage of the design.

3.7 BUILDING CLASSIFICATION AND AMENITIES

Under the Building Code of Australia (BCA) the new building will be classified as Class 9b, being a public building with change rooms.



SITE PLAN
 1 : 1000





FUTURE RING ROAD

PATH REALIGNED TO ALLOW FOR 13M ROAD BUFFER ZONE

13000

ALTERNATIVE CHANGEROOM LOCATION OPTION B)

CURRENT POSITION OF CHANGEROOMS. DIVERSION REQUIRED TO IRRIGATION MAIN AT MINOR COST.

ALTERNATIVE CHANGEROOM LOCATION OPTION A)

CRICKET NETS CAN BE BUILT OVER IRRIGATION MAIN.

SRMO MAIN (AFL)

SRMO 3

SKATE PARK

PINJARRA PRIMARY SCHOOL

POSSIBLE CARPARK TO REPLACE DEMOLISHED HOUSE

Irrigation Overlay
 1 : 1000

SK04 SRMO3 - SITE SERVICES OVERLAY

Scale 1 : 1000

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



1/07/2020 9:42:27 AM

4.0 THE SITE & CONTEXT SOUTH YUNDERUP OVAL (SYO)

4.1 THE SITE & FEATURES

The following site analysis & design has been completed based on briefing information provided by the Shire, and SAS investigations including site inspection on the 19/05/2020.

The proposed siting of the facility is based on the location shown in the Precinct Master Plan as per Figure 2 with the following developments:

1. The building has been located at the mid point of the soccer field in a north south arrangement as per the Master Plan. . The main 4m deep spectator verandah is facing the oval and the minor circulation veranda is located on the western side, providing some weather protection to the rear of the building.
2. Future Playground is proposed to the north allowing good supervision for spectators within the eastern verandah.
3. External covered area / future social function space is located on the North which provides good visual and physical connection with the existing Yunderup Sport & Recreation Club facility, car park and out look over the future playground.
4. Pathways and car parking have been developed from the Precinct Master Plan to align with the project requirements.
5. The site compensation drainage is likely required as the area designated as parking is prone to flooding in winter. A landscaped compensation zone has been located to the west of the proposed car park, which is previously shown as a playground on the Master Plan. This area can be suitably landscaped and presented to improve informal connectivity to the Tennis Courts, Bowling rinks and Yunderup Sport Club facility, as required.
6. The facility is proposed to be built on approximately 900mm of fill to allow the spectators verandah to be elevated to the main viewing oval and the western minor spectator verandah to be level with the Main Sports Oval. The final design level will need to be determined in the next design phase to suit the car park design and civil works associated with the levels for the compensation drain
7. A Bin Store is proposed as a stand alone roofed structure, located within the carpark for ease of access and serviceability.
8. There are some small existing trees on the site which will be affected by the site location, and predominately the car park area, depending on final civil levels. Final location and extent of pedestrian paths will need to be determined in the next stage to suit the outcomes of the Site Feature Survey and staging of the car park and ring road works.

4.2 TRANSPORT, SITE ACCESSIBILITY & PARKING

Access to SYO is expected to be primarily by vehicle with pedestrian traffic from the adjacent sports precinct to the north west, and the neighbouring residential area from the north.

Vehicle access will be provided through the existing unmarked and unsealed carpark to the north of the proposed changerooms accessed by off Delta Drive. There is a proposed future carpark just to the north of the changeroom facility. This will need to be graded up to meet the level of the changeroom to provide on grade universal access without the need for ramps and stairs to the building. Retaining walls/ battenning of earth from carpark to existing tennis courts and bowling green will be to future design.

Pedestrian access will be provided via a new path to connect the new Facility from the car parking areas and the existing Sports Club facility. As the building is proposed to be raised above the oval to create a better viewing angle, the pathway will be sloped (min 1:20) at both ends, as required to suit AS 1428 accessibility compliance.

The grassed area to the west of the Facility can be designated as over flow parking on game days or can be used by service vehicles front he car park to provide closer building access.

Site access during construction of the works will be able to utilise the vacant areas within the site and there is not expected to be any complication with access for construction.

4.3 SITE SERVICES

Existing site services will be diverted and utilised to accommodate the new changeroom facilities.

Power

Power is proposed to be supplied by a new SMSB to replace the existing SMSB to be removed as part of the demolition of the existing toilet block.

Capacity of existing power supply to allow for the changerooms is to be confirmed.

Communications

Currently, there is no requirement in the brief for dedicated communication to the new building. To future proof the building, the design team recommends installing underground communication conduits from Delta Avenue

Water

Water is proposed to connect into existing mains located to the south east of the building at a connection along South Yunderup Road. A Meter is to be provided at connection point in a anti vandal cage. The existing service to the Toilet block will remain.

Sewer

There is an existing sewer junction adjacent the South Yunderup Sport and Recreation Club car park at approximate invert or 0.68AHD. Gravity connection is possible if boring is permitted under the tennis courts. If boring is not permitted under the courts a sewer pump station is recommended for the change rooms with rising main diverting around the hard courts to the existing sewer junction which is allowed for in the cost estimate.

Gas

Gas is available to service the site. If required, it is proposed to connect into existing mains located to the south east of the building at a connection along South Yunderup Road. Meter to be provided at connection point in a anti vandal cage.

The Shire has stated that gas provision within the Facility will not be provided at this stage.

Oval Lighting

The Oval is currently unlit however future lighting is planned and provision for control is allowed for in the current Facility design and cost estimate. Oval Lighting has not been allowed for in the costing estimate. .

Carpark Lighting

The carpark lighting is noted will need to be on a different circuit as will sit on a different lot. This is not currently included in the Chnageroom project scope.

Refer Appendix 02 for further detailed services consultants reporting on the site service requirements & upgrades required.

4.4 SURVEY

Currently the design team has been provided with an aerial high level survey for both sites. This is sufficient for the current design activities, however a site specific title and feature survey will need to be procured for both sites prior to commencement of the next stage of design.

Both sites are relatively flat and do not present any significant level challenges for access in regard to servicing and compliance for DDA and AS1428.

4.5 GEOTECHNICAL REPORT

A geotechnical report has been prepared for both sites by Structerre and provided to SAS by the Shire of Murray. Refer Appendix 2 for reports and high level summary as below. There are no significant issues identified currently noting that the site will require clean compacted sand to build up above the oval. This will need to be confirmed by a structural/ civil engineer for the detailed design of the project (and further geotechnical

information may be required).

- Groundwater not encountered to a depth of 2.5m and on-site drainage will not be suitable
- Site classified as equivalent to Class S with some minor remediation works and as such will be suitable for proposed steel framed / brick work construction and concrete slab on ground.

4.6 ZONING AND APPROVALS

Site Ownership & Zoning

The site is currently owned by the Shire of Murray and is zoned as Public Recreation/ Conservation. No rezoning will be required..

Note - The overall Sports Precinct sits across 3 sites, however the building has been located within Lot 501 to avoid crossing boundaries & possible amalgamation of lots. This is the lot of the existing toilet facilities.

Planning Approval

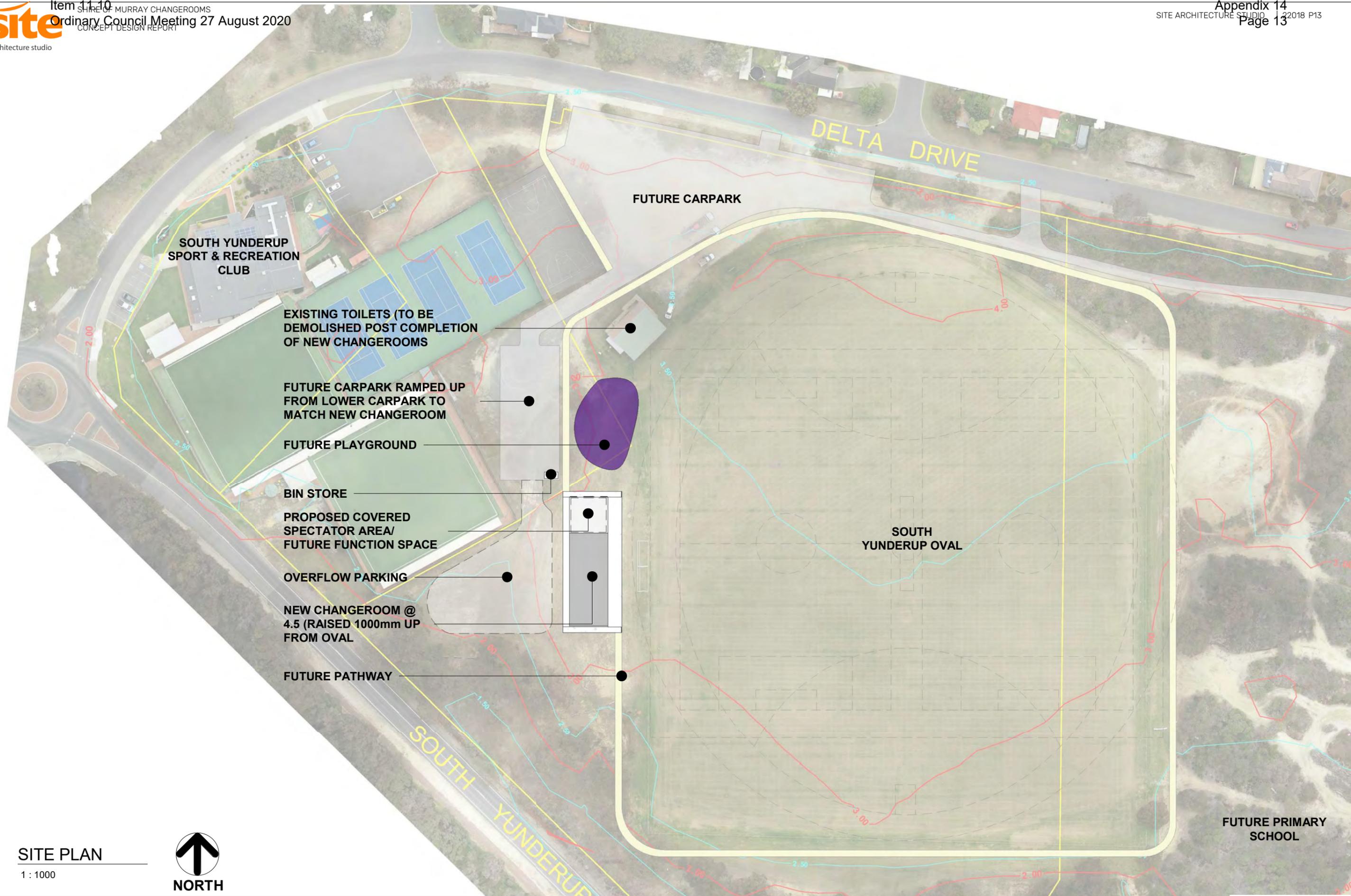
This requirement is expected to be managed by the Shire of Murray as part of the next stage of the design.

Building Permit

The Building Act 2011 requires that this project has a certificate of Design Compliance undertaken by a registered Building Certifier, and a Building Permit is granted by the Shire of Murray as the permit authority. This will occur in the next stage of the design.

4.7 BUILDING CLASSIFICATION AND AMENITIES

Under the Building Code of Australia (BCA) the new building will be classified as Class 9b, being a public building with change rooms.



SITE PLAN

1 : 1000



SK03 SITE PLAN - SOUTH YUNDERUP OVAL

Scale 1 : 1000

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



10/06/2020 2:25:18 PM

5.0 BUILDING CONCEPT DESIGN PRINCIPLES

5.1 PLANNING PRINCIPLES

The planning for the new facility has been based on precedent projects of a similar amenity and function. The Ocean Road, Mandurah pavilion was used as a concept guide and visited by the user groups and SITE have introduced some elements from the Grandis Park facility, Banksia Grove, Wanneroo

The planning of the above projects and a marked up concept floor plan provided by the Shire of Murray have been considered and developed by SAS against the requirements of the Schedule of Accommodation.

Overall, the planning has been designed around the following principles:

- Clearly identifiable areas
- Passive Surveillance
- Efficient Planning with provision for future change
- Weather protected entries & exits
- Universal access
- Separate service ducts to assist in maintenance

See below rationale for planning for the different areas.

Changeroom/ Showers

Two gender neutral changerooms are located at the end of the facility. This allows for effective planning and a covered entry that can be used in a home/ away use. The spaces are designed to be open to allow for passive surveillance while also providing for the privacy of individual shower and toilet cubicles.

Service ducts allow for discrete servicing of HWU's and cisterns to minimise impact on users. The HWU's will be wall mounted at high level to allow access for service personnel to the cisterns.

UATs

2 x UATs are located next to each other near the centre off the main viewing verandah so as to provide easy access and passive surveillance/ supervision for those that need the facilities. These will back onto a duct allowing for concealed toilet cisterns.

The UAT's are gender neutral public facilities and, if desired, can be designated Male and Female on game days with temporary signage.

Umpires Changeroom

The umpires changeroom is located near the centre off the main viewing verandah next to the UAT's and away from the Change Rooms. This provides easy access and passive surveillance to the entry as well as separation from the player change rooms to improve safety for the umpires.

Cleaners Store/ Duct

The cleaners store is located adjacent all the key changeroom/ shower facilities with a secure access of the cleaners store to a duct containing all the Hot Water Units and toilet cisterns. This will provide for secure and easy access for maintenance of the changeroom services

Club Storerooms

2 x club storerooms are provided off the rear walkway with easy access for handling equipment. The storeroom dimensions have been designed to suit the store requirements as outlined by the clubs in the briefing documents and can be divided internally with link mesh cages if required.

Kitchen

The kitchen has been designed at the corner of the future function area to allow for 2 x serveries (one to serve a designated licensed area, one not licenced). The kitchen includes allowance for all the appliances and capabilities identified in the functional requirements brief document (refer Appendix 3) and the user groups feedback. his includes:

- 2 x sinks (one prep, one cleanup)
- 1 x handwash basin
- 2 x fridges/ freezers
- Combined Stove & Electric Oven
- Stainless steel benching and shelving
- Commercial Exhaust

Function Store

A separate store is proposed for function area requirements including chairs/ tables etc. This could also house a portable barbecue or any other shared items for use int he function area by the clubs. this space will double as a chair and table store should the extension of a social space be added in the future.

Future Function Area

An outdoor covered area is currently proposed at the end of the Facility which is to be separately costed. If the budget doesn't allow for the extended roof at this stage, the planning and design of the building can be cut back in line with the kitchen and an appropriate return on the veranda can be added, to reduce costs.

The design has flexibility for this area to be added and enclosed at a later date when funds become available.

Verandahs

The facility includes 2 x verandahs. A 4m deep large verandah will allow for weather protected viewing of the primary use oval,

and a 2m deep walkway type verandah will provide covered for the rooms to the rear of the facility.

5.2 ARCHITECTURE AND MATERIALS

The external architecture has been considered against the briefed requirements as below: Refer to Appendix 1 for Architectural drawings demonstrating the below.

Reflection of Surrounding Natural and Built Environment

The built form of the surrounding areas includes various simple rural buildings of various styles. Considering this, SAS have developed a design which focuses on 2 simple ideas typical of the area including:

- Simple pitch Australian Shed structures
- Outdoor metal sheet verandahs with repetitive columns & exposed structure.

These ideas have defined the form of the building with a simple repetitive shed type structure forming the main building with 2 simply connected verandahs on the east and west sides. This form is not only efficient, cost effective, easy to extend in the future, but also sits well in the open surrounding context.

Colour is proposed to be used with painted FC sheet to the bookends of the shed and to help define the entry points for the different rooms. These colours will be developed with input from the key stakeholders with the idea to use colours representative of the clubs and the natural surrounds, giving the facilities a local point of difference and branding.

Sustainable Design Principles

The external envelope of the building been designed with passive solar design principles in mind while also creating comfortable, functional and flexible spaces. The architecture considered is economical and low maintenance structure and design incorporating:

- Simple pitched metal sheet roofs with draining to the edges of the building to avoid box gutters (and provide opportunity for solar panels mounted to the roof, if desired).
- Reverse Brick Veneer Wall construction allowing for high thermal performance
- Repetitive steel framed roof and wall structure
- Concrete floor slab on grade
- High level polycarbonate cladding and louvres/high level ventilation to allow for natural light and cross ventilation to the central spaces minimising energy consumption

Materiality

The building has been designed with robust, low maintenance materials as below.:

- External robust cladding including fibre cement sheet and Colorbond metal sheet walls so that damaged panels can be easily and economically replaced over time. These will be backed with a plywood panel to enhance durability.
- Internal face brick walls where impact is of concern, i.e. change rooms and stores. Lining to inside of frame to other areas.
- Steel framed (truss) roof structure with Colorbond metal roof sheeting
- Concrete Floor Slab on Grade
- High level polycarbonate cladding which provides a low maintenacne and robust option at high level while also allowing natural light
- Internal Ceilings: combination of flush and perforated plasterboard ceilings where required
- Floor finishes: combination of vinyl and tiles
- Wet area: ceramic floor tile with full height wall tiles. New WELS rated plumbing fixtures

5.3 BUILDING STRUCTURE

The building structure has been considered against the site geotechnical requirements and the proposed architecture and materiality to provide a robust and cost effective solution.

A concrete slab on ground with concrete footings has been designed as the most robust and cost effective solution.

A steel framed roof and wall structure with repetitive trusses has been developed for the following reasons.

- The structure is simple and economical
- There are efficiencies if the 2 changerooms were to be procured together in the manufacturer of the steel
- The structure can be easily added on to at a later date
- The structure suits (and informs) the form and the architecture of the building
- Allows for large uninterrupted areas below (including the verandahs)

The above has been developed at a conceptual level to this stage and will need to be further detailed in the next design stage by a qualified structural engineer.



FLOOR PLAN - CONCEPT

1 : 100

- CHANGEROOM AMENITIES
- KIOSK
- STORE

A2.00 CONCEPT FLOOR PLAN

Scale 1 : 100

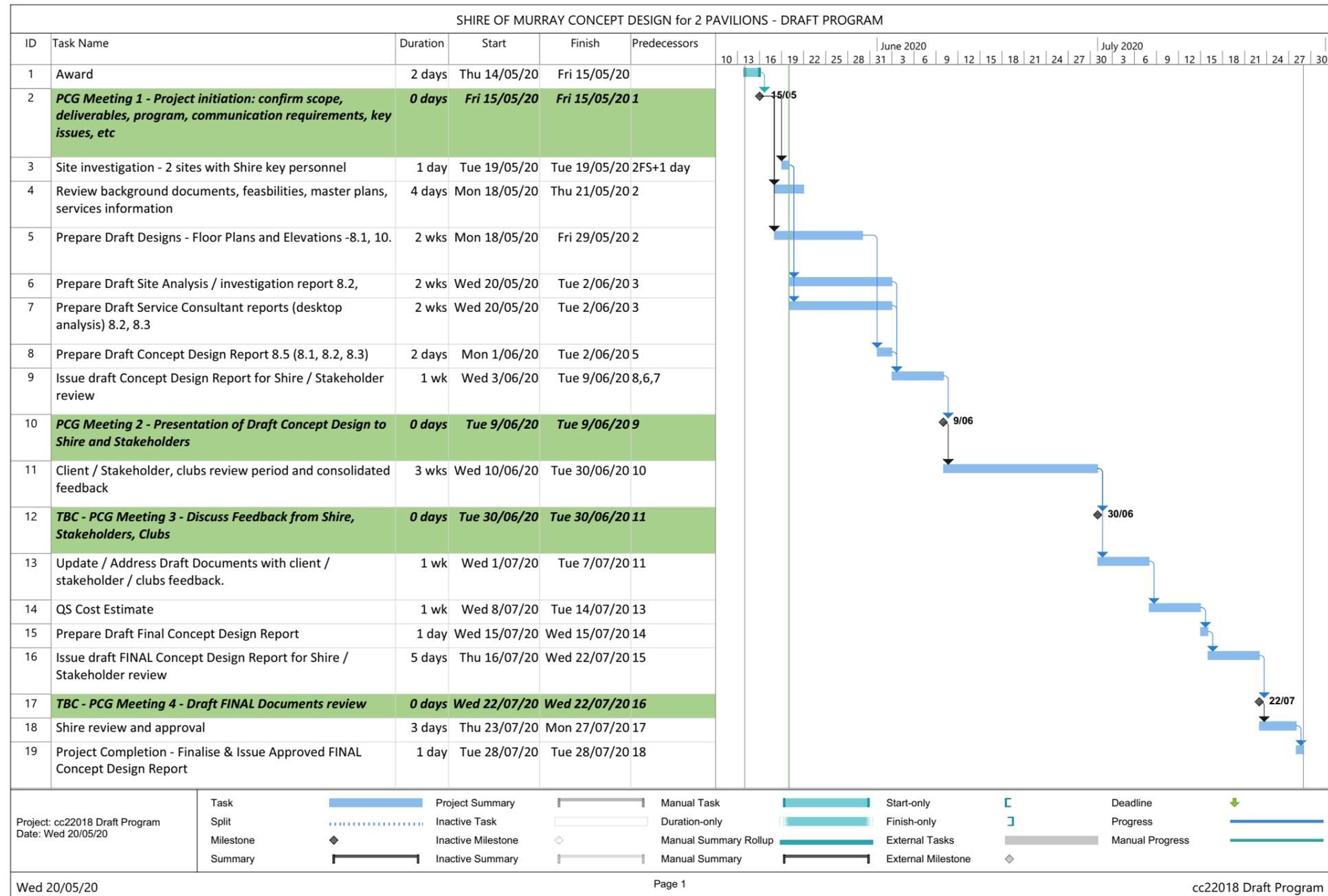
SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



6.0 PROGRAMME

SAS have developed a programme for the concept design stage of the project as per the below. A more detailed programme for the documentation, procurement and construction of the project will need to be developed at the commencement of the next stage.



7.0 COST PLAN

7.1 PROJECT COST ESTIMATE

A Project Cost Estimate has been prepared by Mathew Owen Consultants which provides a breakdown of the total project cost for the building on each site.

The cost estimate includes:

- Detailed cost of site servicing requirements for each building.
- Cost with covered spectator area separated out.
- Clarification on cost savings for concurrent construction of both facilities

It is noted that the concept design cost estimate is in excess of the cost estimate included in the report. The key factors identified for this difference in cost include:

- Site services cost requirements have been clarified and are higher than previously estimated
- The previous cost estimate was based on a pre-fabricated facility
- The detailed requirements are more clearly known and have been capture in the updated estimate.

SAS have reviewed the design with the QS, and the review shows that the materials, style and design of the building has been designed cost effectively for the scope and type of project.

The SoM have requested an additional cost estimate based on a reduced building footprint which has been provided within the Cost Report following. (refer floor plan following cost report for reduced scope option)

Note - Their is further cost savings that could be considered by the Shire of Murray. The costs have been broken down to allow for this consideration. This could include

- Kitchen Fitout and fixtures
- Loose Furniture and equipment
- Staging of works
- Ancillary Site works including fencing & bin store works

owenconsulting

quantity surveyors + construction consultants

4 August 2020

SHIRE OF MURRAY - NEW CHANGEROOMS

Schematic design cost estimate

	SRMO 1	SRMO 2	SYO 1	SYO 2	SYO 3
Changerooms building	\$ 950,000.00	\$ 860,000.00	\$ 950,000.00	\$ 860,000.00	\$ 785,000.00
External works and services	\$ 295,000.00	\$ 285,000.00	\$ 320,000.00	\$ 310,000.00	\$ 305,000.00
Construction Cost (excl GST)	\$ 1,245,000.00	\$ 1,145,000.00	\$ 1,270,000.00	\$ 1,170,000.00	\$ 1,090,000.00
Design and construction contingency (10%)	\$ 125,000.00	\$ 115,000.00	\$ 127,000.00	\$ 117,000.00	\$ 109,000.00
Construction Cost + Contingency (excl GST)	\$ 1,370,000.00	\$ 1,260,000.00	\$ 1,397,000.00	\$ 1,287,000.00	\$ 1,199,000.00
Consultant fees (10%)	\$ 137,000.00	\$ 126,000.00	\$ 140,000.00	\$ 129,000.00	\$ 120,000.00
Loose furniture and equipment	excluded	excluded	excluded	excluded	excluded
Council fees and charges	excluded	excluded	excluded	excluded	excluded
ESD initiatives (solar, greywater, etc.)	excluded	excluded	excluded	excluded	excluded
Cost escalation to tender (beyond 2020)	excluded	excluded	excluded	excluded	excluded
Total Project Cost (excl GST)	\$ 1,507,000.00	\$ 1,386,000.00	\$ 1,537,000.00	\$ 1,416,000.00	\$ 1,319,000.00

Notes

- * This cost estimate is preliminary only based on Site Architects' design drawings, report and preliminary services consultant input
- * In our opinion, any cost advantages associated with the projects being built concurrently are negligible based on the following:
 - There would be no foreseeable reduction in site costs (establishment, amenities, services, temp fencing, insurances, clean up, etc.)
 - There would be no foreseeable reduction in supervision costs unless it is acceptable to have split (part-time) supervision on each project.
 - The projects are large enough as standalone projects to ensure competitive pricing (no foreseeable further discounting in the current market)

Projects

SRMO 1 - with covered spectator

SRMO 2 - without covered spectator

SYO 1 - with covered spectator

SYO 2 - without covered spectator

SYO 3 - without covered spectator (reduced footprint)

owenconsulting

quantity surveyors + construction consultants

4 August 2020

SHIRE OF MURRAY - NEW CHANGEROOMS

Specific estimate exclusions (in addition to items noted above)

- * Demolition of existing toilet block
- * Soft landscaping and reticulation
- * Rock excavation, dewatering, removal of bad ground
- * Retaining walls, step and ramps
- * Ceilings to stores
- * Soffit lining to covered spectator area

Specific estimate inclusions

- * SYO standalone power supply (+\$57,000 for amalgamated power supply)
- * External signage / wayfinding - \$5,000
- * Disabled modifications to existing carpark - \$5,000
- * Bin store - \$15,000
- * Irrigation main diversion (SRMO) - \$10,000
- * Kitchen equipment (oven, griddle and fridges) - \$10,000

owen consulting

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
SRMO - WITH COVERED SPECTATOR					
PR - Preliminaries					
1	Allowance for builders preliminaries costs		item		110,000
2	FECA	290	m2		
3	UCA	355	m2		
SB - Substructure					
4	100 thick ground slab and thickenings	300	m2	75.00	22,500
5	Allowance for internal slab thickenings	300	m2	15.00	4,500
6	100 thick ground slab and thickenings - covered spectator	120	m2	75.00	9,000
7	Footings - building	300	m2	25.00	7,500
8	Footings - covered spectator	120	m2	20.00	2,400
9	Footings - verandahs	230	m2	20.00	4,600
10	Termite treatment		item		4,600
11	Paving - verandah and covered area		note		refer ext works
					55,100
CL - Columns					
12	Structural steel columns - building	420	m2	50.00	21,000
13	Structural steel columns - verandahs	230	m2	50.00	11,500
					32,500
RF - Roof					
14	Structural steel roof framing	650	m2	140.00	91,000
15	Roof purlins	650	m2	20.00	13,000
16	Roof sheeting and insulation	650	m2	60.00	39,000
17	Cappings and flashings	250	m	40.00	10,000
18	Fascia - main roof	24	m	150.00	3,600
19	Fascia - verandahs (not PFC)	90	m	80.00	7,200
20	Concealed eaves gutter - main roof	39	m	125.00	4,875
21	Concealed eaves gutters - verandahs	77	m	125.00	9,625
22	Downpipe - verandah	8	no	300.00	2,400
23	Downpipe and spreader - main roof	4	no	300.00	1,200
24	Roof safety system		item		6,000
25	Verandah and eaves soffit linings		note		refer CF
					187,900
EW - External Walls					
26	Stud framed and polycarbonate profiled sheet cladding	125	m2	170.00	21,250
27	Stud framed and spandek clad walls	140	m2	170.00	23,800
28	Stud framed and spandek clad walls - nib walls	17	m	200.00	3,400
29	Stud framed and painted feature fc sheet walls	90	m2	250.00	22,500
30	Internal brick leaf (std commons)	200	m2	110.00	22,000

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owen consulting

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
SRMO - WITH COVERED SPECTATOR (Continued)					
31	Support beams/lintels to openings	30	m	130.00	3,900
32	Anti-graffiti treatment to external walls		note		excluded
					96,850
WW - Windows					
33	Aluminium windows		note		excluded
34	High level louvre vents		note		excluded
ED - External Doors					
35	Timber entry door, frame hardware and paint	7	no	1,300.00	9,100
36	Timber double entry doors, frame hardware and paint	1	no	2,000.00	2,000
37	Timber double entry doors, frame hardware and paint - SMSB	1	no	1,600.00	1,600
38	Roller shutters - kitchen (not motorised)	2	no	750.00	1,500
39	Roller shutters - stores (not motorised)	2	no	3,300.00	6,600
40	Security grilles		note		excluded
					20,800
NW - Internal Walls					
41	Internal brick walls (std commons)	390	m2	110.00	42,900
					42,900
NS - Internal Screens & Borrowed Lights					
42	Toilet/shower partitions and doors	60	m2	300.00	18,000
43	Caged divider to function store		item		2,000
					20,000
ND - Internal Doors					
44	Timber door, frame, hardware and paint	5	no	1,100.00	5,500
					5,500
WF - Wall Finishes					
45	Wall tiling - showers and toilets (2700h)	200	m2	120.00	24,000
46	Wall tiling - kitchen (2700h)	55	m2	120.00	6,600
47	EO for backing render to brick walls	255	m2	20.00	5,100
48	Waterproofing - showers	11	no	300.00	3,300
49	Paint to brick walls	700	m2	20.00	14,000
					53,000
FF - Floor Finishes					
50	Vinyl flooring (+ coved skirting) - kitchen	30	m2	120.00	3,600
51	Floor tiling - showers, toilets and cleaner	70	m2	140.00	9,800
52	Epoxy flooring - change	90	m2	80.00	7,200
53	Sealed floors - stores	85	m2	20.00	1,700
					22,300

Item	Description	Quantity	Unit	Rate	Total
SRMO - WITH COVERED SPECTATOR (Continued)					
CF - Ceiling Finishes					
54	Suspended ceilings - stores and changerrooms		note		excluded
55	Suspended raking ceilings	120	m2	130.00	15,600
56	External soffit lining - verandahs		note		excluded
57	External soffit lining - covered spectator		note		excluded
					15,600
FT - Fitments					
58	Kitchen stainless steel fitout	1	no	13,500.00	13,500
59	Changeroom bench seating and coat hooks	2	no	10,500.00	21,000
60	Shower/wc seats, mirrors, grab rails and dispensers	2	no	2,000.00	4,000
61	Umpire seating and coat hooks, mirrors and dispensers	1	no	3,000.00	3,000
62	UA toilet folding seat mirror, grab rails and dispensers	1	no	1,500.00	1,500
63	UA toilet baby change, mirror, grab rails and dispensers	1	no	1,800.00	1,800
64	Hand dryers	4	no	500.00	2,000
65	Fire extinguishers and blankets		item		750
66	Signage		PS		2,000
					49,550
SE - Special Equipment					
67	Kitchen equipment (oven, griddle and fridges)		item		10,000
68	Loose furniture and equipment		note		excluded
					10,000
HY - Hydraulic Services					
69	<i>Note - as per CHD report</i>				
70	Fixtures and tapware		item		70,000
71	Sanitary plumbing		item		5,000
72	Hot and cold water services		item		23,500
73	Mechanical drains		item		1,500
					100,000
ME - Mechanical Services					
74	Mechanical Services (as per SMW&C report)		item		58,000
					58,000
EL - Electrical Services					
75	Lighting, power and LV services (as per Focus Consulting report)		item		70,000
					70,000
					Total 950,000
EXTERNAL WORKS AND SERVICES					
Site Preparation					
76	Site clearing, topsoil removal and pad preparation	800	m2	10.00	8,000

owen consulting

owen consulting

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
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**SRMO - WITH COVERED SPECTATOR
(Continued)**

**SRMO - WITH COVERED SPECTATOR
(Continued)**

77	EO for fill (raised pad level +500)	800	m2	15.00	12,000
78	Rock excavation, dewatering, removal of bad ground		note		excluded
79	Retaining walls		note		excluded
					20,000
Roads, Footpaths & Paved Areas					
80	Modifications to existing car park - disabled parking bays		item		5,000
81	Exposed aggregate concrete paving - around building (incl. covered spectator)	300	m2	110.00	33,000
82	Pathway from existing carpark to new changerrooms (ramped to max 1:20)	90	m	100.00	9,000
83	Re-align existing footpath	90	m	100.00	9,000
84	Demolish and make good to re-aligned footpath	120	m	50.00	6,000
85	Form ramps and steps		note		excluded
					62,000
Outbuildings					
86	Bin store enclosure		item		15,000
					15,000
Boundary Walls, Fencing & Gates					
87	Re-align existing fencing	80	m	50.00	4,000
					4,000
Landscaping & Improvements					
88	Soft landscaping and reticulation - around building		note		excluded
89	External signage / wayfinding		item		5,000
90	Irrigation main diversion		item		10,000
					15,000
External Hydraulic Services					
91	<i>Note - as per CHD report</i>				
92	Stormwater drainage from roof area (soakwells)		item		11,000
93	External hydraulic services - from existing services		item		9,000
94	Grease trap - kitchen		item		15,000
95	External fire service - from boundary		note		excluded
96	WCWA headworks charges		note		excluded
					35,000
External Electrical Services					
97	<i>Note - based on Focus Consulting report</i>				
98	Work to SMSB		item		5,000
99	External site services		item		70,000
100	Western Power headworks (power upgrade)		item		40,000
					115,000

PR - Preliminaries

101	Allowance for builders preliminaries costs (external works and services)		item		29,000
			Total		295,000
TOTAL CONSTRUCTION COST (excl GST)					1,245,000

SRMO - WITH COVERED SPECTATOR

1,245,000

owen consulting

owen consulting

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
SRMO - WITHOUT COVERED SPECTATOR					
PR - Preliminaries					
102	Allowance for builders preliminaries costs		item		100,000
103	FECA	290	m2		
104	UCA	170	m2		
SB - Substructure					
105	100 thick ground slab and thickenings	300	m2	75.00	22,500
106	Allowance for internal slab thickenings	300	m2	15.00	4,500
107	Footings - building	300	m2	25.00	7,500
108	Footings - verandahs	170	m2	20.00	3,400
109	Termite treatment		item		3,600
110	Paving - verandah		note	refer ext works	
					41,500
CL - Columns					
111	Structural steel columns - building	300	m2	50.00	15,000
112	Structural steel columns - verandahs	170	m2	50.00	8,500
					23,500
RF - Roof					
113	Structural steel roof framing	470	m2	140.00	65,800
114	Roof purlins	470	m2	20.00	9,400
115	Roof sheeting and insulation	470	m2	60.00	28,200
116	Cappings and flashings	205	m	40.00	8,200
117	Fascia - main roof	24	m	150.00	3,600
118	Fascia - verandahs (not PFC)	70	m	80.00	5,600
119	Concealed eaves gutter - main roof	28	m	125.00	3,500
120	Concealed eaves gutters - verandahs	56	m	125.00	7,000
121	Downpipe - verandah	6	no	300.00	1,800
122	Downpipe and spreader - main roof	3	no	300.00	900
123	Roof safety system		item		5,000
124	Verandah and eaves soffit linings		note	refer CF	
					139,000
EW - External Walls					
125	Stud framed and polycarbonate profiled sheet cladding	75	m2	170.00	12,750
126	Stud framed and spandek clad walls	140	m2	170.00	23,800
127	Stud framed and spandek clad walls - nib walls	17	m	200.00	3,400
128	Stud framed and painted feature fc sheet walls	90	m2	250.00	22,500
129	Internal brick leaf (std commons)	200	m2	110.00	22,000
130	Support beams/lintels to openings	30	m	130.00	3,900
131	Anti-graffiti treatment to external walls		note		excluded

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
SRMO - WITHOUT COVERED SPECTATOR (Continued)					
					88,350
WW - Windows					
132	Aluminium windows		note		excluded
133	High level louvre vents		note		excluded
ED - External Doors					
134	Timber entry door, frame hardware and paint	7	no	1,300.00	9,100
135	Timber double entry doors, frame hardware and paint	1	no	2,000.00	2,000
136	Timber double entry doors, frame hardware and paint - SMSB	1	no	1,600.00	1,600
137	Roller shutters - kitchen (not motorised)	2	no	750.00	1,500
138	Roller shutters - stores (not motorised)	2	no	3,300.00	6,600
139	Security grilles		note		excluded
					20,800
NW - Internal Walls					
140	Internal brick walls (std commons)	390	m2	110.00	42,900
					42,900
NS - Internal Screens & Borrowed Lights					
141	Toilet/shower partitions and doors	60	m2	300.00	18,000
142	Caged divider to function store		item		2,000
					20,000
ND - Internal Doors					
143	Timber door, frame, hardware and paint	5	no	1,100.00	5,500
					5,500
WF - Wall Finishes					
144	Wall tiling - showers and toilets (2700h)	200	m2	120.00	24,000
145	Wall tiling - kitchen (2700h)	55	m2	120.00	6,600
146	EO for backing render to brick walls	255	m2	20.00	5,100
147	Waterproofing - showers	11	no	300.00	3,300
148	Paint to brick walls	700	m2	20.00	14,000
					53,000
FF - Floor Finishes					
149	Vinyl flooring (+ coved skirting) - kitchen	30	m2	120.00	3,600
150	Floor tiling - showers, toilets and cleaner	70	m2	140.00	9,800
151	Epoxy flooring - change	90	m2	80.00	7,200
152	Sealed floors - stores	85	m2	20.00	1,700
					22,300
CF - Ceiling Finishes					
153	Suspended ceilings - stores and changerrooms		note		excluded

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
SRMO - WITHOUT COVERED SPECTATOR (Continued)					
154	Suspended raking ceilings	120	m2	130.00	15,600
155	External soffit lining - verandahs		note		excluded
					15,600
FT - Fitments					
156	Kitchen stainless steel fitout	1	no	13,500.00	13,500
157	Changeroom bench seating and coat hooks	2	no	10,500.00	21,000
158	Shower/wc seats, mirrors, grab rails and dispensers	2	no	2,000.00	4,000
159	Umpire seating and coat hooks, mirrors and dispensers	1	no	3,000.00	3,000
160	UA toilet folding seat mirror, grab rails and dispensers	1	no	1,500.00	1,500
161	UA toilet baby change, mirror, grab rails and dispensers	1	no	1,800.00	1,800
162	Hand dryers	4	no	500.00	2,000
163	Fire extinguishers and blankets		item		750
164	Signage		PS		2,000
					49,550
SE - Special Equipment					
165	Kitchen equipment (oven, griddle and fridges)		item		10,000
166	Loose furniture and equipment		note		excluded
					10,000
HY - Hydraulic Services					
167	<i>Note - as per CHD report</i>				
168	Fixtures and tapware		item		70,000
169	Sanitary plumbing		item		5,000
170	Hot and cold water services		item		23,500
171	Mechanical drains		item		1,500
					100,000
ME - Mechanical Services					
172	Mechanical Services (as per SMW&C report)		item		58,000
					58,000
EL - Electrical Services					
173	Lighting, power and LV services (as per Focus Consulting report)		item		70,000
					70,000
			Total		860,000
EXTERNAL WORKS AND SERVICES					
Site Preparation					
174	Site clearing, topsoil removal and pad preparation	800	m2	10.00	8,000
175	EO for fill (raised pad level +500)	800	m2	15.00	12,000
176	Rock excavation, dewatering, removal of bad ground		note		excluded
177	Retaining walls		note		excluded

Item	Description	Quantity	Unit	Rate	Total
SRMO - WITHOUT COVERED SPECTATOR (Continued)					
					20,000
Roads, Footpaths & Paved Areas					
178	Modifications to existing car park - disabled parking bays		item		5,000
179	Exposed aggregate concrete paving - around building	200	m2	110.00	22,000
180	Pathway from existing carpark to new changerooms (ramped to max 1:20)	90	m	100.00	9,000
181	Re-align existing footpath	90	m	100.00	9,000
182	Demolish and make good to re-aligned footpath	120	m	50.00	6,000
183	Form ramps and steps		note		excluded
					51,000
Outbuildings					
184	Bin store enclosure		item		15,000
					15,000
Boundary Walls, Fencing & Gates					
185	Re-align existing fencing	80	m	50.00	4,000
					4,000
Landscaping & Improvements					
186	Soft landscaping and reticulation - around building		note		excluded
187	External signage / wayfinding		item		5,000
188	Irrigation main diversion		item		10,000
					15,000
External Hydraulic Services					
189	<i>Note - as per CHD report</i>				
190	Stormwater drainage from roof area (soakwells)		item		11,000
191	External hydraulic services - from existing services		item		9,000
192	Grease trap - kitchen		item		15,000
193	External fire service - from boundary		note		excluded
194	WCWA headworks charges		note		excluded
					35,000
External Electrical Services					
195	<i>Note - based on Focus Consulting report</i>				
196	Work to SMSB		item		5,000
197	External site services		item		70,000
198	Western Power headworks (power upgrade)		item		40,000
					115,000
PR - Preliminaries					
199	Allowance for builders preliminaries costs (external works and services)		item		30,000
			Total		285,000
TOTAL CONSTRUCTION COST (excl GST)					
					1,145,000

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
SRMO - WITHOUT COVERED SPECTATOR (Continued)					
	SRMO - WITHOUT COVERED SPECTATOR				1,145,000

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
SYO - WITH COVERED SPECTATOR					
PR - Preliminaries					
200	Allowance for builders preliminaries costs		item		110,000
201	FECA	290	m2		
202	UCA	355	m2		
SB - Substructure					
203	100 thick ground slab and thickenings	300	m2	75.00	22,500
204	Allowance for internal slab thickenings	300	m2	15.00	4,500
205	100 thick ground slab and thickenings - covered spectator	120	m2	75.00	9,000
206	Footings - building	300	m2	25.00	7,500
207	Footings - covered spectator	120	m2	20.00	2,400
208	Footings - verandahs	230	m2	20.00	4,600
209	Termite treatment		item		4,600
210	Paving - verandah and covered area		note		refer ext works
					55,100
CL - Columns					
211	Structural steel columns - building	420	m2	50.00	21,000
212	Structural steel columns - verandahs	230	m2	50.00	11,500
					32,500
RF - Roof					
213	Structural steel roof framing	650	m2	140.00	91,000
214	Roof purlins	650	m2	20.00	13,000
215	Roof sheeting and insulation	650	m2	60.00	39,000
216	Cappings and flashings	250	m	40.00	10,000
217	Fascia - main roof	24	m	150.00	3,600
218	Fascia - verandahs (not PFC)	90	m	80.00	7,200
219	Concealed eaves gutter - main roof	39	m	125.00	4,875
220	Concealed eaves gutters - verandahs	77	m	125.00	9,625
221	Downpipe - verandah	8	no	300.00	2,400
222	Downpipe and spreader - main roof	4	no	300.00	1,200
223	Roof safety system		item		6,000
224	Verandah and eaves soffit linings		note		refer CF
					187,900
EW - External Walls					
225	Stud framed and polycarbonate profiled sheet cladding	125	m2	170.00	21,250
226	Stud framed and spandek clad walls	140	m2	170.00	23,800
227	Stud framed and spandek clad walls - nib walls	17	m	200.00	3,400
228	Stud framed and painted feature fc sheet walls	90	m2	250.00	22,500
229	Internal brick leaf (std commons)	200	m2	110.00	22,000

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
SYO - WITH COVERED SPECTATOR (Continued)					
230	Support beams/lintels to openings	30	m	130.00	3,900
231	Anti-graffiti treatment to external walls		note		excluded
					96,850
WW - Windows					
232	Aluminium windows		note		excluded
233	High level louvre vents		note		excluded
ED - External Doors					
234	Timber entry door, frame hardware and paint	7	no	1,300.00	9,100
235	Timber double entry doors, frame hardware and paint	1	no	2,000.00	2,000
236	Timber double entry doors, frame hardware and paint - SMSB	1	no	1,600.00	1,600
237	Roller shutters - kitchen (not motorised)	2	no	750.00	1,500
238	Roller shutters - stores (not motorised)	2	no	3,300.00	6,600
239	Security grilles		note		excluded
					20,800
NW - Internal Walls					
240	Internal brick walls (std commons)	390	m2	110.00	42,900
					42,900
NS - Internal Screens & Borrowed Lights					
241	Toilet/shower partitions and doors	60	m2	300.00	18,000
242	Caged divider to function store		item		2,000
					20,000
ND - Internal Doors					
243	Timber door, frame, hardware and paint	5	no	1,100.00	5,500
					5,500
WF - Wall Finishes					
244	Wall tiling - showers and toilets (2700h)	200	m2	120.00	24,000
245	Wall tiling - kitchen (2700h)	55	m2	120.00	6,600
246	EO for backing render to brick walls	255	m2	20.00	5,100
247	Waterproofing - showers	11	no	300.00	3,300
248	Paint to brick walls	700	m2	20.00	14,000
					53,000
FF - Floor Finishes					
249	Vinyl flooring (+ coved skirting) - kitchen	30	m2	120.00	3,600
250	Floor tiling - showers, toilets and cleaner	70	m2	140.00	9,800
251	Epoxy flooring - change	90	m2	80.00	7,200
252	Sealed floors - stores	85	m2	20.00	1,700
					22,300

Item	Description	Quantity	Unit	Rate	Total
SYO - WITH COVERED SPECTATOR (Continued)					
CF - Ceiling Finishes					
253	Suspended ceilings - stores and changerrooms		note		excluded
254	Suspended raking ceilings	120	m2	130.00	15,600
255	External soffit lining - verandahs		note		excluded
256	External soffit lining - covered spectator		note		excluded
					15,600
FT - Fitments					
257	Kitchen stainless steel fitout	1	no	13,500.00	13,500
258	Changeroom bench seating and coat hooks	2	no	10,500.00	21,000
259	Shower/wc seats, mirrors, grab rails and dispensers	2	no	2,000.00	4,000
260	Umpire seating and coat hooks, mirrors and dispensers	1	no	3,000.00	3,000
261	UA toilet folding seat mirror, grab rails and dispensers	1	no	1,500.00	1,500
262	UA toilet baby change, mirror, grab rails and dispensers	1	no	1,800.00	1,800
263	Hand dryers	4	no	500.00	2,000
264	Fire extinguishers and blankets		item		750
265	Signage		PS		2,000
					49,550
SE - Special Equipment					
266	Kitchen equipment (oven, griddle and fridges)		item		10,000
267	Loose furniture and equipment		note		excluded
					10,000
HY - Hydraulic Services					
268	<i>Note - as per CHD report</i>				
269	Fixtures and tapware		item		70,000
270	Sanitary plumbing		item		5,000
271	Hot and cold water services		item		23,500
272	Mechanical drains		item		1,500
					100,000
ME - Mechanical Services					
273	Mechanical Services (as per SMW&C report)		item		58,000
					58,000
EL - Electrical Services					
274	Lighting, power and LV services (as per Focus Consulting report)		item		70,000
					70,000
EXTERNAL WORKS AND SERVICES					
Demolition					
275	Demolition of existing toilet block and make good		note		excluded
					950,000

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
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**SYO - WITH COVERED SPECTATOR
(Continued)**

**SYO - WITH COVERED SPECTATOR
(Continued)**

Site Preparation					
276	Site clearing, topsoil removal and pad preparation	800	m2	10.00	8,000
277	EO for fill (raised pad level +1000)	800	m2	30.00	24,000
278	Rock excavation, dewatering, removal of bad ground		note		excluded
279	Retaining walls		note		excluded
					32,000
Roads, Footpaths & Paved Areas					
280	Modifications to existing car park - disabled parking bays		item		5,000
281	Exposed aggregate concrete paving - around building (incl. covered spectator)	300	m2	110.00	33,000
282	Pathway from existing carpark to new changerrooms	50	m	100.00	5,000
283	Form ramps and steps		note		excluded
					43,000
Outbuildings					
284	Bin store enclosure		item		15,000
					15,000
Landscaping & Improvements					
285	Soft landscaping and reticulation - around building		note		excluded
286	External signage / wayfinding		item		5,000
					5,000
External Hydraulic Services					
287	<i>Note - as per CHD report</i>				
288	Stormwater drainage from roof area (soakwells)		item		11,000
289	External hydraulic services - from existing services		item		19,000
290	Grease trap - kitchen		item		15,000
291	External fire service - from boundary		note		excluded
292	WCWA headworks charges		note		excluded
					45,000
External Electrical Services					
293	<i>Note - based on Focus Consulting report (standalone power supply)</i>				
294	New SMSB		item		50,000
295	External site services		item		60,000
296	Western Power headworks (power upgrade)		item		39,000
					149,000
PR - Preliminaries					
297	Allowance for builders preliminaries costs (external works and services)		item		31,000
			Total		<u>320,000</u>
	TOTAL CONSTRUCTION COST (excl GST)				<u>1,270,000</u>

	SYO - WITH COVERED SPECTATOR				1,270,000
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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
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SYO - WITHOUT COVERED SPECTATOR

**SYO - WITHOUT COVERED SPECTATOR
(Continued)**

PR - Preliminaries					
298	Allowance for builders preliminaries costs		item		100,000
299	FECA	290	m2		
300	UCA	170	m2		
SB - Substructure					
301	100 thick ground slab and thickenings	300	m2	75.00	22,500
302	Allowance for internal slab thickenings	300	m2	15.00	4,500
303	Footings - building	300	m2	25.00	7,500
304	Footings - verandahs	170	m2	20.00	3,400
305	Termite treatment		item		3,600
306	Paving - verandah		note	refer ext works	
					41,500
CL - Columns					
307	Structural steel columns - building	300	m2	50.00	15,000
308	Structural steel columns - verandahs	170	m2	50.00	8,500
					23,500
RF - Roof					
309	Structural steel roof framing	470	m2	140.00	65,800
310	Roof purlins	470	m2	20.00	9,400
311	Roof sheeting and insulation	470	m2	60.00	28,200
312	Cappings and flashings	205	m	40.00	8,200
313	Fascia - main roof	24	m	150.00	3,600
314	Fascia - verandahs (not PFC)	70	m	80.00	5,600
315	Concealed eaves gutter - main roof	28	m	125.00	3,500
316	Concealed eaves gutters - verandahs	56	m	125.00	7,000
317	Downpipe - verandah	6	no	300.00	1,800
318	Downpipe and spreader - main roof	3	no	300.00	900
319	Roof safety system		item		5,000
320	Verandah and eaves soffit linings		note	refer CF	
					139,000
EW - External Walls					
321	Stud framed and polycarbonate profiled sheet cladding	75	m2	170.00	12,750
322	Stud framed and spandek clad walls	140	m2	170.00	23,800
323	Stud framed and spandek clad walls - nib walls	17	m	200.00	3,400
324	Stud framed and painted feature fc sheet walls	90	m2	250.00	22,500
325	Internal brick leaf (std commons)	200	m2	110.00	22,000
326	Support beams/lintels to openings	30	m	130.00	3,900
327	Anti-graffiti treatment to external walls		note	excluded	

					88,350
WW - Windows					
328	Aluminium windows		note		excluded
329	High level louvre vents		note		excluded
ED - External Doors					
330	Timber entry door, frame hardware and paint	7	no	1,300.00	9,100
331	Timber double entry doors, frame hardware and paint	1	no	2,000.00	2,000
332	Timber double entry doors, frame hardware and paint - SMSB	1	no	1,600.00	1,600
333	Roller shutters - kitchen (not motorised)	2	no	750.00	1,500
334	Roller shutters - stores (not motorised)	2	no	3,300.00	6,600
335	Security grilles		note		excluded
					20,800
NW - Internal Walls					
336	Internal brick walls (std commons)	390	m2	110.00	42,900
					42,900
NS - Internal Screens & Borrowed Lights					
337	Toilet/shower partitions and doors	60	m2	300.00	18,000
338	Caged divider to function store		item		2,000
					20,000
ND - Internal Doors					
339	Timber door, frame, hardware and paint	5	no	1,100.00	5,500
					5,500
WF - Wall Finishes					
340	Wall tiling - showers and toilets (2700h)	200	m2	120.00	24,000
341	Wall tiling - kitchen (2700h)	55	m2	120.00	6,600
342	EO for backing render to brick walls	255	m2	20.00	5,100
343	Waterproofing - showers	11	no	300.00	3,300
344	Paint to brick walls	700	m2	20.00	14,000
					53,000
FF - Floor Finishes					
345	Vinyl flooring (+ coved skirting) - kitchen	30	m2	120.00	3,600
346	Floor tiling - showers, toilets and cleaner	70	m2	140.00	9,800
347	Epoxy flooring - change	90	m2	80.00	7,200
348	Sealed floors - stores	85	m2	20.00	1,700
					22,300
CF - Ceiling Finishes					
349	Suspended ceilings - stores and changerrooms		note		excluded

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
SYO - WITHOUT COVERED SPECTATOR (Continued)					
350	Suspended raking ceilings	120	m2	130.00	15,600
351	External soffit lining - verandahs		note		excluded
					15,600
FT - Fitments					
352	Kitchen stainless steel fitout	1	no	13,500.00	13,500
353	Changeroom bench seating and coat hooks	2	no	10,500.00	21,000
354	Shower/wc seats, mirrors, grab rails and dispensers	2	no	2,000.00	4,000
355	Umpire seating and coat hooks, mirrors and dispensers	1	no	3,000.00	3,000
356	UA toilet folding seat mirror, grab rails and dispensers	1	no	1,500.00	1,500
357	UA toilet baby change, mirror, grab rails and dispensers	1	no	1,800.00	1,800
358	Hand dryers	4	no	500.00	2,000
359	Fire extinguishers and blankets		item		750
360	Signage		PS		2,000
					49,550
SE - Special Equipment					
361	Kitchen equipment (oven, griddle and fridges)		item		10,000
362	Loose furniture and equipment		note		excluded
					10,000
HY - Hydraulic Services					
363	<i>Note - as per CHD report</i>				
364	Fixtures and tapware		item		70,000
365	Sanitary plumbing		item		5,000
366	Hot and cold water services		item		23,500
367	Mechanical drains		item		1,500
					100,000
ME - Mechanical Services					
368	Mechanical Services (as per SMW&C report)		item		58,000
					58,000
EL - Electrical Services					
369	Lighting, power and LV services (as per Focus Consulting report)		item		70,000
					70,000
			Total		860,000
EXTERNAL WORKS AND SERVICES					
Demolition					
370	Demolition of existing toilet block and make good		note		excluded
Site Preparation					
371	Site clearing, topsoil removal and pad preparation	800	m2	10.00	8,000

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
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Item	Description	Quantity	Unit	Rate	Total
SYO - WITHOUT COVERED SPECTATOR (Continued)					
372	EO for fill (raised pad level +1000)	800	m2	30.00	24,000
373	Rock excavation, dewatering, removal of bad ground		note		excluded
374	Retaining walls		note		excluded
					32,000
Roads, Footpaths & Paved Areas					
375	Modifications to existing car park - disabled parking bays		item		5,000
376	Exposed aggregate concrete paving - around building	200	m2	110.00	22,000
377	Pathway from existing carpark to new changerooms	50	m	100.00	5,000
378	Form ramps and steps		note		excluded
					32,000
Outbuildings					
379	Bin store enclosure		item		15,000
					15,000
Landscaping & Improvements					
380	Soft landscaping and reticulation - around building		note		excluded
381	External signage / wayfinding		item		5,000
					5,000
External Hydraulic Services					
382	<i>Note - as per CHD report</i>				
383	Stormwater drainage from roof area (soakwells)		item		11,000
384	External hydraulic services - from existing services		item		19,000
385	Grease trap - kitchen		item		15,000
386	External fire service - from boundary		note		excluded
387	WCWA headworks charges		note		excluded
					45,000
External Electrical Services					
388	<i>Note - based on Focus Consulting report (standalone power supply)</i>				
389	New SMSB		item		50,000
390	External site services		item		60,000
391	Western Power headworks (power upgrade)		item		39,000
					149,000
PR - Preliminaries					
392	Allowance for builders preliminaries costs (external works and services)		item		32,000
			Total		310,000
	TOTAL CONSTRUCTION COST (excl GST)				1,170,000
SYO - WITHOUT COVERED SPECTATOR					1,170,000

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
SYO REDUCED FOOTPRINT					
PR - Preliminaries					
393	Allowance for builders preliminaries costs		item		95,000
394	FECA	250	m2		
395	UCA	155	m2		
SB - Substructure					
396	100 thick ground slab and thickenings	260	m2	75.00	19,500
397	Allowance for internal slab thickenings	260	m2	15.00	3,900
398	Footings - building	260	m2	25.00	6,500
399	Footings - verandahs	155	m2	20.00	3,100
400	Termite treatment		item		3,600
401	Paving - verandah		note	refer ext works	
					36,600
CL - Columns					
402	Structural steel columns - building	260	m2	50.00	13,000
403	Structural steel columns - verandahs	155	m2	55.00	8,525
					21,525
RF - Roof					
404	Structural steel roof framing	415	m2	140.00	58,100
405	Roof purlins	415	m2	20.00	8,300
406	Roof sheeting and insulation	415	m2	60.00	24,900
407	Cappings and flashings	185	m	40.00	7,400
408	Fascia - main roof	24	m	150.00	3,600
409	Fascia - verandahs (not PFC)	60	m	80.00	4,800
410	Concealed eaves gutter - main roof	25	m	125.00	3,125
411	Concealed eaves gutters - verandahs	50	m	125.00	6,250
412	Downpipe - verandah	6	no	300.00	1,800
413	Downpipe and spreader - main roof	3	no	300.00	900
414	Roof safety system		item		5,000
415	Verandah and eaves soffit linings		note	refer CF	
					124,175
EW - External Walls					
416	Stud framed and polycarbonate profiled sheet cladding	65	m2	170.00	11,050
417	Stud framed and spandek clad walls	125	m2	170.00	21,250
418	Stud framed and spandek clad walls - nib walls	17	m	200.00	3,400
419	Stud framed and painted feature fc sheet walls	90	m2	250.00	22,500
420	Internal brick leaf (std commons)	190	m2	110.00	20,900
421	Support beams/lintels to openings	25	m	130.00	3,250
422	Anti-graffiti treatment to external walls		note		excluded

Item	Description	Quantity	Unit	Rate	Total
SYO REDUCED FOOTPRINT (Continued)					
WW - Windows					
423	Aluminium windows		note		excluded
424	High level louvre vents		note		excluded
ED - External Doors					
425	Timber entry door, frame hardware and paint	7	no	1,300.00	9,100
426	Timber double entry doors, frame hardware and paint	1	no	2,000.00	2,000
427	Timber double entry doors, frame hardware and paint - SMSB	1	no	1,600.00	1,600
428	Roller shutters - kitchen (not motorised)	2	no	750.00	1,500
429	Roller shutters - stores (not motorised)	2	no	2,000.00	4,000
430	Security grilles		note		excluded
					18,200
NW - Internal Walls					
431	Internal brick walls (std commons)	365	m2	110.00	40,150
					40,150
NS - Internal Screens & Borrowed Lights					
432	Toilet/shower partitions and doors	60	m2	300.00	18,000
433	Caged divider to function store		item		2,000
					20,000
ND - Internal Doors					
434	Timber door, frame, hardware and paint	3	no	1,100.00	3,300
					3,300
WF - Wall Finishes					
435	Wall tiling - showers and toilets (2700h)	175	m2	120.00	21,000
436	Wall tiling - kitchen (2700h)	55	m2	120.00	6,600
437	EO for backing render to brick walls	230	m2	20.00	4,600
438	Waterproofing - showers	10	no	300.00	3,000
439	Paint to brick walls	675	m2	20.00	13,500
					48,700
FF - Floor Finishes					
440	Vinyl flooring (+ coved skirting) - kitchen	25	m2	120.00	3,000
441	Floor tiling - showers, toilets and cleaner	60	m2	140.00	8,400
442	Epoxy flooring - change	90	m2	80.00	7,200
443	Sealed floors - stores	60	m2	20.00	1,200
					19,800
CF - Ceiling Finishes					
444	Suspended ceilings - stores and changerrooms		note		excluded

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Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
SYO REDUCED FOOTPRINT (Continued)					
445	Suspended raking ceilings	95	m2	130.00	12,350
446	External soffit lining - verandahs		note		excluded
					12,350
FT - Fitments					
447	Kitchen stainless steel fitout	1	no	13,500.00	13,500
448	Changeroom bench seating and coat hooks	2	no	10,500.00	21,000
449	Shower/wc seats, mirrors, grab rails and dispensers	2	no	2,000.00	4,000
450	Umpire seating and coat hooks, mirrors and dispensers	1	no	2,100.00	2,100
451	UA toilet folding seat, baby change, mirror, grab rails and dispensers	1	no	2,500.00	2,500
452	Hand dryers	4	no	500.00	2,000
453	Fire extinguishers and blankets		item		750
454	Signage		PS		2,000
					47,850
SE - Special Equipment					
455	Kitchen equipment (oven, griddle and fridges)		item		10,000
456	Loose furniture and equipment		note		excluded
					10,000
HY - Hydraulic Services					
457	<i>Note - as per CHD report (adjusted for reduced footprint)</i>				
458	Fixtures and tapware		item		67,000
459	Sanitary plumbing		item		5,000
460	Hot and cold water services		item		22,500
461	Mechanical drains		item		1,500
					96,000
ME - Mechanical Services					
462	Mechanical Services (as per SMW&C report - adjusted for reduced footprint)		item		54,000
					54,000
EL - Electrical Services					
463	Lighting, power and LV services (as per Focus Consulting report - adjusted for reduced footprint)		item		55,000
					55,000
			Total		<u>785,000</u>
EXTERNAL WORKS AND SERVICES					
Demolition					
464	Demolition of existing toilet block and make good		note		excluded
Site Preparation					
465	Site clearing, topsoil removal and pad preparation	750	m2	10.00	7,500
466	EO for fill (raised pad level +1000)	750	m2	30.00	22,500

Project: 20050 - Shire of Murray	Details: Schematic Design cost estimate - rev 2
Building: SRMO & SYO Changerooms	

Item	Description	Quantity	Unit	Rate	Total
SYO REDUCED FOOTPRINT (Continued)					
467	Rock excavation, dewatering, removal of bad ground		note		excluded
468	Retaining walls		note		excluded
					30,000
Roads, Footpaths & Paved Areas					
469	Modifications to existing car park - disabled parking bays		item		5,000
470	Exposed aggregate concrete paving - around building	180	m2	110.00	19,800
471	Pathway from existing carpark to new changerooms	50	m	100.00	5,000
472	Form ramps and steps		note		excluded
					29,800
Outbuildings					
473	Bin store enclosure		item		15,000
					15,000
Landscaping & Improvements					
474	Soft landscaping and reticulation - around building		note		excluded
475	External signage / wayfinding		item		5,000
					5,000
External Hydraulic Services					
476	<i>Note - as per CHD report</i>				
477	Stormwater drainage from roof area (soakwells)		item		11,000
478	External hydraulic services - from existing services		item		19,000
479	Grease trap - kitchen		item		15,000
480	External fire service - from boundary		note		excluded
481	WCWA headworks charges		note		excluded
					45,000
External Electrical Services					
482	<i>Note - based on Focus Consulting report (standalone power supply)</i>				
483	New SMSB		item		50,000
484	External site services		item		60,000
485	Western Power headworks (power upgrade)		item		39,000
					149,000
PR - Preliminaries					
486	Allowance for builders preliminaries costs (external works and services)		item		31,200
					31,200
			Total		<u>305,000</u>
TOTAL CONSTRUCTION COST (excl GST)					
					<u>1,090,000</u>
SYO REDUCED FOOTPRINT					
					1,090,000



FLOOR PLAN - CONCEPT

1 : 100

- CHANGEROOM AMENITIES
- KIOSK
- STORE



7.2 LIFE CYCLE COST ANALYSIS

A life cycle cost analysis has been prepared for the facility at both sites by Altus Group. The life cycle cost analysis includes analysis for both the full scope and reduced cost option..

SHIRE of MURRAY

Sir Ross McLarty Oval 3 (SRMO3) & South Yunderup Oval (SYO)



PROJECT NO.:	100297
PREPARED BY:	Shron Yap
DOCUMENT TITLE:	Life Cycle Costing
ISSUE DATE:	04-Aug-20

ISSUE REGISTER

Version	Issue Date	Details	Prepared By	Authorise By
			Name (Position)	Name (Position)
0.0	04-Aug-20	Life Cycle Costing	Sharon Yap (State Manager)	Sharon Yap (State Manager)

DISTRIBUTION

Company	Name	Sent Via
Site Architecture Studio	Paul Edwards	Electronic
Site Architecture Studio	Michael Tyler-Hare	Electronic



TABLE OF CONTENT

	<u>Page</u>
1 Life Cycle Costs - Cost Summary	1
2 Cost Element Breakdown & Life Span Expectancy	2
3 Sir Ross McLarty Oval 3 (SRMO3) Expenditure Tabulation	3 - 6
4 South Yunderup Oval Changeroom (S Expenditure Tabulation	7 - 10



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

Life Cycle Costs - Cost Summary

CAT	Sir Ross McLarty Oval 3 (SRMO3)	Y1 - Yr10	Yr 11 - Yr20	Yr21 - Yr30	Yr31 - Yr40	Yr41 - Y50	TOTAL (for 50 Yrs of Each Category)
1	Replace with Design Element & Consultant Input	\$0	\$0	\$0	\$0	\$0	\$0
2	Standard Replacement without Design Element ("Like-for-Like")	\$100,891	\$289,194	\$154,844	\$587,610	\$769,053	\$1,901,592
3	Standard Yearly Maintenance	\$98,822	\$247,507	\$332,870	\$207,285	\$519,164	\$1,405,648
4	Energy and Utilities Cost / Operating Cost	\$998,327	\$1,277,942	\$1,635,874	\$2,094,058	\$2,680,571	\$8,686,772
<i>See CAT 1 & CAT 2 Cost Breakdown as Attached in COST SUMMARY</i>							
	Total	\$1,198,039	\$1,814,644	\$2,123,588	\$2,888,953	\$3,968,787	
	Total Cumulative	\$1,198,039	\$3,012,684	\$5,136,272	\$8,025,225	\$11,994,012	\$11,994,012

CAT	South Yunderup Oval Changeroom (SYO)	Y1 - Yr10	Yr 11 - Yr20	Yr21 - Yr30	Yr31 - Yr40	Yr41 - Y50	TOTAL (for 50 Yrs of Each Category)
1	Replace with Design Element & Consultant Input	\$0	\$0	\$0	\$0	\$0	\$0
2	Standard Replacement without Design Element ("Like-for-Like")	\$96,163	\$264,553	\$146,679	\$543,578	\$713,195	\$1,764,168
3	Standard Yearly Maintenance	\$94,948	\$237,805	\$319,821	\$199,160	\$498,812	\$1,350,545
4	Energy and Utilities Cost / Operating Cost	\$998,327	\$1,277,942	\$1,635,874	\$2,094,058	\$2,680,571	\$8,686,772
<i>See CAT 1 & CAT 2 Cost Breakdown as Attached in OPEX COST SUMMARY</i>							
	Total	\$1,189,438	\$1,780,300	\$2,102,375	\$2,836,795	\$3,892,578	
	Total Cumulative	\$1,189,438	\$2,969,738	\$5,072,113	\$7,908,908	\$11,801,485	\$11,801,485

Notes

- 1 Expected life after repair and replacement is based on ATO Effective Lives Table TR2019/5
- 2 Escalation assumed at 2.5% per annum factored into the expenditure tabulation
- 4 Replacement cycle is assumed at the year after the estimated effective life (e.g first replacement for an item with effective life span of 5 years will be replaced in year 5; the next replacement will be in year 11 and so on)
- 5 Budgets exclude GST



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom 04/08/20

Cost Element Breakdown & Life Span Expectancy

Category	Factor	(See below for factor calculation)
CAT 1 = Replace with Design Element	1.40	
CAT 2 = Standard Replacement w/o Design Element ("Like-for-Like")	1.20	
CAT 3 = Standard Yearly / Periodic Maintenance	1.07	
CAT 4 = Energy and Utilities Cost / Operating Cost	1.00	

Item	Scope of Works	Category	Unit	Qty	Std Unit Rate	Factor	Adjusted Unit Rate	Replacement Cost / Maintenance Cost	Current Life Expectancy (Yr)	Next Repair / Replacement Circle
1	SRMO - WITHOUT COVERED SPECTATOR									
	End-of-Life Maintenance									
1.1	Painting to external doors	CAT2	No	9	\$300	1.20	\$360.00	\$3,240	5	6
1.2	Painting to internal doors	CAT2	No	5	\$250	1.20	\$300.00	\$1,500	5	6
1.3	Painting to brickwall	CAT2	m2	700	\$20	1.20	\$24.00	\$16,800	10	11
1.4	Vinyl flooring	CAT2	m2	30	\$120	1.20	\$144.00	\$4,320	7	8
1.5	Epoxy flooring	CAT2	m2	90	\$80	1.20	\$96.00	\$8,640	7	8
1.6	Wall tiles	CAT2	m2	255	\$120	1.20	\$144.00	\$36,720	15	16
1.7	Floor tiles	CAT2	m2	70	\$140	1.20	\$168.00	\$11,760	15	16
1.8	Kitchen Stainless Steel fitments	CAT2	Sum	1	\$13,500	1.20	\$16,200.00	\$16,200	10	11
1.9	Joinery	CAT2	Sum	1	\$21,000	1.20	\$25,200.00	\$25,200	15	16
1.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	Sum	1	\$10,300	1.20	\$12,360.00	\$12,360	7	8
1.11	Hand Dryer	CAT2	Sum	4	\$500	1.20	\$600.00	\$2,400	5	6
1.12	Fire extinguisher & blankets	CAT2	Sum	1	\$750	1.20	\$900.00	\$900	3	4
1.13	Signage	CAT2	Sum	1	\$2,000	1.20	\$2,400.00	\$2,400	10	11
1.14	Kitchen equipment	CAT2	Sum	1	\$10,000	1.20	\$12,000.00	\$12,000	10	11
1.15	Toilet Sanitaryware & Tapware	CAT2	Sum	1	\$70,000	1.20	\$84,000.00	\$84,000	15	16
	Routine / Periodic Maintenance									
1.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	Sum	1	\$81,630	1.07	\$87,344.10	\$87,344	5	6
2	SRMO REDUCED FOOTPRINT									
	End-of-Life Maintenance									
2.1	Painting to external doors	CAT2	No	9	\$300	1.20	\$360.00	\$3,240	5	6
2.2	Painting to internal doors	CAT2	No	3	\$250	1.20	\$300.00	\$900	5	6
2.3	Painting to brickwall	CAT2	m2	675	\$20	1.20	\$24.00	\$16,200	10	11
2.4	Vinyl flooring	CAT2	m2	25	\$120	1.20	\$144.00	\$3,600	7	8
2.5	Epoxy flooring	CAT2	m2	90	\$80	1.20	\$96.00	\$8,640	7	8
2.6	Wall tiles	CAT2	m2	230	\$120	1.20	\$144.00	\$33,120	15	16
2.7	Floor tiles	CAT2	m2	60	\$140	1.20	\$168.00	\$10,080	15	16
2.8	Kitchen Stainless Steel fitments	CAT2	Sum	1	\$13,500	1.20	\$16,200.00	\$16,200	10	11
2.9	Joinery	CAT2	Sum	1	\$21,000	1.20	\$25,200.00	\$25,200	15	16
2.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	Sum	1	\$8,600	1.20	\$10,320.00	\$10,320	7	8
2.11	Hand Dryer	CAT2	No	4	\$500	1.20	\$600.00	\$2,400	5	6
2.12	Fire extinguisher & blankets	CAT2	Sum	1	\$750	1.20	\$900.00	\$900	3	4
2.13	Signage	CAT2	Sum	1	\$2,000	1.20	\$2,400.00	\$2,400	10	11
2.14	Kitchen equipment	CAT2	Sum	1	\$10,000	1.20	\$12,000.00	\$12,000	10	11
2.15	Toilet Sanitaryware & Tapware	CAT2	Sum	1	\$63,500	1.20	\$76,200.00	\$76,200	15	16
	Routine / Periodic Maintenance									
2.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	Sum	1	\$78,430	1.07	\$83,920.10	\$83,920	5	6
3	OPERATING COST									
	Yearly Operating Cost - for each facility									
3.1	Spare parts and consumables	CAT4	Yearly	1	\$250	1.00	\$250.00	\$250	1	1
3.2	Routine maintenance	CAT4	Yearly	1	Incl. in item 16	1.00	\$0.00	\$0	0	0
3.3	Major programmed maintenance	CAT4	Yearly	1	\$300	1.00	\$300.00	\$300	1	1
3.4	Unscheduled maintenance	CAT4	Yearly	1	Incl. in item 16	1.00	\$0.00	\$0	0	0
	Support services - for each facility									
3.5	Administrative overheads	CAT4	Yearly	1	\$1,225	1.00	\$1,225.00	\$1,225	1	1
3.6	Insurance	CAT4	Yearly	1	\$3,100	1.00	\$3,100.00	\$3,100	1	1
3.7	Depreciation and interest Costs	CAT4	Yearly	1	\$75,621	1.00	\$75,621.00	\$75,621	1	1
3.8	Utilities cleaning and fees	CAT4	Yearly	1	\$6,440	1.00	\$6,440.00	\$6,440	1	1

Factor Calculation - To be added to Standard Unit Rate	CAT 1	CAT 2	CAT 3	CAT 4
Design Contingency	5.00%	0.00%	0.00%	\$0
Construction Contingency	5.00%	5.00%	0.00%	\$0
Escalation - Incl. Separately - Expenditure Tabulation	0.00%	0.00%	0.00%	\$0
Locality factor	0.00%	0.00%	0.00%	\$0
Professional Fees	10.00%	0.00%	0.00%	\$0
Removal Cost	5.00%	5.00%	2.00%	\$0
Preliminaries & Margin	15.00%	10.00%	5.00%	\$0
Total	40.00%	20.00%	7.00%	\$0



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

Sir Ross McLarty Oval 3 (SRMO3)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
A	SRMO - WITHOUT COVERED SPECTATOR																		
	End-of-Life Maintenance																		
1.1	Painting to external doors	CAT2	New	3,240	5	6	-	-	-	-	3,666	-	-	-	-	-	4,251	-	-
1.2	Painting to internal doors	CAT2	New	1,500	5	6	-	-	-	-	1,697	-	-	-	-	-	1,968	-	-
1.3	Painting to brickwall	CAT2	New	16,800	10	11	-	-	-	-	-	-	-	-	-	21,505	-	-	-
1.4	Vinyl flooring	CAT2	New	4,320	7	8	-	-	-	-	-	-	5,135	-	-	-	-	-	-
1.5	Epoxy flooring	CAT2	New	8,640	7	8	-	-	-	-	-	-	10,270	-	-	-	-	-	-
1.6	Wall tiles	CAT2	New	36,720	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
1.7	Floor tiles	CAT2	New	11,760	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
1.8	Kitchen Stainless Steel fittings	CAT2	New	16,200	10	11	-	-	-	-	-	-	-	-	-	20,737	-	-	-
1.9	Joinery	CAT2	New	25,200	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	12,360	7	8	-	-	-	-	-	-	14,692	-	-	-	-	-	-
1.11	Hand Dryer	CAT2	New	2,400	5	6	-	-	-	-	2,715	-	-	-	-	-	3,149	-	-
1.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	-	969	-	-	-	1,070	-	-	-	1,181	-	-
1.13	Signage	CAT2	New	2,400	10	11	-	-	-	-	-	-	-	-	-	3,072	-	-	-
1.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	-	-	-	-	-	-	15,361	-	-	-
1.15	Toilet Sanitaryware & Tapware	CAT2	New	84,000	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
	Routine / Periodic Maintenance																		
1.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	87,344	5	6	-	-	-	-	98,822	-	-	-	-	-	114,603	-	-
3	OPERATING COST																		
	Yearly Operating Cost - for each facility																		
3.1	Spare parts and consumables	CAT4	New	250	1	1	256	263	269	276	283	290	297	305	312	320	328	336	345
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	308	315	323	331	339	348	357	366	375	384	394	403	414
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Support services - for each facility																		
3.5	Administrative overheads	CAT4	New	1,225	1	1	1,256	1,287	1,319	1,352	1,386	1,421	1,456	1,493	1,530	1,568	1,607	1,647	1,689
3.6	Insurance	CAT4	New	3,100	1	1	3,178	3,257	3,338	3,422	3,507	3,595	3,685	3,777	3,871	3,968	4,067	4,169	4,273
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	77,512	79,449	81,436	83,471	85,558	87,697	89,890	92,137	94,440	96,801	99,221	101,702	104,244
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	6,601	6,766	6,935	7,109	7,286	7,468	7,655	7,847	8,043	8,244	8,450	8,661	8,878
	TOTAL						89,109	91,337	94,590	95,961	205,260	100,819	134,507	105,923	108,571	171,961	239,220	116,919	119,842
	TOTAL CUMULATIVE						89,109	180,447	275,036	370,997	576,258	677,077	811,584	917,507	1,026,078	1,198,039	1,437,259	1,554,178	1,674,021
	Notes																		
	Escalation assumed at 2.5% per annum factored into the calculation																		
	Budgets exclude GST																		
	SRMO - WITHOUT COVERED SPECTATOR																		
	CAT 1 = Replace with Design Element						-	-	-	-	-	-	-	-	-	-	-	-	-
	CAT 2 = Standard Replacement w/o Design Element						-	-	969	-	8,078	-	31,167	-	-	60,676	10,549	-	-
	CAT 3 = Standard Yearly Maintenance						-	-	-	-	98,822	-	-	-	-	-	114,603	-	-
	CAT 4 = Energy and Utilities Cost / Operating Cost						89,109	91,337	93,621	95,961	98,360	100,819	103,340	105,923	108,571	111,285	114,068	116,919	119,842



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

20/01/17

Sir Ross McLarty Oval 3 (SRMO3)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
A	SRMO - WITHOUT COVERED SPECTATOR																	
	End-of-Life Maintenance																	
1.1	Painting to external doors	CAT2	New	3,240	5	6	-	-	-	4,930	-	-	-	-	-	5,717	-	-
1.2	Painting to internal doors	CAT2	New	1,500	5	6	-	-	-	2,282	-	-	-	-	-	2,647	-	-
1.3	Painting to brickwall	CAT2	New	16,800	10	11	-	-	-	-	-	-	-	28,217	-	-	-	-
1.4	Vinyl flooring	CAT2	New	4,320	7	8	-	6,257	-	-	-	-	-	-	-	7,623	-	-
1.5	Epoxy flooring	CAT2	New	8,640	7	8	-	12,513	-	-	-	-	-	-	-	15,246	-	-
1.6	Wall tiles	CAT2	New	36,720	15	16	-	53,182	-	-	-	-	-	-	-	-	-	-
1.7	Floor tiles	CAT2	New	11,760	15	16	-	17,032	-	-	-	-	-	-	-	-	-	-
1.8	Kitchen Stainless Steel fitments	CAT2	New	16,200	10	11	-	-	-	-	-	-	-	27,209	-	-	-	-
1.9	Joinery	CAT2	New	25,200	15	16	-	36,497	-	-	-	-	-	-	-	-	-	-
1.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	12,360	7	8	-	17,901	-	-	-	-	-	-	-	21,811	-	-
1.11	Hand Dryer	CAT2	New	2,400	5	6	-	-	-	3,652	-	-	-	-	-	4,235	-	-
1.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	1,303	-	-	-	1,439	-	-	-	1,588	-	-
1.13	Signage	CAT2	New	2,400	10	11	-	-	-	-	-	-	-	4,031	-	-	-	-
1.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	-	-	-	-	20,155	-	-	-	-
1.15	Toilet Sanitaryware & Tapware	CAT2	New	84,000	15	16	-	121,657	-	-	-	-	-	-	-	-	-	-
	Routine / Periodic Maintenance																	
1.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	87,344	5	6	-	-	-	132,904	-	-	-	-	-	154,128	-	-
3	OPERATING COST																	
	Yearly Operating Cost - for each facility																	
3.1	Spare parts and consumables	CAT4	New	250	1	1	353	362	371	380	390	400	410	420	430	441	452	463
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	424	434	445	456	468	480	492	504	516	529	543	556
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Support services - for each facility																	
3.5	Administrative overheads	CAT4	New	1,225	1	1	1,731	1,774	1,819	1,864	1,911	1,958	2,007	2,057	2,109	2,162	2,216	2,271
3.6	Insurance	CAT4	New	3,100	1	1	4,380	4,490	4,602	4,717	4,835	4,956	5,080	5,207	5,337	5,470	5,607	5,747
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	106,850	109,522	112,260	115,066	117,943	120,892	123,914	127,012	130,187	133,442	136,778	140,197
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	9,100	9,327	9,560	9,799	10,044	10,295	10,553	10,817	11,087	11,364	11,648	11,939
	TOTAL						122,838	392,251	129,057	276,052	135,590	140,419	142,455	225,628	149,667	366,404	157,243	161,174
	TOTAL CUMULATIVE						1,796,859	2,189,110	2,318,167	2,594,219	2,729,810	2,870,229	3,012,684	3,238,312	3,387,978	3,754,382	3,911,626	4,072,800

Notes

Escalation assumed at 2.5% per annum factored into the calculation
 Budgets exclude GST

SRMO - WITHOUT COVERED SPECTATOR

CAT 1 = Replace with Design Element	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAT 2 = Standard Replacement w/o Design Element	-	266,342	-	10,864	-	1,439	-	79,612	-	58,867	-	-	-	-	-	-	-	-
CAT 3 = Standard Yearly Maintenance	-	-	-	132,904	-	-	-	-	-	154,128	-	-	-	-	-	-	-	-
CAT 4 = Energy and Utilities Cost / Operating Cost	122,838	125,909	129,057	132,283	135,590	138,980	142,455	146,016	149,667	153,408	157,243	161,174						



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

Sir Ross McLarty Oval 3 (SRMO3)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39
A SRMO - WITHOUT COVERED SPECTATOR																				
End-of-Life Maintenance																				
1.1	Painting to external doors	CAT2	New	3,240	5	6	-	-	-	6,630	-	-	-	-	-	7,689	-	-	-	-
1.2	Painting to internal doors	CAT2	New	1,500	5	6	-	-	-	3,070	-	-	-	-	-	3,560	-	-	-	-
1.3	Painting to brickwall	CAT2	New	16,800	10	11	-	-	-	-	-	-	37,023	-	-	-	-	-	-	-
1.4	Vinyl flooring	CAT2	New	4,320	7	8	-	-	-	-	-	9,288	-	-	-	-	-	-	-	11,317
1.5	Epoxy flooring	CAT2	New	8,640	7	8	-	-	-	-	-	18,576	-	-	-	-	-	-	-	22,633
1.6	Wall tiles	CAT2	New	36,720	15	16	-	-	-	-	-	78,948	-	-	-	-	-	-	-	-
1.7	Floor tiles	CAT2	New	11,760	15	16	-	-	-	-	-	25,284	-	-	-	-	-	-	-	-
1.8	Kitchen Stainless Steel fitments	CAT2	New	16,200	10	11	-	-	-	-	-	-	35,701	-	-	-	-	-	-	-
1.9	Joinery	CAT2	New	25,200	15	16	-	-	-	-	-	54,180	-	-	-	-	-	-	-	-
1.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	12,360	7	8	-	-	-	-	-	26,574	-	-	-	-	-	-	-	32,378
1.11	Hand Dryer	CAT2	New	2,400	5	6	-	-	-	4,911	-	-	-	-	-	5,696	-	-	-	-
1.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	1,753	-	-	-	1,935	-	-	-	2,136	-	-	-	2,358
1.13	Signage	CAT2	New	2,400	10	11	-	-	-	-	-	-	5,289	-	-	-	-	-	-	-
1.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	-	-	-	26,445	-	-	-	-	-	-	-
1.15	Toilet Sanitaryware & Tapware	CAT2	New	84,000	15	16	-	-	-	-	-	180,601	-	-	-	-	-	-	-	-
Routine / Periodic Maintenance																				
1.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	87,344	5	6	-	-	-	178,742	-	-	-	-	-	207,285	-	-	-	-
3 OPERATING COST																				
Yearly Operating Cost - for each facility																				
3.1	Spare parts and consumables	CAT4	New	250	1	1	475	487	499	512	524	538	551	565	579	593	608	623	639	655
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	570	584	599	614	629	645	661	678	695	712	730	748	767	786
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support services - for each facility																				
3.5	Administrative overheads	CAT4	New	1,225	1	1	2,328	2,386	2,446	2,507	2,570	2,634	2,700	2,767	2,836	2,907	2,980	3,054	3,131	3,209
3.6	Insurance	CAT4	New	3,100	1	1	5,891	6,038	6,189	6,344	6,502	6,665	6,832	7,002	7,177	7,357	7,541	7,729	7,923	8,121
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	143,702	147,295	150,977	154,751	158,620	162,586	166,650	170,817	175,087	179,464	183,951	188,550	193,263	198,095
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	12,238	12,544	12,857	13,179	13,508	13,846	14,192	14,547	14,911	15,283	15,666	16,057	16,459	16,870
TOTAL							165,204	171,087	173,567	371,259	182,354	582,299	296,044	196,375	201,285	432,683	211,475	216,762	222,181	296,421
TOTAL CUMULATIVE							4,238,004	4,409,091	4,582,658	4,953,918	5,136,272	5,718,571	6,014,615	6,210,990	6,412,275	6,844,958	7,056,433	7,273,195	7,495,376	7,791,796

Notes

Escalation assumed at 2.5% per annum factored into the calculation
 Budgets exclude GST

SRMO - WITHOUT COVERED SPECTATOR

CAT 1 = Replace with Design Element	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAT 2 = Standard Replacement w/o Design Element	-	1,753	-	14,611	-	-	395,386	104,458	-	-	-	-	19,081	-	-	-	-	-	-	68,685
CAT 3 = Standard Yearly Maintenance	-	-	-	178,742	-	-	-	-	-	-	-	-	-	-	-	207,285	-	-	-	-
CAT 4 = Energy and Utilities Cost / Operating Cost	165,204	169,334	173,567	177,906	182,354	186,913	191,586	196,375	201,285	206,317	211,475	216,762	222,181	227,735						



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

Sir Ross McLarty Oval 3 (SRMO3)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Year 46	Year 47	Year 48	Year 49	Year 50
A SRMO - WITHOUT COVERED SPECTATOR																	
End-of-Life Maintenance																	
1.1	Painting to external doors	CAT2	New	3,240	5	6	-	8,917	-	-	-	-	-	10,341	-	-	-
1.2	Painting to internal doors	CAT2	New	1,500	5	6	-	4,128	-	-	-	-	-	4,788	-	-	-
1.3	Painting to brickwall	CAT2	New	16,800	10	11	-	-	-	48,578	-	-	-	-	-	-	-
1.4	Vinyl flooring	CAT2	New	4,320	7	8	-	-	-	-	-	-	-	13,788	-	-	-
1.5	Epoxy flooring	CAT2	New	8,640	7	8	-	-	-	-	-	-	-	27,576	-	-	-
1.6	Wall tiles	CAT2	New	36,720	15	16	-	-	-	-	-	-	-	117,199	-	-	-
1.7	Floor tiles	CAT2	New	11,760	15	16	-	-	-	-	-	-	-	37,534	-	-	-
1.8	Kitchen Stainless Steel fitments	CAT2	New	16,200	10	11	-	-	-	46,843	-	-	-	-	-	-	-
1.9	Joinery	CAT2	New	25,200	15	16	-	-	-	-	-	-	-	80,431	-	-	-
1.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	12,360	7	8	-	-	-	-	-	-	-	39,449	-	-	-
1.11	Hand Dryer	CAT2	New	2,400	5	6	-	6,605	-	-	-	-	-	7,660	-	-	-
1.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	-	-	2,602	-	-	-	2,873	-	-	-
1.13	Signage	CAT2	New	2,400	10	11	-	-	-	6,940	-	-	-	-	-	-	-
1.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	34,698	-	-	-	-	-	-	-
1.15	Toilet Sanitaryware & Tapware	CAT2	New	84,000	15	16	-	-	-	-	-	-	-	268,103	-	-	-
Routine / Periodic Maintenance																	
1.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	87,344	5	6	-	240,388	-	-	-	-	-	278,776	-	-	-
3 OPERATING COST																	
Yearly Operating Cost - for each facility																	
3.1	Spare parts and consumables	CAT4	New	250	1	1	671	688	705	723	741	759	778	798	818	838	859
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	806	826	846	867	889	911	934	958	981	1,006	1,031
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support services - for each facility																	
3.5	Administrative overheads	CAT4	New	1,225	1	1	3,289	3,371	3,456	3,542	3,631	3,721	3,814	3,910	4,008	4,108	4,210
3.6	Insurance	CAT4	New	3,100	1	1	8,324	8,532	8,745	8,964	9,188	9,418	9,653	9,894	10,142	10,395	10,655
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	203,047	208,123	213,326	218,660	224,126	229,729	235,473	241,359	247,393	253,578	259,918
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	17,292	17,724	18,167	18,621	19,087	19,564	20,053	20,555	21,068	21,595	22,135
TOTAL							233,429	499,303	245,246	391,038	257,662	264,103	270,706	1,165,991	284,410	291,520	298,808
TOTAL CUMULATIVE							8,025,225	8,524,528	8,769,774	9,160,811	9,418,473	9,682,576	9,953,282	11,119,273	11,403,683	11,695,204	11,994,012

Notes

Escalation assumed at 2.5% per annum factored into the calculation
 Budgets exclude GST

SRMO - WITHOUT COVERED SPECTATOR

CAT 1 = Replace with Design Element	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAT 2 = Standard Replacement w/o Design Element	-	19,651	-	139,660	-	-	-	-	-	-	-	-	-	609,742	-	-	-
CAT 3 = Standard Yearly Maintenance	-	240,388	-	-	-	-	-	-	-	-	-	-	-	278,776	-	-	-
CAT 4 = Energy and Utilities Cost / Operating Cost	233,429	239,264	245,246	251,377	257,662	264,103	270,706	277,473	284,410	291,520	298,808						



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

South Yunderup Oval Changeroom (SYO)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
2	SYO - REDUCED FOOTPRINT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	End-of-Life Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1	Painting to external doors	CAT2	New	3,240	5	6	-	-	-	-	3,666	-	-	-	-	-	4,251	-	-
2.2	Painting to internal doors	CAT2	New	900	5	6	-	-	-	-	1,018	-	-	-	-	-	1,181	-	-
2.3	Painting to brickwall	CAT2	New	16,200	10	11	-	-	-	-	-	-	-	-	-	20,737	-	-	-
2.4	Vinyl flooring	CAT2	New	3,600	7	8	-	-	-	-	-	-	4,279	-	-	-	-	-	-
2.5	Epoxy flooring	CAT2	New	8,640	7	8	-	-	-	-	-	-	10,270	-	-	-	-	-	-
2.6	Wall tiles	CAT2	New	33,120	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
2.7	Floor tiles	CAT2	New	10,080	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
2.8	Kitchen Stainless Steel fitments	CAT2	New	16,200	10	11	-	-	-	-	-	-	-	-	-	20,737	-	-	-
2.9	Joinery	CAT2	New	25,200	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
2.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	10,320	7	8	-	-	-	-	-	-	12,267	-	-	-	-	-	-
2.11	Hand Dryer	CAT2	New	2,400	5	6	-	-	-	-	2,715	-	-	-	-	-	3,149	-	-
2.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	-	969	-	-	-	1,070	-	-	-	1,181	-	-
2.13	Signage	CAT2	New	2,400	10	11	-	-	-	-	-	-	-	-	-	3,072	-	-	-
2.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	-	-	-	-	-	-	15,361	-	-	-
2.15	Toilet Sanitaryware & Tapware	CAT2	New	76,200	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-
	Routine / Periodic Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	83,920	5	6	-	-	-	-	94,948	-	-	-	-	-	110,110	-	-
3	OPERATING COST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yearly Operating Cost - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.1	Spare parts and consumables	CAT4	New	250	1	1	256	263	269	276	283	290	297	305	312	320	328	336	345
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	308	315	323	331	339	348	357	366	375	384	394	403	414
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Support services - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5	Administrative overheads	CAT4	New	1,225	1	1	1,256	1,287	1,319	1,352	1,386	1,421	1,456	1,493	1,530	1,568	1,607	1,647	1,689
3.6	Insurance	CAT4	New	3,100	1	1	3,178	3,257	3,338	3,422	3,507	3,595	3,685	3,777	3,871	3,968	4,067	4,169	4,273
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	77,512	79,449	81,436	83,471	85,558	87,697	89,890	92,137	94,440	96,801	99,221	101,702	104,244
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	6,601	6,766	6,935	7,109	7,286	7,468	7,655	7,847	8,043	8,244	8,450	8,661	8,878
	TOTAL						89,109	91,337	94,590	95,961	200,707	100,819	131,226	105,923	108,571	171,193	233,940	116,919	119,842
	TOTAL CUMULATIVE						89,109	180,447	275,036	370,997	571,705	672,524	803,750	909,673	1,018,244	1,189,438	1,423,378	1,540,297	1,660,139
	Notes						-	-	-	-	-	-	-	-	-	-	-	-	-
	Escalation assumed at 2.5% per annum factored into the calculation						-	-	-	-	-	-	-	-	-	-	-	-	-
	Budgets exclude GST						-	-	969	-	7,399	-	27,887	-	-	59,908	9,762	-	-
	CAT 1 = Replace with Design Element						-	-	-	-	94,948	-	-	-	-	-	110,110	-	-
	CAT 2 = Standard Replacement w/o Design Element						89,109	91,337	93,621	95,961	98,360	100,819	103,340	105,923	108,571	111,285	114,068	116,919	119,842
	CAT 3 = Standard Yearly Maintenance						-	-	-	-	-	-	-	-	-	-	-	-	-
	CAT4 = Energy and Utilities Cost / Operating Cost						-	-	-	-	-	-	-	-	-	-	-	-	-



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

20/01/17

South Yunderup Oval Changeroom (SYO)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
2	SYO - REDUCED FOOTPRINT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	End-of-Life Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1	Painting to external doors	CAT2	New	3,240	5	6	-	-	-	4,930	-	-	-	-	-	5,717	-	-
2.2	Painting to internal doors	CAT2	New	900	5	6	-	-	-	1,369	-	-	-	-	-	1,588	-	-
2.3	Painting to brickwall	CAT2	New	16,200	10	11	-	-	-	-	-	-	-	27,209	-	-	-	-
2.4	Vinyl flooring	CAT2	New	3,600	7	8	-	5,214	-	-	-	-	-	-	-	6,353	-	-
2.5	Epoxy flooring	CAT2	New	8,640	7	8	-	12,513	-	-	-	-	-	-	-	15,246	-	-
2.6	Wall tiles	CAT2	New	33,120	15	16	-	47,968	-	-	-	-	-	-	-	-	-	-
2.7	Floor tiles	CAT2	New	10,080	15	16	-	14,599	-	-	-	-	-	-	-	-	-	-
2.8	Kitchen Stainless Steel fitments	CAT2	New	16,200	10	11	-	-	-	-	-	-	-	27,209	-	-	-	-
2.9	Joinery	CAT2	New	25,200	15	16	-	36,497	-	-	-	-	-	-	-	-	-	-
2.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	10,320	7	8	-	14,946	-	-	-	-	-	-	-	18,211	-	-
2.11	Hand Dryer	CAT2	New	2,400	5	6	-	-	-	3,652	-	-	-	-	-	4,235	-	-
2.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	1,303	-	-	-	1,439	-	-	-	1,588	-	-
2.13	Signage	CAT2	New	2,400	10	11	-	-	-	-	-	-	-	4,031	-	-	-	-
2.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	-	-	-	-	20,155	-	-	-	-
2.15	Toilet Sanitaryware & Tapware	CAT2	New	76,200	15	16	-	110,360	-	-	-	-	-	-	-	-	-	-
	Routine / Periodic Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	83,920	5	6	-	-	-	127,694	-	-	-	-	-	148,086	-	-
3	OPERATING COST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yearly Operating Cost - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.1	Spare parts and consumables	CAT4	New	250	1	1	353	362	371	380	390	400	410	420	430	441	452	463
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	424	434	445	456	468	480	492	504	516	529	543	556
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Support services - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5	Administrative overheads	CAT4	New	1,225	1	1	1,731	1,774	1,819	1,864	1,911	1,958	2,007	2,057	2,109	2,162	2,216	2,271
3.6	Insurance	CAT4	New	3,100	1	1	4,380	4,490	4,602	4,717	4,835	4,956	5,080	5,207	5,337	5,470	5,607	5,747
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	106,850	109,522	112,260	115,066	117,943	120,892	123,914	127,012	130,187	133,442	136,778	140,197
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	9,100	9,327	9,560	9,799	10,044	10,295	10,553	10,817	11,087	11,364	11,648	11,939
	TOTAL						122,838	369,310	129,057	269,929	135,590	140,419	142,455	224,621	149,667	354,433	157,243	161,174
	TOTAL CUMULATIVE						1,782,977	2,152,288	2,281,345	2,551,274	2,686,864	2,827,283	2,969,738	3,194,359	3,344,025	3,698,458	3,855,701	4,016,876

Notes
 Escalation assumed at 2.5% per annum factored into the calculation
 Budgets exclude GST

CAT 1 = Replace with Design Element	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAT 2 = Standard Replacement w/o Design Element	-	243,401	-	9,951	-	1,439	-	-	78,604	-	52,938	-	-	-	-	-	-	-
CAT 3 = Standard Yearly Maintenance	-	-	-	127,694	-	-	-	-	148,086	-	-	-	-	-	-	-	-	-
CAT 4 = Energy and Utilities Cost / Operating Cost	122,838	125,909	129,057	132,283	135,590	138,980	142,455	146,016	149,667	153,408	157,243	161,174	-	-	-	-	-	-



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

South Yunderup Oval Changeroom (SYO)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39
2	SYO - REDUCED FOOTPRINT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	End-of-Life Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1	Painting to external doors	CAT2	New	3,240	5	6	-	-	-	6,630	-	-	-	-	-	7,689	-	-	-	-
2.2	Painting to internal doors	CAT2	New	900	5	6	-	-	-	1,842	-	-	-	-	-	2,136	-	-	-	-
2.3	Painting to brickwall	CAT2	New	16,200	10	11	-	-	-	-	-	-	35,701	-	-	-	-	-	-	-
2.4	Vinyl flooring	CAT2	New	3,600	7	8	-	-	-	-	-	7,740	-	-	-	-	-	-	-	9,430
2.5	Epoxy flooring	CAT2	New	8,640	7	8	-	-	-	-	-	18,576	-	-	-	-	-	-	-	22,633
2.6	Wall tiles	CAT2	New	33,120	15	16	-	-	-	-	-	71,208	-	-	-	-	-	-	-	-
2.7	Floor tiles	CAT2	New	10,080	15	16	-	-	-	-	-	21,672	-	-	-	-	-	-	-	-
2.8	Kitchen Stainless Steel fitments	CAT2	New	16,200	10	11	-	-	-	-	-	-	35,701	-	-	-	-	-	-	-
2.9	Joinery	CAT2	New	25,200	15	16	-	-	-	-	-	54,180	-	-	-	-	-	-	-	-
2.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	10,320	7	8	-	-	-	-	-	22,188	-	-	-	-	-	-	-	27,034
2.11	Hand Dryer	CAT2	New	2,400	5	6	-	-	-	4,911	-	-	-	-	-	5,696	-	-	-	-
2.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	1,753	-	-	-	1,935	-	-	-	2,136	-	-	-	2,358
2.13	Signage	CAT2	New	2,400	10	11	-	-	-	-	-	-	5,289	-	-	-	-	-	-	-
2.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	-	-	-	26,445	-	-	-	-	-	-	-
2.15	Toilet Sanitaryware & Tapware	CAT2	New	76,200	15	16	-	-	-	-	-	163,831	-	-	-	-	-	-	-	-
	Routine / Periodic Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	83,920	5	6	-	-	-	171,735	-	-	-	-	-	199,160	-	-	-	-
3	OPERATING COST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yearly Operating Cost - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.1	Spare parts and consumables	CAT4	New	250	1	1	475	487	499	512	524	538	551	565	579	593	608	623	639	655
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	570	584	599	614	629	645	661	678	695	712	730	748	767	786
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Support services - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5	Administrative overheads	CAT4	New	1,225	1	1	2,328	2,386	2,446	2,507	2,570	2,634	2,700	2,767	2,836	2,907	2,980	3,054	3,131	3,209
3.6	Insurance	CAT4	New	3,100	1	1	5,891	6,038	6,189	6,344	6,502	6,665	6,832	7,002	7,177	7,357	7,541	7,729	7,923	8,121
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	143,702	147,295	150,977	154,751	158,620	162,586	166,650	170,817	175,087	179,464	183,951	188,550	193,263	198,095
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	12,238	12,544	12,857	13,179	13,508	13,846	14,192	14,547	14,911	15,283	15,666	16,057	16,459	16,870
	TOTAL						165,204	171,087	173,567	363,025	182,354	548,243	294,722	196,375	201,285	423,133	211,475	216,762	222,181	289,191
	TOTAL CUMULATIVE						4,182,080	4,353,167	4,526,734	4,889,759	5,072,113	5,620,356	5,915,078	6,111,453	6,312,738	6,735,871	6,947,346	7,164,108	7,386,288	7,675,479

Notes

Escalation assumed at 2.5% per annum factored into the calculation
 Budgets exclude GST

CAT 1 = Replace with Design Element	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAT 2 = Standard Replacement w/o Design Element	-	1,753	-	13,384	-	-	361,330	103,136	-	-	-	17,657	-	-	-	-	-	-	-	61,455
CAT 3 = Standard Yearly Maintenance	-	-	-	171,735	-	-	-	-	-	-	-	-	-	-	-	199,160	-	-	-	-
CAT 4 = Energy and Utilities Cost / Operating Cost	165,204	169,334	173,567	177,906	182,354	186,913	191,586	196,375	201,285	206,317	211,475	216,762	222,181	227,735						



INDICATIVE LIFE CYCLE COSTING FOR 50 YEARS

Shire of Murray Sir Ross McLarty Oval 3 and South Yunderup Oval Changeroom

04/08/20

South Yunderup Oval Changeroom (SYO)

Expenditure Tabulation

Item	Description	Category	Current Condition	Replacement Cost at Project Completion	No. of Years Until Repair / Replacement	Expected Life After Repair / Replacement	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Year 46	Year 47	Year 48	Year 49	Year 50
2	SYO - REDUCED FOOTPRINT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	End-of-Life Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1	Painting to external doors	CAT2	New	3,240	5	6	-	8,917	-	-	-	-	-	10,341	-	-	-
2.2	Painting to internal doors	CAT2	New	900	5	6	-	2,477	-	-	-	-	-	2,873	-	-	-
2.3	Painting to brickwall	CAT2	New	16,200	10	11	-	-	-	46,843	-	-	-	-	-	-	-
2.4	Vinyl flooring	CAT2	New	3,600	7	8	-	-	-	-	-	-	-	11,490	-	-	-
2.5	Epoxy flooring	CAT2	New	8,640	7	8	-	-	-	-	-	-	-	27,576	-	-	-
2.6	Wall tiles	CAT2	New	33,120	15	16	-	-	-	-	-	-	-	105,709	-	-	-
2.7	Floor tiles	CAT2	New	10,080	15	16	-	-	-	-	-	-	-	32,172	-	-	-
2.8	Kitchen Stainless Steel fittings	CAT2	New	16,200	10	11	-	-	-	46,843	-	-	-	-	-	-	-
2.9	Joinery	CAT2	New	25,200	15	16	-	-	-	-	-	-	-	80,431	-	-	-
2.10	Toilet Fittings, mirror, grabrail and dispenser	CAT2	New	10,320	7	8	-	-	-	-	-	-	-	32,938	-	-	-
2.11	Hand Dryer	CAT2	New	2,400	5	6	-	6,605	-	-	-	-	-	7,660	-	-	-
2.12	Fire extinguisher & blankets	CAT2	New	900	3	4	-	-	-	2,602	-	-	-	2,873	-	-	-
2.13	Signage	CAT2	New	2,400	10	11	-	-	-	6,940	-	-	-	-	-	-	-
2.14	Kitchen equipment	CAT2	New	12,000	10	11	-	-	-	34,698	-	-	-	-	-	-	-
2.15	Toilet Sanitaryware & Tapware	CAT2	New	76,200	15	16	-	-	-	-	-	-	-	243,207	-	-	-
	Routine / Periodic Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.16	Routine Maintenance on general building works (incl. roof, façade, lighting and general services- based on 10% of building cost at every 5 years)	CAT3	New	83,920	5	6	-	230,964	-	-	-	-	-	267,848	-	-	-
3	OPERATING COST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yearly Operating Cost - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.1	Spare parts and consumables	CAT4	New	250	1	1	671	688	705	723	741	759	778	798	818	838	859
3.2	Routine maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Major programmed maintenance	CAT4	New	300	1	1	806	826	846	867	889	911	934	958	981	1,006	1,031
3.4	Unscheduled maintenance	CAT4	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Support services - for each facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5	Administrative overheads	CAT4	New	1,225	1	1	3,289	3,371	3,456	3,542	3,631	3,721	3,814	3,910	4,008	4,108	4,210
3.6	Insurance	CAT4	New	3,100	1	1	8,324	8,532	8,745	8,964	9,188	9,418	9,653	9,894	10,142	10,395	10,655
3.7	Depreciation and interest Costs	CAT4	New	75,621	1	1	203,047	208,123	213,326	218,660	224,126	229,729	235,473	241,359	247,393	253,578	259,918
3.8	Utilities cleaning and fees	CAT4	New	6,440	1	1	17,292	17,724	18,167	18,621	19,087	19,564	20,053	20,555	21,068	21,595	22,135
	TOTAL						233,429	488,228	245,246	389,303	257,662	264,103	270,706	1,102,591	284,410	291,520	298,808
	TOTAL CUMULATIVE						7,908,908	8,397,136	8,642,382	9,031,684	9,289,346	9,553,449	9,824,155	10,926,746	11,211,156	11,502,677	11,801,485

Notes

Escalation assumed at 2.5% per annum factored into the calculation
 Budgets exclude GST

CAT 1 = Replace with Design Element	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAT 2 = Standard Replacement w/o Design Element	-	17,999	-	137,926	-	-	-	-	-	-	-	-	-	557,270	-	-	-
CAT 3 = Standard Yearly Maintenance	-	230,964	-	-	-	-	-	-	-	-	-	-	-	267,848	-	-	-
CAT 4 = Energy and Utilities Cost / Operating Cost	233,429	239,264	245,246	251,377	257,662	264,103	270,706	277,473	284,410	291,520	298,808						

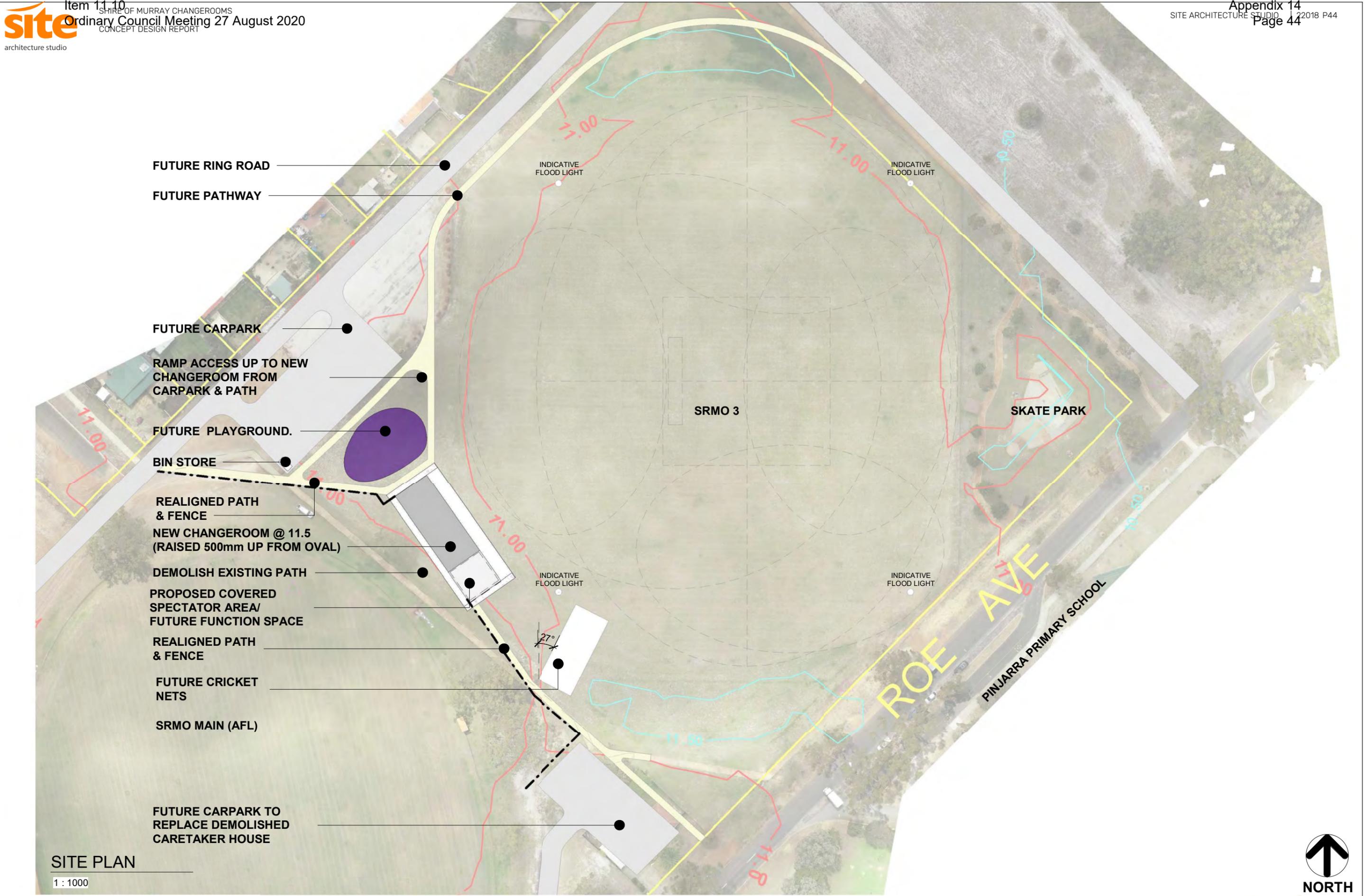
APENDIX ONE ARCHITECTURAL DRAWINGS

SITE ARCHITECTURE STUDIO

- SK-02 SITE PLAN - SRM03
- SK-03 SITE PLAN - SYO
- A1.00 BUILDING SITE PLAN - SRM03
- A1.10 BUILDING SITE PLAN - SYO
- A2.00 CONCEPT FLOOR PLAN
- A4.00 BUILDING ELEVATIONS

- 3D PERSPECTIVE - FUNCTION AREA (COLOUR OPTION 1)
- 3D PERSPECTIVE - CHANGEROOM SIDE (COLOUR OPTION 1)
- 3D PERSPECTIVE - FUNCTION AREA (COLOUR OPTION 2)
- 3D PERSPECTIVE - CHANGEROOM SIDE (COLOUR OPTION 2)

- A2.00 CONCEPT FLOOR PLAN - COST RED OPTION



FUTURE RING ROAD

FUTURE PATHWAY

FUTURE CARPARK

RAMP ACCESS UP TO NEW CHANGEROOM FROM CARPARK & PATH

FUTURE PLAYGROUND.

BIN STORE

REALIGNED PATH & FENCE

NEW CHANGEROOM @ 11.5 (RAISED 500mm UP FROM OVAL)

DEMOLISH EXISTING PATH

PROPOSED COVERED SPECTATOR AREA/ FUTURE FUNCTION SPACE

REALIGNED PATH & FENCE

FUTURE CRICKET NETS

SRMO MAIN (AFL)

FUTURE CARPARK TO REPLACE DEMOLISHED CARETAKER HOUSE

SITE PLAN

1 : 1000

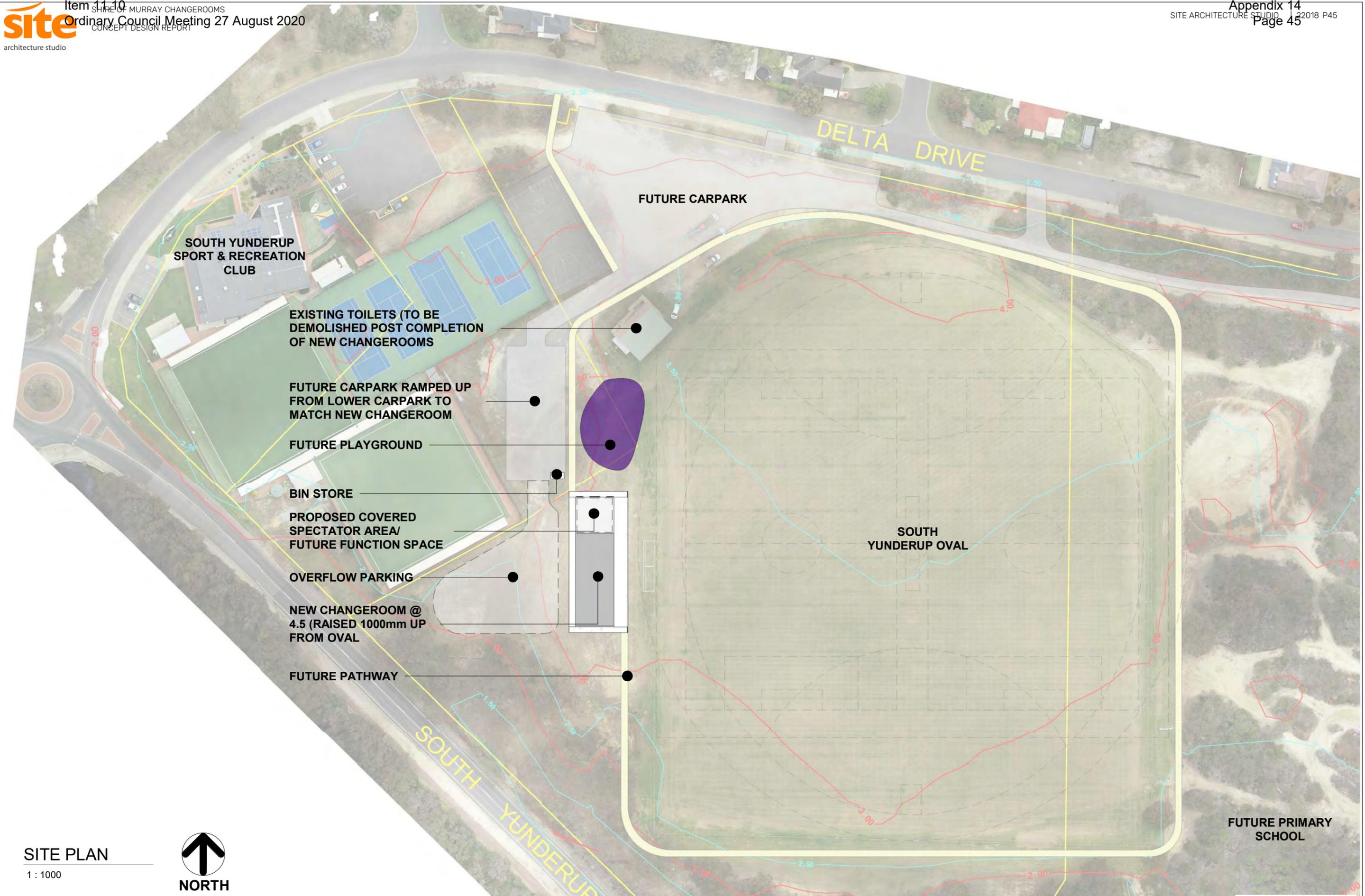
SK02 SITE PLAN - SIR ROSS MCLARTY OVAL 3

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



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SITE PLAN
 1 : 1000



SK03 SITE PLAN - SOUTH YUNDERUP OVAL

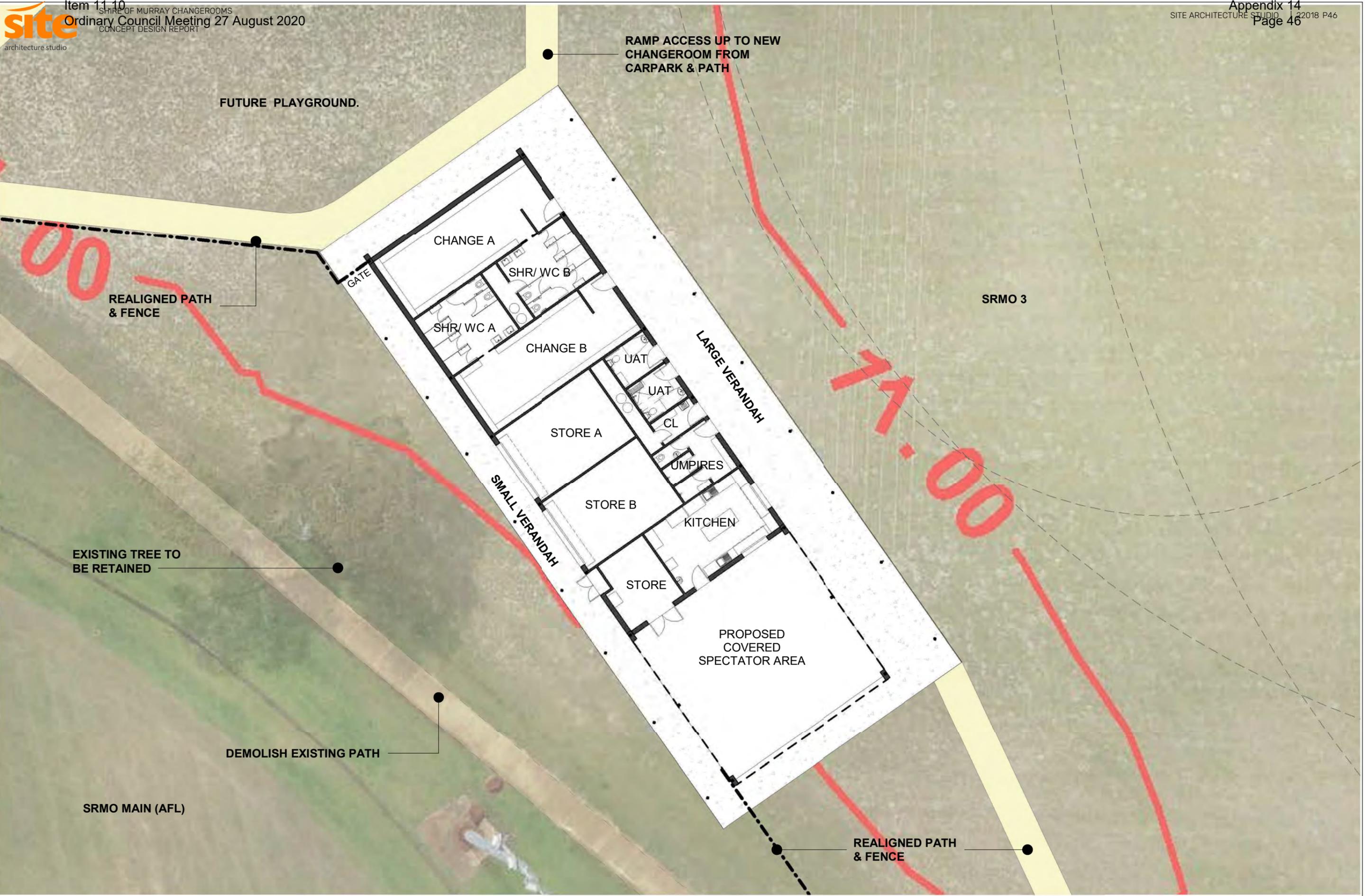
Scale 1 : 1000

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



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A1.00 BUILDING SITE PLAN - SRMO3



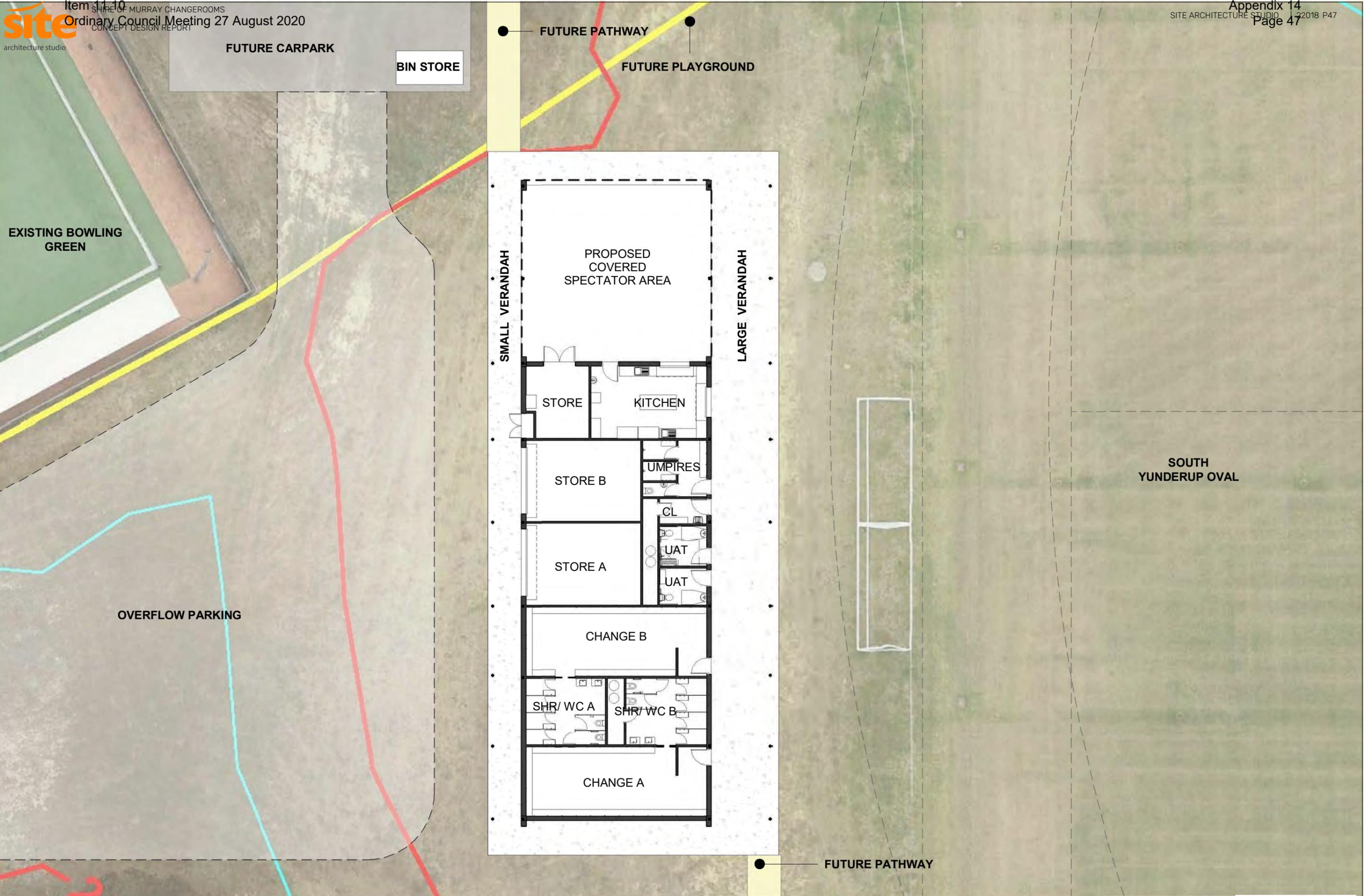
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SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



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A1.10 BUILDING SITE PLAN - SYO



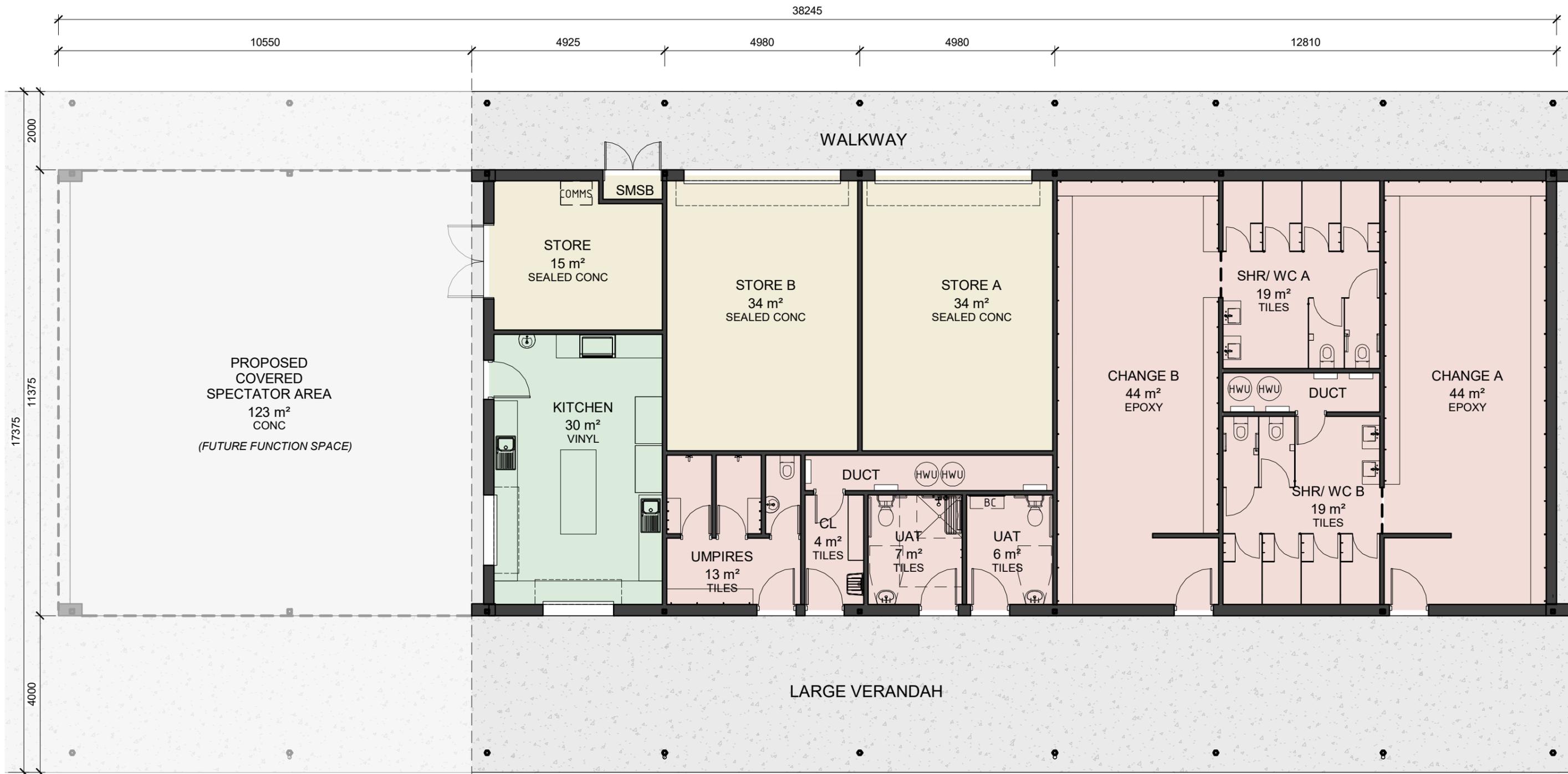
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SRMO & SYO CHANGEROOMS
SHIRE OF MURRAY

Project number
22018
MAY 2020



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FLOOR PLAN - CONCEPT
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- CHANGEROOM AMENITIES
- KIOSK
- STORE

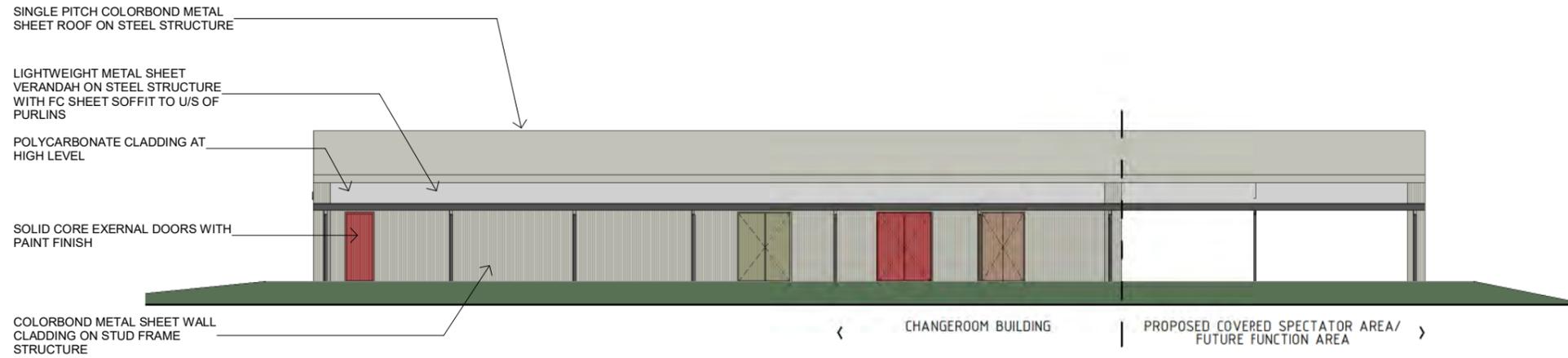
A2.00 CONCEPT FLOOR PLAN

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**SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY**

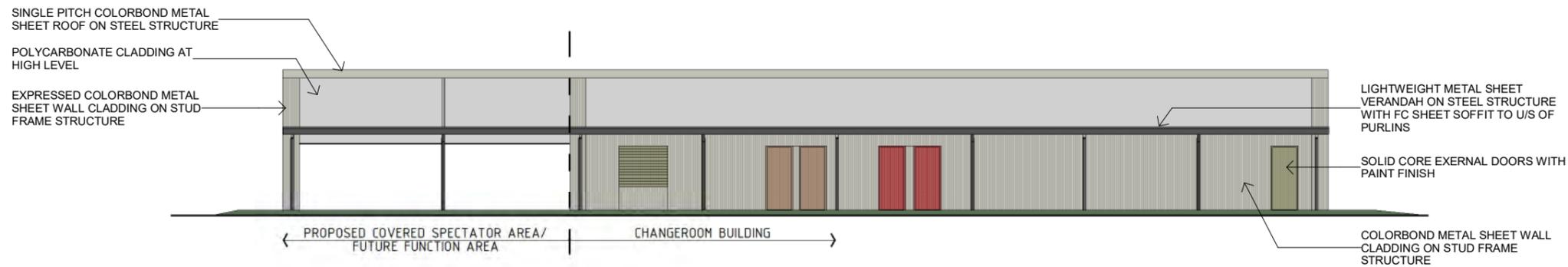
Project number
 22018
 MAY 2020





NORTH ELEVATION

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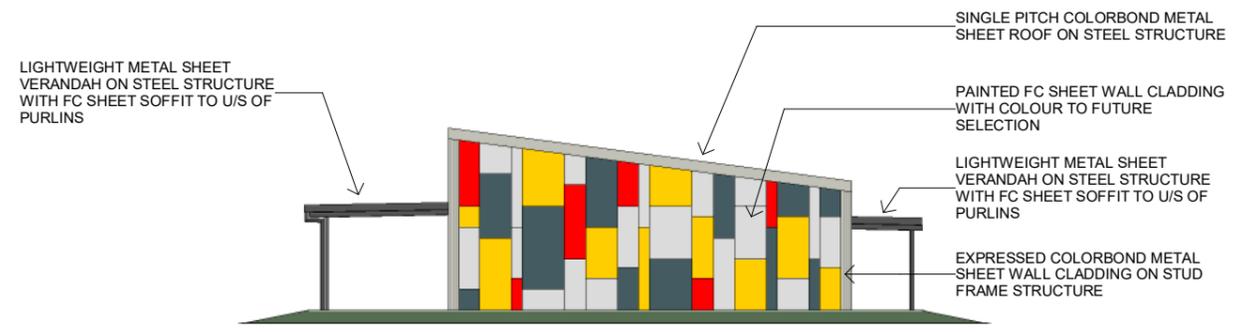
SOUTH ELEVATION

1 : 200



WEST ELEVATION

1 : 200



EAST ELEVATION

1 : 200



3D PERSPECTIVE - LOOKING TOWARDS FUNCTION AREA (COLOUR OPTION 1)



3D PERSPECTIVE - LOOKING TOWARDS CHANGEROOM WALL (COLOUR OPTION 1)



3D PERSPECTIVE - LOOKING TOWARDS FUNCTION AREA (COLOUR OPTION 2)



3D PERSPECTIVE - LOOKING TOWARDS CHANGEROOM WALL (COLOUR OPTION 2)



FLOOR PLAN - CONCEPT

1 : 100

- CHANGEROOM AMENITIES
- KIOSK
- STORE

APPENDIX 2

CONSULTANTS REPORTS

<u>9.01 MECHANICAL</u>	<u>74</u>
<u>9.02 ELECTRICAL</u>	<u>81</u>
<u>9.03 HYDRAULIC</u>	<u>98</u>
<u>9.04 GEOTECHNICAL</u>	<u>111</u>

9.01 MECHANICAL

The following report has been prepared by SMWC. Due to the preliminary stages of the design and project, the report outlines the proposed strategy for the mechanical systems of the building highlighting assumptions made to date and risks to the design.

These items will need to be developed and detailed in the following design & documentation stages.

MECHANICAL SERVICES CONCEPT DESIGN REPORT

for
SRMO & SYO CHANGEROOMS
SHIRE OF MURRAY

PROJECT NO. 3402

DirectorShane Wilson

Date.....03/07/2020

Issue.B



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INDEX

1. INTRODUCTION.....	1
2. DOCUMENTS	1
3. ASSUMPTIONS	1
4. EQUIPMENT SELECTION DESIGN INPUTS.....	1
6. AMENITIES.....	1
7. CONCEPT DESIGN BUDGET.....	1
8. MECHANICAL ROOM DATA SHEET INPUTS	2

Stevens McGann Willcock & Copping

1. INTRODUCTION

The following brief outlines the mechanical scope of work proposed to be installed at the proposed new Changerooms at Sir Ross McLarty Oval and South Yunderup Oval . This document has been prepared at the pre-design stage as requested by the client.

2. DOCUMENTS

The brief is based on the architectural drawings provided on the 29th May 2020 from Site Architecture Studio by email. These drawings are acknowledged as:-

- 22018-SK01 Concept Floor Plan
- 22018-SK02 Site Plan – Sir Ross McLarty Oval 3
- 22018-SK03 Site Plan – South Yunderup Oval

3. ASSUMPTIONS

The brief is based on the following assumptions for the mechanical scope of work:-

- Kitchen will be fitted out as commercial style kitchen, with a canopy hood and purpose kitchen exhaust system required. The canopy hood shall be sized to cater for the 900mm wide electric griddle and two (2) bench mounted chip fryers
- External plant area will be provided for mounting and concealing roof mounted exhaust fans.

4. EQUIPMENT SELECTION DESIGN INPUTS

Ambient Temperatures

Summer 37.0°C dry bulb
 23.0°C wet bulb

Winter 9.0°C dry bulb

6. AMENITIES

This development shall include the following ventilation systems to satisfy AS1668.2-2012:

- Toilets, showers, changerrooms and cleaners store exhaust ventilation will comprise of ducted roof mounted exhaust fan complete with ceiling mounted grilles. Each exhaust system shall be duplicated (duty/standby) complete with run and fault lights to notify the occupants when there is an issue with any of the toilet exhaust fans.
- Ducted kitchen canopy exhaust hood will be ducted to a roof mounted vertically discharged all metal kitchen exhaust fan.

7. CONCEPT DESIGN BUDGET

Based on the scope of work identified above, our concept design estimate is as follows:-

Mechanical Ventilation	\$58,000
SUBTOTAL	\$58,000 + GST

Please note that this estimate does not include allowance for builders work associated with the mechanical services installation.

Stevens McGann Willcock & Copping

8. MECHANICAL ROOM DATA SHEET INPUTS

Room	No. off	Approved Area m ²	Total	Air Conditioning	Ventilation	Budget Estimate
Change room	2	45	90	No	Mechanical Ventilation	\$27,000
Amenities / Shower & Toilets	2	22	44	No	Mechanical Ventilation	\$14,000
Function Store Room	1	15	15	No	No	-
Store Rooms	2	34	68	No	No	-
Universally Accessible Toilet	2	7 & 6	13	No	Mechanical Ventilation	\$3,200
Umpires Room	1	13	13	No	Mechanical Ventilation	\$3,200
Kiosk / Kitchen (heat and serve only)	1	30	30	No	Canopy Exhaust Hood	\$9,000
Future Function	1	120	120	No (2)	No	-
Cleaner	1	4	4	No	Mechanical Ventilation	\$1,600
TOTAL			667			\$58,000

Note:

- 1) The requirement for a commercial kitchen style mechanical canopy hood and exhaust system applies when there is more than 8kW (electrical) or 29MJ/hr (gas) of total connected input energy into cooking equipment.
- 2) Future Function Room is not included in the current scope of works – but we would recommend that the electrical supply calculations include a future electrical load of **30:32A** for a future air conditioning system.

9.02 ELECTRICAL

The following report has been prepared by Focus Consulting. Due to the preliminary stages of the design and project, the report outlines the proposed strategy for the electrical systems of the building & site service requirements highlighting assumptions made to date and risks to the design.

These items will need to be developed and detailed in the following design & documentation stages.



CONCEPT DESIGN REPORT ELECTRICAL SERVICES

SOUTH YUNDERUP OVAL PAVILION
SITE ARCHITECTURE STUDIO



Concept Design Report

Concept Design Report

REVISION REGISTER

Rev	Date	Revision Details	Signatures		
			Author	Reviewed	Approved
A	08.06.20	For Comment	FWA	MH	PRJ
B	19.06.20	Revised to include Options A and B for site services	FWA	MH	PRJ
C	01.07.20	Amended to Client request	FWA	MH	PRJ

TABLE OF CONTENTS

1	INTRODUCTION	5
1.1	General	5
1.2	Purpose	5
1.3	Scope of Report.....	5
1.4	Information Source	5
1.5	Exclusions	5
2	BUILDING CLASSIFICATION AND CONDITIONS	6
2.1	Building Conditions	6
2.2	Maximum Demand	6
3	THE SITE	7
3.1	General	7
3.2	Existing Points of Supply.....	7
3.3	Site Power Capacity	8
4	ELECTRICAL SERVICES	9
4.1	Site Main Switchboard	9
4.2	Building Power Supply	11
4.3	Proposed Distribution Boards.....	12
4.4	Power Consumption Metering	12
4.5	Pavilion Socket Outlets.....	12
4.6	Powered Equipment	12
4.7	Common Area Socket Outlets.....	13
5	COMMUNICATIONS	14
5.1	General.....	14
6	LIGHTING	14
6.1	General.....	14
6.2	Kitchen Lighting	14
6.3	Changeroom and Store Lighting.....	14
6.4	Common Area Lighting	14
6.5	Emergency Lighting	15
6.6	External Lighting.....	15
6.7	Lighting Controls	15
7	SECURITY SYSTEMS	16
7.1	General.....	16
8	ASSISTANCE CALL SYSTEM	16
8.1	General.....	16
9	TELEVISION SYSTEMS	17
9.1	General.....	17
10	PUBLIC ADDRESS SYSTEM	17
10.1	General.....	17
11	ALTERNATIVE ENERGY SYSTEMS	17
11.1	Photovoltaic Systems	17
12	ENERGY EFFICIENCY	18
12.1	General.....	18
12.2	Lighting Controls	18
12.3	Lighting Technology	18
13	ESTIMATED ORDER OF COST	19
13.1	New Pavilion Building	19
13.2	Exclusions	20
13.3	Risks.....	20

Concept Design Report

APPENDIX A – PROPOSED OVAL FLOODLIGHTING LAYOUT 21

Concept Design Report

1 INTRODUCTION

1.1 General

Copyright of this document belongs to Focus Consulting WA, and cannot be used in its original or modified form for any purpose other than that stated.

1.2 Purpose

The purpose of this report is to identify and outline the conceptual design of the electrical and extra low voltage services for the proposed new Pavilion development, and future oval sports lighting designed to achieve 100 lux, located at South Yunderup Oval, Delta Drive, South Yunderup WA.

1.3 Scope of Report

The scope of this Concept Design Report includes the following:

- Existing site conditions
- Site power supply
- Power distribution infrastructure
- Power consumption metering
- Extra low voltage services

This report is intended to be a high-level conceptual report. This report is not intended to provide low level details on all the proposed electrical and extra low voltage services for the development.

1.4 Information Source

The report information is based on the following information:

- Concept Design and survey drawings provided by Site Architecture Studio.
- Electrical site investigation information provided by the Shire of Murray.
- Google maps and Google street view images.
- Nearmap images.
- Site photographs provided by Site Architecture Studio.
- Technical information provided by MDE Electrical.

1.5 Exclusions

Focus Consulting WA as requested by the Client has not visited site and this Report has been prepared as a Desktop study only. A site visit is recommended to ensure that the information provided is thorough, current and accurate.

Concept Design Report

2 BUILDING CLASSIFICATION AND CONDITIONS

2.1 Building Conditions

Focus Consulting WA have assessed the layout, floor area, conditions and constraints of the proposed new Pavilion building. The following have been used in final assessment of required services as outlined within the BCA.

- BCA Class – 9b
- Floor area – approximately 294m², with future additional 120m² function space
- Rise in Storeys - 1

2.2 Maximum Demand

A preliminary assessment of the site maximum demand has been undertaken, based upon Table C3 of AS3000, and with reference to proposed equipment provided by Shire of Murray as follows:

- Airconditioning allowance of 32 Amps three phase for future Function space
- Ventilation to entire building
- Assumed artificial lighting to entire building at 10VA/m²
- 1-off gas burner with electrical oven – 16 Amp single phase
- 1-off bain marie – 15 Amp single phase
- 1-off pie warmer – 15 Amp single phase
- 4-off electric storage hot water units – 30 Amps three phase each

The future additional function space has been included within calculations.

The maximum demand of the building is estimated to be in the order of 112 kVA (156 Amps three phase).

Focus Consulting WA understand that Shire of Murray propose to provide new artificial lighting to South Yunderup Oval adjacent to the proposed new Pavilion building. For lighting to club competition level (100 lux) as recommended within AS2560.2.3 the oval will require a minimum of 20-off 1.4kW LED floodlights. The maximum demand associated with oval floodlighting is in the order of 32kVA (45 Amps three phase).

The total demand therefore associated with the proposed Pavilion and adjacent oval (Option A) is 144 kVA (200 Amps three phase).

The maximum demand associated with the proposed lighting to the bowling green and four (4) tennis courts is in the order of 29 kVA (40 Amps three phase), based upon LED floodlights. Focus Consulting WA understand that these are separate works to the proposed changeroom and oval development, however this additional load will be required to be considered for an amalgamation of site power supply under Option B.

Concept Design Report

3 THE SITE

3.1 General

The site is located in South Yunderup, bounded by Delta Drive to the north and South Yunderup Road to the south.

The site boundary is marked by the orange lines in the Nearmap image below.



The site appears to be constructed across four (4) separate lots as indicated in the Nearmap image, with some facilities such as the bowling green, tennis courts, basketball court and sporting oval spanning over multiple lots.

3.2 Existing Points of Supply

Each lot indicated in the Nearmap image in Section 3.1 has a separate Western Power point of supply.

2 Delta Drive

2 Delta Drive, which contains the South Yunderup Sport and Recreation Club, appears to be provided with power supply via a Western Power pillar, however this infrastructure was not investigated on site by MDE Electrical.

Concept Design Report

There is an existing Western Power pillar near the corner of Delta Drive and South Yunderup Road as shown in Image A below, however it is not confirmed whether this is the point of supply for the Recreation Club building.



Image A: Existing Western Power point of supply

20 Delta Drive

20 Delta Drive, which contains the existing toilet block and oval, appears to be provided with power supply via a Western Power pillar located adjacent to Delta drive on the northern boundary of the site, as shown in Image A.



Image B: Existing Western Power point of supply

There is not an existing main switchboard within 30m of this point of supply, as required under the WA Distribution Connections Manual.

3.3 Site Power Capacity

Focus Consulting WA have reviewed the site power capacity report provided by MDE Electrical.

The electrical infrastructure investigated relates solely to 20 Delta Drive.

The report identifies that the SPD installed to the Oval Site Main Switchboard (SMSB) is rated at 35 Amps, and the incoming consumers mains are 4 x 1-core 16mm², with a maximum current carrying capacity of 86 Amps three phase.

Focus Consulting WA have liaised with Western Power for historical metering data for the site, however the meter installed is old technology, and is not able to provide useful demand information.

Due to the size of the existing SPD, the existing demand is likely to be very low and to not exceed 35 Amps three phase.

Concept Design Report

4 ELECTRICAL SERVICES

4.1 Site Main Switchboard

The existing Site Main Switchboard for the South Yunderup oval is a small domestic style switchboard mounted to the wall of the existing toilet block as indicated in Image C.



Image C: SMSB

MDE Electrical have provided a report identifying the following:

- The service protective device (SPD) installed is rated at 35 Amps.
- The SMSB contains two din rails with space for a total of eighteen (18) single pole miniature circuit breakers.

The size of installed consumer's mains has been identified as 4 x 1-core 16mm² cables, with a maximum current carrying capacity of 86 Amps three phase.

The SMSB will be removed during demolition of the existing building, and a new SMSB will be required to be provided to the Lot. In the short term, the existing building will be supplied from the new SMSB, via the existing consumer's mains cables.

The location and arrangement of the new SMSB requires careful consideration, as the existing South Yunderup facilities are currently developed across multiple lots. In reference to the proposed site master plan, the future carparks and ramps cross multiple lot boundaries, into adjacent lots which already contain sports lighting installations.

Two options have been considered for site power supply distribution.

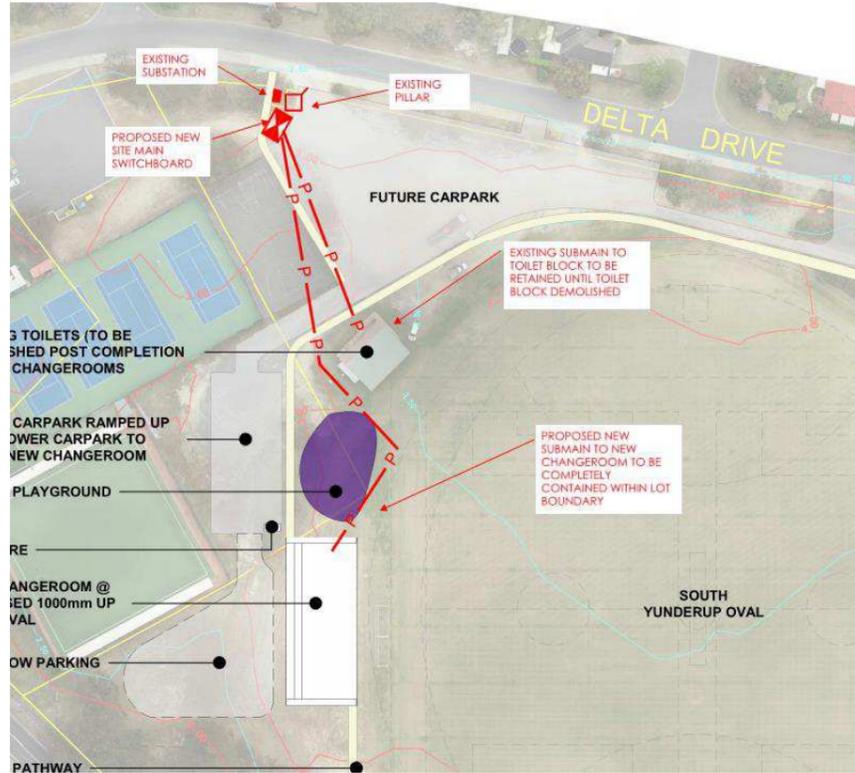
Option A – Standalone Lot Power Supply

If the electrical installation including the proposed new changeroom, existing toilet block and proposed sporting oval are able to be located entirely within the 20 Delta Drive lot, then it will be possible to retain the existing two points of supply to 2 Delta Drive and 20 Delta Drive, and upgrade only the 20 Delta Drive supply to accommodate the proposed developments.

The proposed site services will include a new Site Main Switchboard adjacent to the existing pillar and substation, which will be utilised to re-supply the existing toilet block, via the existing submain cable. A new submain cable in underground conduit will be provided to service the proposed new Changeroom building.

Concept Design Report

Due to the requirement to retain the electrical services completely within the lot boundary, it will not be possible under Option A to safely provide lighting to the proposed future external carparks and pathways, as these will be installed across multiple lot boundaries which will present a safety issue.



Option B – Amalgamated Lot Power Supply

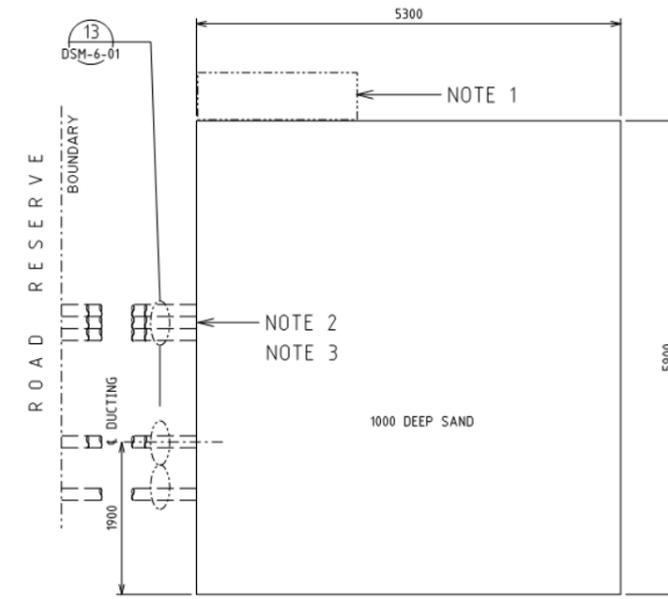
For long term planning and to allow future illumination of external carparks, pathways and expansion of sporting court lighting, Focus Consulting WA recommend as Option B the amalgamation of the power supplies to 2 and 20 Delta Drive, into a single point of supply.

A new Site Main Switchboard will be provided to service all facilities, including the existing South Yunderup Sport and Recreation Club. Western Power will permit one power supply to service multiple lots, where a single entity is operating across all lots.

The new Site Main Switchboard will be required to contain Western Power master metering, sub-meters for separate facilities if required by Shire of Murray, and circuit breakers protecting submain cabling to all new and existing installations.

It is likely that a Western Power substation will be required to be provided contiguous with the site boundary, with indicative footprint as indicated below.

Concept Design Report

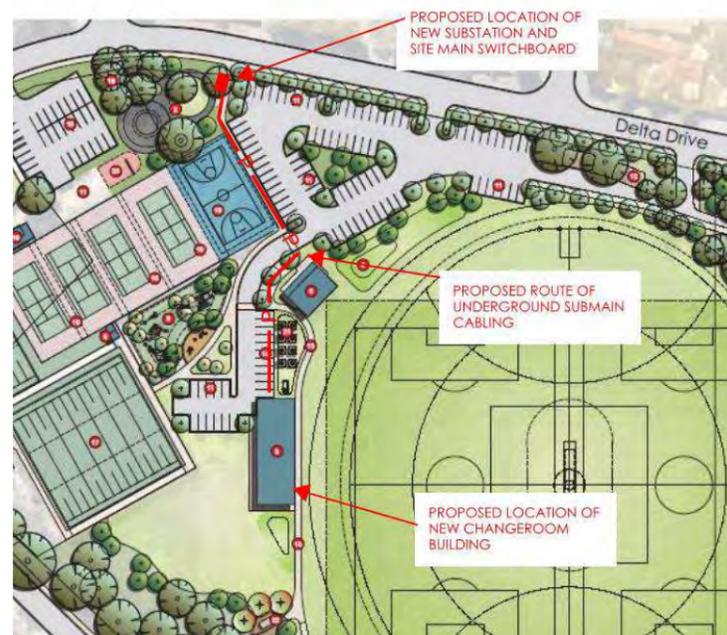


Notes:

- Note 1 – Site Main Switchboard location
- Note 2 – Ducting required if set back from site boundary
- Note 3 – 9-off 150mm dia. ducts

4.2 Building Power Supply

Power supply to the new Club room Building is recommended to come from the new SMSB, via underground submain cabling installed to the indicative route indicated below. The route length is approximately 125m.



Under Option A, this submain cabling will be required to be completely contained within the lot boundary.

Under Option B, additional submain cabling will also be required to reticulate from the SMSB to the existing distribution board located at the South Yunderup Sport and Recreation Club.

4.3 Proposed Distribution Boards

A new floor standing distribution board will be required to be provided within the new Pavilion Building, within the dedicated enclosure shown on the Concept Plan.

The new DB will have nominal dimensions 1200mm wide x 250mm deep x 2000mm high, and will contain the following

- Main switch
- Power metering equipment
- Surge protection equipment
- Separate chassis for lighting, power and mechanical services final circuits
- Circuit breakers protecting final circuits to lighting, power, mechanical and hydraulic services equipment

4.4 Power Consumption Metering

A single power analysis meter will be provided within the new Pavilion DB, to measure maximum demand and total power consumed, in compliance with the BCA Section J8.

4.5 Pavilion Socket Outlets

Socket outlets will be provided throughout the Pavilion Building, to enable functional usage of each space.

4.6 Powered Equipment

Each item of powered equipment will be provided with a dedicated power supply sized to suit, consisting of socket outlet or isolator. This includes but is not limited to hot water units, pumps, air conditioning units, fans and powered kitchen equipment.

4.7 Common Area Socket Outlets

Dedicated socket outlets for cleaning purposes will be provided throughout the Pavilion Building.

Socket outlets will also be provided for building systems including but not limited to security and communications.

External weatherproof socket outlets will be provided for the external covered space.

Concept Design Report

5 COMMUNICATIONS

5.1 General

Focus Consulting WA understand that dedicated communications infrastructure via incoming fibre optic or copper cabling is not required to the new building.

In order to future proof the development Focus Consulting WA recommend the provision of underground communications conduits from Delta Drive, to be installed in a common trench with the new underground submain. The communications conduits will terminate within the store room and be capped off for future use. A draw wire will be provided.

6 LIGHTING

6.1 General

Lighting will be provided to all areas of the Pavilion building, to the requirements of the BCA, including but not limited to Section J6.

Lighting will also provide the following:

- Highlighting of specific architectural building features
- Arranged to enable functional use of each space

Generally lighting will be controlled via wall mounted rocker or electronic timer switch, within motion sensors used where practicable to reduce energy usage in rooms which are not occupied.

Dimming controls will not be provided.

LED luminaires will be utilised throughout to reduce energy usage and ongoing maintenance.

6.2 Kitchen Lighting

Lighting to the kitchen areas will be designed to provide task lighting in accordance with AS 1680.2.1 and as follows:

- Minimum maintained illuminance at the workplane level of 240 lux
- Background maintained illuminance level of 160 lux
- Maximum UGR (unified glare rating) of 19
- Uniformity of 0.7 or higher in task areas

Luminaires for each area will be selected to suit the ceiling design, and generally will be surface or recessed linear LED luminaires with IP44 protection to enable cleaning.

6.3 Changeroom and Store Lighting

Lighting to changerooms and stores will provide minimum maintained illuminance level of 80 lux.

Lighting to changerooms where balls will be used will be impact resistant.

Luminaires will consist of surface impact resistance linear luminaires with LED light source.

6.4 Common Area Lighting

Lighting to common areas including but not limited to corridors, toilets, stores and the like will be designed in compliance with AS 1680.2.1 recommended illuminance level.

Luminaires for each area will be selected to suit the ceiling design, will include recessed or surface linear LED luminaires.

Concept Design Report

6.5 Emergency Lighting

Emergency luminaires and exit signage will be provided in accordance with the requirements of the BCA and AS 2293. Luminaires will be single point type, with test switch located at the Pavilion distribution board.

A computer monitored system will not be provided.

Generally exit signs will be ceiling recessed or surface mounted, with running man diffuser and LED light source.

Emergency luminaires will be ceiling recessed in all areas with suspended ceilings, and surface mounted or incorporated in to luminaires, in areas without suspended ceiling.

Emergency luminaires will be provided to all publicly accessible areas within the Class 9b building.

6.6 External Lighting

External lighting will be designed and selected in order to:

- Enhance building architectural and design features
- Provide safe movement lighting to external walkways

External lighting will be controlled on timed circuits to switch on at dusk and off at a preset time nominated by the client.

Weatherproof LED luminaires will be utilized externally, which are impact resistant.

6.7 Lighting Controls

Lighting controls through the development will generally consist of simple 240V controls, as follows:

- Motion sensors will be provided to all rooms where practicable, to switch lighting off automatically after a preset time
- Generally rocker switches will be provided to turn lighting on
- External lighting will be controlled via PE cell and time clock, to turn on at dusk and off at a nominated time

7 SECURITY SYSTEMS

7.1 General

Focus Consulting WA understand from the Meeting 1 minutes that a dedicated security system is not required for the new Pavilion Building.

In order to provide some deterrence to vandalism and theft, and protection of club assets, Focus Consulting WA recommend the provision of a simple intruder detection system to the proposed new building, which can be armed and disarmed by the various user groups.

Security systems are able to communicate to offsite monitoring centres via 4G connectivity, negating the need for any dedicated communications systems.

8 ASSISTANCE CALL SYSTEM

8.1 General

Assistance call will be provided to the new UAT facilities.

A standalone assistance call system will be provided, with dedicated power supply located within the new building distribution board.

Assistance call push buttons will be provided within the UATs adjacent to the toilet, shower and hand basin.

On activation of a push button, sounder located within the Kitchen will be activated. The sounder will continue to operate until manually reset at the associated button.

9 TELEVISION SYSTEMS

9.1 General

As the Function space where television services would be required is future, Focus Consulting WA recommend that television services are not installed in the initial development, but are provided when the building is extended in future to incorporate the Function area.

10 PUBLIC ADDRESS SYSTEM

10.1 General

Client to confirm whether public address is required. Given the small building footprint, this is considered not required.

11 ALTERNATIVE ENERGY SYSTEMS

11.1 Photovoltaic Systems

Alternative energy systems including photovoltaic and/or wind will not be provided.

Concept Design Report

12 ENERGY EFFICIENCY

12.1 General

Energy efficiency will be a key feature of the electrical services design.

While the requirements of the BCA Section J6 and J8 will be provided, additional measures will be included within the design as follows.

12.2 Lighting Controls

Lighting controls will be designed to assist with minimising energy usage, via:

- Provision of motion sensors to automatically switch off lighting while rooms are not occupied
- Provision of simple intuitive switches, so that lighting circuits which are not required can be switched off or left off
- Provision of time clocks for external lighting, to eliminate usage during daylight hours, or when external lighting is not required

12.3 Lighting Technology

LED luminaires will be utilised throughout. As these are now the commonly utilised light source, there is no applicable cost penalty for use of this technology. In addition, carefully selected LED luminaires will decrease the energy usage of the lighting, and prolong luminaire life, meaning less resources are consumed, and maintenance costs are minimised.

Concept Design Report

13 ESTIMATED ORDER OF COST

13.1 New Pavilion Building

Electrical Services – Option A – Standalone Power Supply		
Item:	Description	Cost
Pavilion:		
1	Western Power headworks estimate. (* See Note below)	\$ 39,000
2	New SMSB.	\$ 50,000
3	Internal lighting, power and extra low voltage services to the new building.	\$ 70,000
4	External site services to the new Pavilion including submain cabling and trenching.	\$ 60,000
Total		\$ 219,000

*Notes:

- The Western Power headworks estimate above is for the required 112kVA to support the proposed changeroom building, and does not include the additional 32kVA for the adjacent oval sports lighting. If the capacity for the sports lighting is included, headworks costs will increase to \$53,000.
- Western Power headworks charges have been estimated based on published Western Power rates. These costs require confirmation by Western Power and in most instances final costs are significantly less than the worst case published rates.
- Site services costs are based upon utilising a submain cable designed to accommodate both the new Pavilion, and the adjacent Sports Oval lighting.

Electrical Services – Option B – Amalgamated Power Supply		
Item:	Description	Cost
Pavilion:		
1	Western Power headworks estimate.	\$ 66,000
2	New SMSB.	\$ 50,000
3	Internal lighting, power and extra low voltage services to the new building.	\$ 70,000
4	External site services to the new Pavilion including submain cabling and trenching.	\$ 60,000
5	External site services to the existing Recreation Club including submain cabling and trenching.	\$ 30,000
Total		\$ 276,000

* Notes:

- Western Power headworks charges have been estimated based on published Western Power rates. These costs require confirmation by Western Power and in most instances final costs are significantly less than the worst case published rates.
- Site services costs are based upon utilising a submain cable designed to accommodate both the new Pavilion, and the adjacent Sports Oval lighting.

Concept Design Report

Concept Design Report

APPENDIX A – PROPOSED OVAL FLOODLIGHTING LAYOUT

13.2 Exclusions

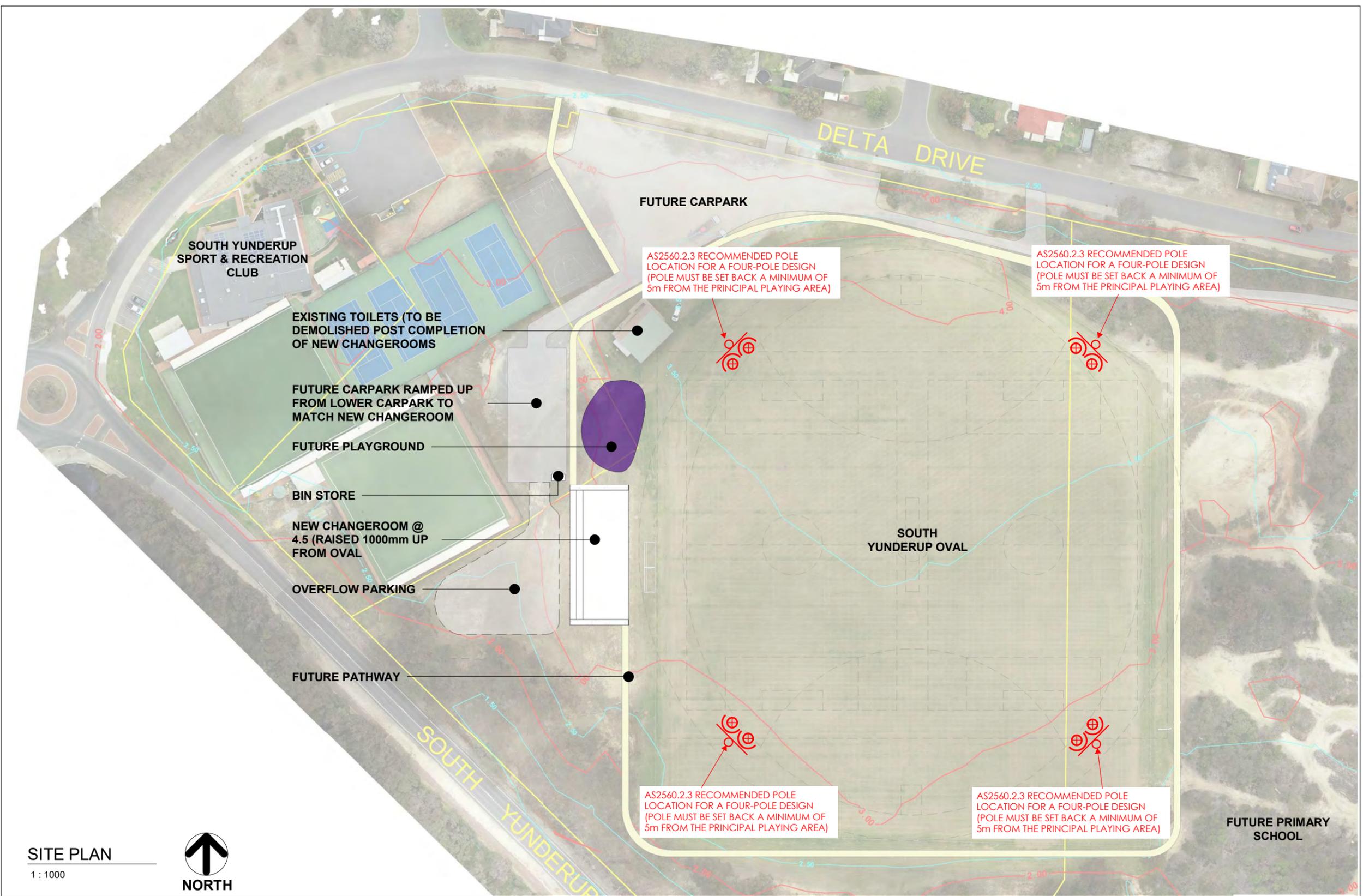
The estimated costs listed above exclude: -

- GST.
- Builder's Margin.
- Builders works.
- Communications systems or services.
- Television services.
- Audio visual services.
- Security services. Costs for a security (intruder detection) system proposed building are in the order of \$10,000 + GST.
- Photovoltaic solar system.
- Lighting to the oval, bowling green or tennis courts (understood to be within Option B costs).
- External lighting to ramps, carparks and pathways.

13.3 Risks

Based on the available information, the following risks require further detail:

- 1. Western Power supply. Application will be required to be submitted for the additional 144kVA required for the new building and Final Western Power works and headworks charges cannot be finalised until Western Power have completed a design.



SITE PLAN
 1 : 1000



SK03 SITE PLAN - SOUTH YUNDERUP OVAL

Scale 1 : 1000

SRMO & SYO CHANGEROOMS
SHIRE OF MURRAY

Project number
 22018
 MAY 2020



29/05/2020 3:00:30 PM



Concept Design Report

REVISION REGISTER

Rev	Date	Revision Details	Signatures		
			Author	Reviewed	Approved
A	08.06.20	For Comment	FWA	MH	PRJ
B	19.06.20	Revised based on Client comment	FWA	MH	PRJ
C	01.07.20	Amended to Client request	FWA	MH	PRJ

CONCEPT DESIGN REPORT
 ELECTRICAL SERVICES

SIR ROSS McLARTY OVAL PAVILION
 SITE ARCHITECTURE STUDIO



Concept Design Report

Concept Design Report

TABLE OF CONTENTS

1	INTRODUCTION	5
1.1	General.....	5
1.2	Purpose	5
1.3	Scope of Report.....	5
1.4	Information Source	5
1.5	Exclusions	5
2	BUILDING CLASSIFICATION AND CONDITIONS	6
2.1	Building Conditions	6
2.2	Maximum Demand	6
3	THE SITE	7
3.1	General.....	7
3.2	Existing Multiple Points of Supply	8
3.3	Site Power Capacity	9
4	ELECTRICAL SERVICES	10
4.1	Zone 2 Site Main Switchboard	10
4.2	Building Power Supply	11
4.3	Multiple Points of Supply Zoning	12
4.4	Proposed Distribution Boards.....	13
4.5	Power Consumption Metering	13
4.6	Pavilion Socket Outlets.....	13
4.7	Powered Equipment	13
4.8	Common Area Socket Outlets.....	13
5	COMMUNICATIONS	14
5.1	General.....	14
6	LIGHTING	14
6.1	General.....	14
6.2	Kitchen Lighting	14
6.3	Changeroom and Store Lighting.....	14
6.4	Common Area Lighting	14
6.5	Emergency Lighting	15
6.6	External Lighting.....	15
6.7	Lighting Controls	15
7	SECURITY SYSTEMS	16
7.1	General.....	16
8	ASSISTANCE CALL SYSTEM	16
8.1	General.....	16
9	TELEVISION SYSTEMS	17
9.1	General.....	17
10	PUBLIC ADDRESS SYSTEM	17
10.1	General.....	17
11	ALTERNATIVE ENERGY SYSTEMS	17
11.1	Photovoltaic Systems	17
12	ENERGY EFFICIENCY	18
12.1	General.....	18
12.2	Lighting Controls	18
12.3	Lighting Technology	18
13	ESTIMATED ORDER OF COST	19
13.1	New Pavilion Building	19
13.2	Exclusions	19
13.3	Risks.....	19

APPENDIX A – PROPOSED OVAL FLOODLIGHTING LAYOUT 20

Concept Design Report

1 INTRODUCTION

1.1 General

Copyright of this document belongs to Focus Consulting WA, and cannot be used in its original or modified form for any purpose other than that stated.

1.2 Purpose

The purpose of this report is to identify and outline the conceptual design of the electrical and extra low voltage services for the proposed new Pavilion development, and future oval sports lighting designed to achieve 100 lux, located at Sir Ross McLarty Oval, Roe Avenue, Pinjarra WA.

1.3 Scope of Report

The scope of this Concept Design Report includes the following:

- Existing site conditions
- Site power supply
- Power distribution infrastructure
- Power consumption metering
- Extra low voltage services

This report is intended to be a high-level conceptual report. This report is not intended to provide low level details on all the proposed electrical and extra low voltage services for the development.

1.4 Information Source

The report information is based on the following information:

- Concept Design and survey drawings provided by Site Architecture Studio.
- Electrical site investigation information provided by the Shire of Murray.
- Google maps and Google street view images.
- Nearmap images.
- Site photographs provided by Site Architecture Studio.
- Technical information provided by MDE Electrical.

1.5 Exclusions

Focus Consulting WA as requested by the Client has not visited site and this Report has been prepared as a Desktop study only. A site visit is recommended to ensure that the information provided is thorough, current and accurate.

Concept Design Report

2 BUILDING CLASSIFICATION AND CONDITIONS

2.1 Building Conditions

Focus Consulting WA have assessed the layout, floor area, conditions and constraints of the proposed new Pavilion building. The following have been used in final assessment of required services as outlined within the BCA.

- BCA Class – 9b
- Floor area – approximately 294m², with future additional 120m² function space
- Rise in Storeys - 1

2.2 Maximum Demand

A preliminary assessment of the site maximum demand has been undertaken, based upon Table C3 of AS3000, and with reference to proposed equipment provided by Shire of Murray as follows:

- Airconditioning allowance of 32 Amps three phase for future Function space
- Ventilation to entire building
- 1-off gas burner with electrical oven – 16 Amp single phase
- 1-off bain marie – 15 Amp single phase
- 1-off pie warmer – 15 Amp single phase
- 4-off electric storage hot water units – 30 Amp three phase each

The future additional function space has been included within calculations.

The maximum demand of the building is estimated to be in the order of 112 kVA (156 Amps three phase).

Focus Consulting WA understand that Shire of Murray propose to provide new artificial lighting to Sir Ross McLarty Oval 3 (SRMO 3) adjacent to the proposed new Pavilion building. For lighting to club competition level (100 lux) as recommended within AS2560.2.3 SMRO will require a minimum of 20-off 1.4kW LED floodlights. The maximum demand associated with oval floodlighting is in the order of 32kVA (45 Amps three phase).

The total demand therefore associated with the proposed Pavilion and adjacent SMRO 3 lighting is 144 kVA (200 Amps three phase).

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3 THE SITE

3.1 General

The site is located in Pinjarra, bounded by Lovegrove St to the south, Dixon Avenue and Roe Avenue to the east, bushland to the north, Longo Avenue to the north west, and existing residential properties to the west.

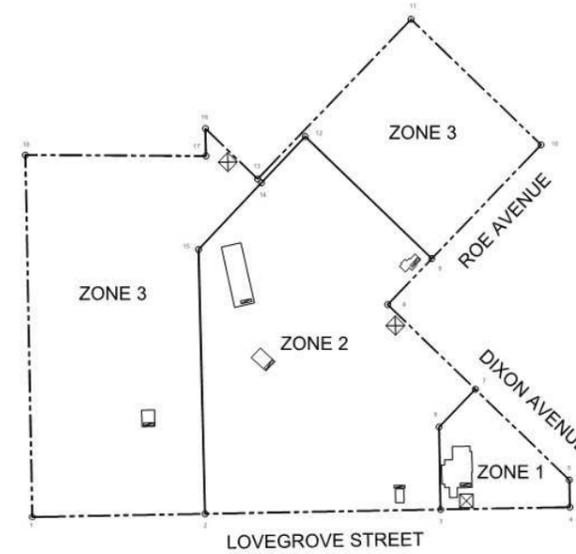
The site boundary is marked by the orange lines in the Nearmap image below.



Concept Design Report

3.2 Existing Multiple Points of Supply

The site has multiple existing points of supply from Western Power as indicated on the zone diagram below.



Zone 1

Zone 1 includes the Pinjarra Bowling and Recreation Club. The point of supply to Zone 1 is located along Lovegrove Street, and appears to be a sole use Western Power substation.

Zone 2

Zone 2 includes the SMRO Main AFL oval, Senior AFL clubrooms, Geoge Beacham changerooms and cricket clubrooms, Pinjarra tennis courts and clubrooms, SMRO junior oval and SRMO cricket oval.

The point of supply to Zone 2 is a Western Power district substation located adjacent to Dixon Avenue as indicated below.



Image A: Zone 2 Point of Supply

Concept Design Report

Zone 3

Zone 3 includes the western end of the site, containing bore pump and old equestrian grounds.

Zone 3 also currently includes SRMO 3 and the skate park, although these appear to have no existing permanent power supply.

The point of supply to Zone 3 is an aerial Western Power cable terminating at a consumer pole adjacent to a ground mounted Site Main Switchboard.



Image B: Zone 3 Point of Supply

3.3 Site Power Capacity

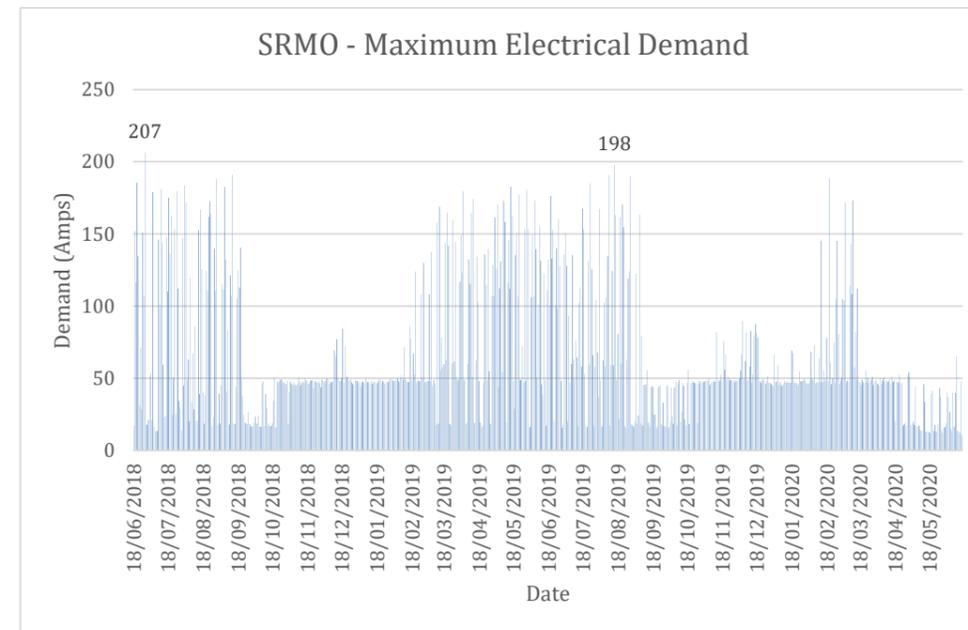
Focus Consulting WA have reviewed the site power capacity report provided by MDE Electrical.

The report focuses solely on the Zone 2 point of supply for Sir Ross McLarty Oval, and does not consider Zones 1 or 3.

The report identifies that the SPD installed to the Zone 2 Site Main Switchboard (SMSB) is rated at 400 Amps maximum, with actual overload setting of 400 Amps. The consumer's mains cabling connecting the SMSB to the Western Power point of supply is rated at a maximum of 426 Amps three phase.

Focus Consulting WA have obtained historical metering data from Western Power for the previous two years. The data is displayed graphically below.

Concept Design Report



The graph indicates that while the site has a normal base load of around 50 Amps, there are intermittent higher peaks of up to 207 Amps three phase, which is expected to be when the facilities including external lighting are utilised to full capacity.

On the basis of the estimated maximum demand of the proposed development, and the historical metering data, the total estimated site maximum demand is therefore 407 Amps three phase.

The remaining spare capacity of 193 Amps three phase is able to accommodate the proposed changeroom building development, without requiring replacement of the existing Site Main Switchboard and consumer's mains.

In order to accommodate both the proposed changeroom and adjacent oval sports lighting in the future, replacement of the SMSB and consumer's mains with new rated at 630 Amps is recommended.

4 ELECTRICAL SERVICES

4.1 Zone 2 Site Main Switchboard

Zone 2 supplies the majority of the central sporting ovals and clubrooms on the Sir Ross McLarty site.

The Zone 2 Site Main Switchboard (SMSB) is located contiguous with the Western Power substation as shown in Image A. The switchboard was installed in 2009 and has estimated 14-19 years remaining design life.

MDE Electrical have provided a report identifying the following:

- The service protective device (SPD) installed is rated at 400 Amps maximum, and has overload setting of 400 Amps.
- The SMSB supplies Chassis 1 via a 250 Amp rated circuit breaker
- The SMSB supplies Chassis 2 via a 160 Amp rated circuit breaker
- The SMSB supplies the main clubroom building via a 125 Amp rated circuit breaker
- The SMSB contains one spare 160 Amp rated circuit breaker for future lighting

Concept Design Report

The consumer's mains cable to the SMSB are 240mm² XLPE with a maximum current carrying capacity of 426 Amps.

From photos provided by MDE Electrical, the SMSB has some evidence of external wearing, however the photographs of the internal circuit breakers appear to show the equipment in good condition.

As the SMSB is rated to a maximum of 400 Amps, and the estimated total site demand including the proposed changeroom is 363 Amps, the existing SMSB is able to accommodate the proposed changeroom.

When sports lighting is installed to the adjacent SMRO 3 oval in future, replacement of the existing SMSB with new rated at 630 Amps will be required.

4.2 Building Power Supply

Focus Consulting WA have considered two options for reticulation of power supply to the proposed changeroom and SRMO 3 oval as follows: -

1. Option 1 – Supply from Zone 3 point of supply
2. Option 2 – Supply from Zone 2 point of supply

Option 1 is not recommended for the following reasons:

- Zone 3 point of supply is a small switchboard fed by overhead supply, designed to accommodate only a bore pump. To increase the capacity of this point of supply would require major Western Power headworks, and complete replacement of the Zone 3 site main switchboard with new. This option would not utilise the existing spare capacity available at the Zone 2 point of supply.
- The proposed changeroom location and adjacent carparks are very close to the existing illuminated oval which is supplied from Zone 2. Western Australia Electrical Requirement (WAER) require all zones to be completely and clearly separate to prevent safety issues. This would be very difficult to achieve a clear and separate segregation of zones between the changeroom and carparks, and adjacent oval.

For the the reasons outline above, Option 2 is recommended. Power supply to the new Club room Building is recommended to come from the new Zone 2 SMSB, via underground submain cabling installed to the indicative route indicated below. The route length is approximately 180m.

Concept Design Report



A single new external switchboard is proposed to be utilised to supply both the new clubrooms, and the new oval lighting.

4.3 Multiple Points of Supply Zoning

As part of the proposed developments, Focus Consulting WA recommend that the existing multiple points of supply zones are re-configured as shown below, to include SMRO 3 and skate park within Zone 2. This will enable the existing substation and infrastructure installed to Zone 2, with its existing spare capacity, to be utilised for the new development. Any existing Western Power or Client pillars or supplies in the Northern section of Zone 3 will be required to be removed and services re-wired from Zone 2 for compliance.

Concept Design Report

Concept Design Report



4.4 Proposed Distribution Boards

A new floor standing distribution board will be required to be provided within the new Pavilion Building, within the dedicated enclosure shown on the Concept Plan.

The new DB will have nominal dimensions 1200mm wide x 250mm deep x 2000mm high, and will contain the following

- Main switch
- Power metering equipment
- Surge protection equipment
- Separate chassis for lighting, power and mechanical services final circuits
- Circuit breakers protecting final circuits to lighting, power, mechanical and hydraulic services equipment

4.5 Power Consumption Metering

A single power analysis meter will be provided within the new Pavilion DB, to measure maximum demand and total power consumed, in compliance with the BCA Section J8.

4.6 Pavilion Socket Outlets

Socket outlets will be provided throughout the Pavilion Building, to enable functional usage of each space.

4.7 Powered Equipment

Each item of powered equipment will be provided with a dedicated power supply sized to suit, consisting of socket outlet or isolator. This includes but is not limited to hot water units, pumps, air conditioning units, fans and powered kitchen equipment.

4.8 Common Area Socket Outlets

Dedicated socket outlets for cleaning purposes will be provided throughout the Pavilion Building.

Socket outlets will also be provided for building systems including but not limited to security and communications.

External weatherproof socket outlets will be provided for the external covered space.

5 COMMUNICATIONS

5.1 General

Focus Consulting WA understand that dedicated communications infrastructure via incoming fibre optic or copper cabling is not required to the new building.

In order to future proof the development Focus Consulting WA recommend the provision of underground communications conduits from Dixon Avenue, to be installed in a common trench with the new underground submain. The communications conduits will terminate within the store room and be capped off for future use. A draw wire will be provided.

6 LIGHTING

6.1 General

Lighting will be provided to all areas of the Pavilion building, to the requirements of the BCA, including but not limited to Section J6.

Lighting will also provide the following:

- Highlighting of specific architectural building features
- Arranged to enable functional use of each space

Generally lighting will be controlled via wall mounted rocker or electronic timer switch, within motion sensors used where practicable to reduce energy usage in rooms which are not occupied.

Dimming controls will not be provided.

LED luminaires will be utilised throughout to reduce energy usage and ongoing maintenance.

6.2 Kitchen Lighting

Lighting to the kitchen areas will be designed to provide task lighting in accordance with AS 1680.2.1 and as follows:

- Minimum maintained illuminance at the workplane level of 240 lux
- Background maintained illuminance level of 160 lux
- Maximum UGR (unified glare rating) of 19
- Uniformity of 0.7 or higher in task areas

Luminaires for each area will be selected to suit the ceiling design, and generally will be surface or recessed linear LED luminaires with IP44 protection to enable cleaning.

6.3 Changeroom and Store Lighting

Lighting to changerooms and stores will provide minimum maintained illuminance level of 80 lux.

Lighting to changerooms where balls will be used will be impact resistant.

Luminaires will consist of surface impact resistance linear luminaires with LED light source.

6.4 Common Area Lighting

Lighting to common areas including but not limited to corridors, toilets, stores and the like will be designed in compliance with AS 1680.2.1 recommended illuminance level.

Luminaires for each area will be selected to suit the ceiling design, will include recessed or surface linear LED luminaires.

Concept Design Report

6.5 Emergency Lighting

Emergency luminaires and exit signage will be provided in accordance with the requirements of the BCA and AS 2293. Luminaires will be single point type, with test switch located at the Pavilion distribution board.

A computer monitored system will not be provided.

Generally exit signs will be ceiling recessed or surface mounted, with running man diffuser and LED light source.

Emergency luminaires will be ceiling recessed in all areas with suspended ceilings, and surface mounted or incorporated in to luminaires, in areas without suspended ceiling.

Emergency luminaires will be provided to all publicly accessible areas within the Class 9b building.

6.6 External Lighting

External lighting will be designed and selected in order to:

- Enhance building architectural and design features
- Provide safe movement lighting to external walkways

External lighting will be controlled on timed circuits to switch on at dusk and off at a preset time nominated by the client.

Weatherproof LED luminaires will be utilized externally, which are impact resistant.

6.7 Lighting Controls

Lighting controls through the development will generally consist of simple 240V controls, as follows:

- Motion sensors will be provided to all rooms where practicable, to switch lighting off automatically after a preset time
- Generally rocker switches will be provided to turn lighting on
- External lighting will be controlled via PE cell and time clock, to turn on at dusk and off at a nominated time

Concept Design Report

7 SECURITY SYSTEMS

7.1 General

Focus Consulting WA understand from the Meeting 1 minutes that a dedicated security system is not required for the new Pavilion Building.

In order to provide some deterrence to vandalism and theft, and protection of club assets, Focus Consulting WA recommend the provision of a simple intruder detection system to the proposed new building, which can be armed and disarmed by the various user groups.

Security systems are able to communicate to offsite monitoring centres via 4G connectivity, negating the need for any dedicated communications systems.

8 ASSISTANCE CALL SYSTEM

8.1 General

Assistance call will be provided to the new UAT facilities.

A standalone assistance call system will be provided, with dedicated power supply located within the new building distribution board.

Assistance call push buttons will be provided within the UATs adjacent to the toilet, shower and hand basin.

On activation of a push button, sounder located within the Kitchen will be activated. The sounder will continue to operate until manually reset at the associated button.

Concept Design Report

9 TELEVISION SYSTEMS

9.1 General

As the Function space where television services would be required is future, Focus Consulting WA recommend that television services are not installed in the initial development, but are provided when the building is extended in future to incorporate the Function area.

10 PUBLIC ADDRESS SYSTEM

10.1 General

Client to confirm whether public address is required. Given the small building footprint, this is considered not required.

11 ALTERNATIVE ENERGY SYSTEMS

11.1 Photovoltaic Systems

Alternative energy systems including photovoltaic and/or wind will not be provided.

Concept Design Report

12 ENERGY EFFICIENCY

12.1 General

Energy efficiency will be a key feature of the electrical services design.

While the requirements of the BCA Section J6 and J8 will be provided, additional measures will be included within the design as follows.

12.2 Lighting Controls

Lighting controls will be designed to assist with minimising energy usage, via:

- Provision of motion sensors to automatically switch off lighting while rooms are not occupied
- Provision of simple intuitive switches, so that lighting circuits which are not required can be switched off or left off
- Provision of time clocks for external lighting, to eliminate usage during daylight hours, or when external lighting is not required

12.3 Lighting Technology

LED luminaires will be utilised throughout. As these are now the commonly utilised light source, there is no applicable cost penalty for use of this technology. In addition, carefully selected LED luminaires will decrease the energy usage of the lighting, and prolong luminaire life, meaning less resources are consumed, and maintenance costs are minimised.

Concept Design Report

Concept Design Report

13 ESTIMATED ORDER OF COST

APPENDIX A – PROPOSED OVAL FLOODLIGHTING LAYOUT

13.1 New Pavilion Building

Electrical Services		
Item:	Description	Cost
Pavilion:		
1	Works to the SMSB to accommodate a new circuit breaker.	\$ 5,000
2	Internal lighting, power and extra low voltage services to the new building.	\$ 70,000
3	External site services including submain cabling and trenching.	\$ 70,000
34	Western Power headworks – capacity increase charge (*See Notes below).	\$ 40,000
Total		\$ 185,000

* Notes:

- Western Power headworks charges are based upon the required 112kVA for the changeroom only, and does not include the additional 32kVA for the oval sports lighting. To include the oval sports lighting the headworks charge will increase to \$47,000.
- Western Power charges are based on published rates, and will be finalised following application to Western Power for design. In most instances final costs are significantly less than the worst case published rates.
- Site services costs are based upon utilising a submain cable designed to accommodate both the new Pavilion, and the adjacent Sports Oval lighting.

13.2 Exclusions

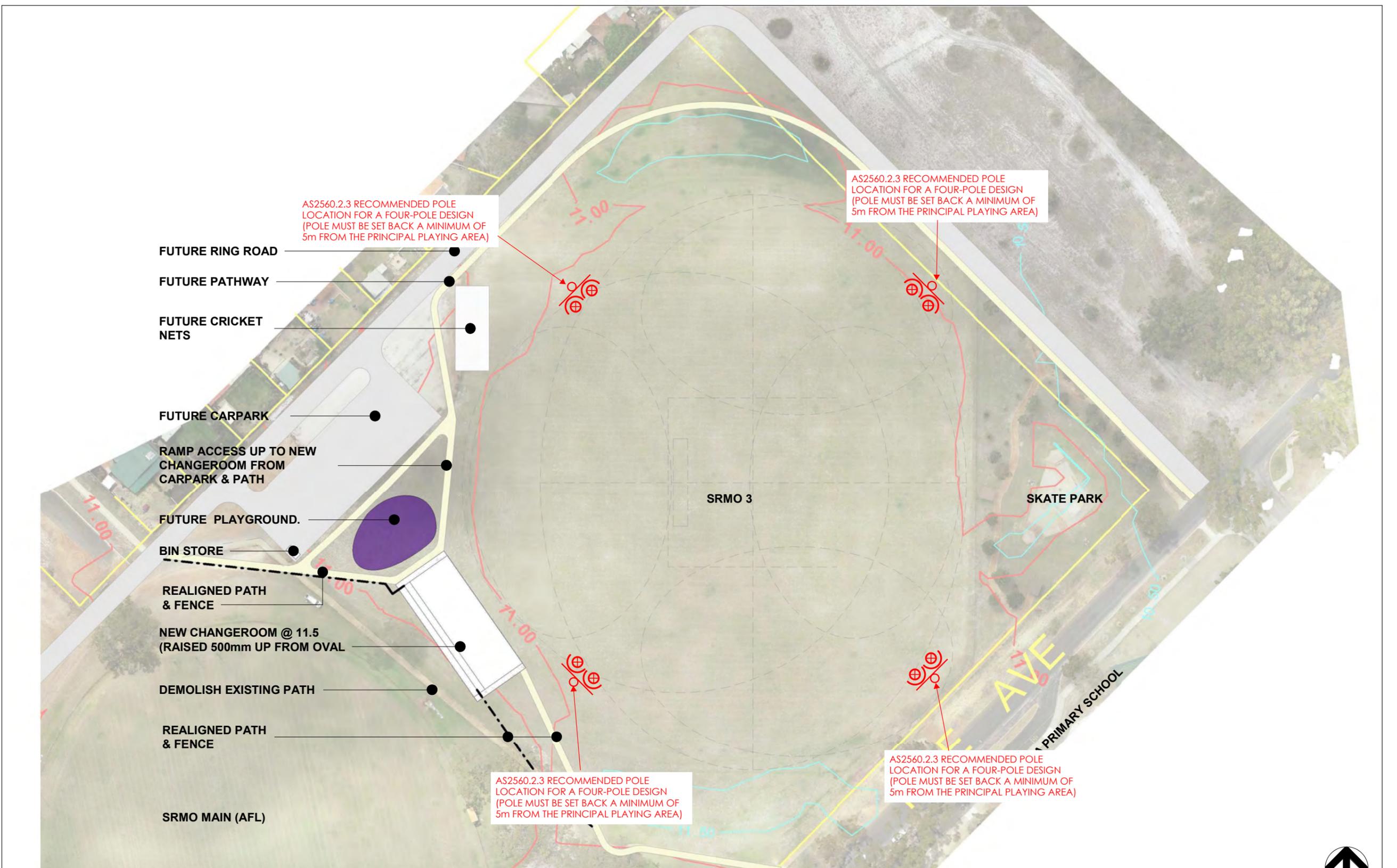
The estimated costs listed above exclude: -

- GST.
- Builder's margin.
- Builders works.
- Communications systems or services.
- Television services.
- Audio visual services.
- Security services. Costs for a security (intruder detection) system to service the proposed building are in the order of \$10,000 + GST.
- Photovoltaic solar system.
- Lighting to the oval SRMO 3 (understood to be future works). (Headworks capacity charges associated with the oval lighting load are included).
- Lighting to external carparks and pathways.
- Replacement of the existing Zone 2 Site Main Switchboard. This will be required in future when oval lighting is installed to SMRO 3.

13.3 Risks

Based on the available information, the following risks require further detailed investigation: -

- 1. Western Power supply. Application will be required to be submitted to Western Power for the additional 144kVA required for the new building. There is a risk that the existing substation cannot support this additional load, and that replacement of the equipment is required. In order to finalise costs, Western Power will be required to complete a design.



SITE PLAN

1 : 1000



SK02 SITE PLAN - SIR ROSS MCLARTY OVAL 3

Scale 1 : 1000

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



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9.05 HYDRAULIC

The following report has been prepared by CHD Engineers. Due to the preliminary stages of the design and project, the report outlines the proposed strategy for the hydraulic, fire services & drainage systems for the building and site highlighting assumptions made to date and risks to the design.

These items will need to be developed and detailed in the following design & documentation stages.



Project: Sir Ross McLarty Oval 3 & South Yunderup Oval
Report Status: Hydraulic Services Concept Report
Date: 4th June 2020
CHD Project No: 20-043

Introduction

This Hydraulic Services Concept Design Report has been prepared at the request of Site Architect Studio for the proposed Sir Ross McLarty Oval 3 (SRMO3) and South Yunderup Oval (SYO) works in Pinjarra and South Yunderup.

This Concept Report has been prepared based on the following information.

Architectural drawings received from Site Architecture Studio on 29/05/20;

- SK01 Concept Floor Plan
- SK02 Site Plan – Sir Ross McLarty Oval 3
- SK03 Site Plan – South Yunderup Oval
- Site visit to conduct flow testing

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Concept Design

The information in this document is at Concept Level only. It shows the general intent of the required works however Detailed Design has not been completed. Detailed Design will follow Concept Design stage and will be combined with the other supportive documents to eventually provide a fully functional and operational facility.

The design intent of this document shall be met in conjunction with the other services documentation and any other relevant information specifying design parameters. The design shall be in accordance with the NCC, BCA, Australian Standards and other statutory requirements whether or not detailed in this document.

The design of the Hydraulic Services for this project is to be undertaken with the following considerations;

- Services to be benchmarked against services previously installed in similar municipal change room facilities
- Provision for low ongoing maintenance costs of proposed plant and equipment

Project Overview

The proposed upgrade involves the following main elements for both sites:

Internal Serviced Areas:

- New Kitchen area
- New Umpires Change Room
- New Change Rooms and Amenities
- New Public Access UAT's
- Internal plumbing duct for hot water plant and concealed cisterns
- New tempered hot water supply to ablutions fixtures
- New tundishes for mechanical condensate wastes



ACN 142 458 302
ABN 51 142 458 302

Site Hydraulic Infrastructure including:

- Connection off existing Water Corporation main for potable water service
- Connection off Water Corporation gravity sewer junction
- Connection to natural gas service is available if required
- New stormwater service via onsite disposal

Design Standards and Criteria

Design Standards

Hydraulic services to comply with the Building Code of Australia 2016 Amendment 1.

Hydraulic services to comply with all current statutory requirements and guidelines including City of Stirling, Water Authority, Department of Fire & Emergency Services and Health Department.

Hydraulic Services to comply with current Australian Standards where applicable and particularly the following:

AS2419.1: Fire Hydrants Installations

AS2441: Installation of Fire Hose Reels

AS3500 : National Plumbing and Drainage Code incorporating:

- Part 1 : 2018 Water Supply
- Part 2 : 2018 Sanitary Plumbing and Drainage.
- Part 3 : 2018 Stormwater Drainage.
- Part 4 : 2018 Heated Water Services.

Design Criteria

Hot Water

- Storage Temperature (domestic use) minimum 60°C
- Supply Temperature (sanitary and disabled fixtures) Maximum 45°C
- Hot water Temp not to exceed 60°C
- Tempered water supply not to exceed 50°C

Cold Water

- Maximum 500kPa at outlet
- Maximum 1 outlet to be fed from 15mm service
- Cold water supply to all fixtures
- Backflow installed at boundary connection

Fire Service

- Buildings Under 500m² and do not require fire hydrants or hose reels

Sewer

- New sewer connections to building on gravity where possible
- Overflow relief at low point on site
- Install of grease arrestor for trade waste to Water Corporation requirements

Gas

- Gas supply not requested by Shire in current scope



ACN 142 458 302
ABN 51 142 458 302

Scope of Work

Sanitary Fixtures and Fittings

Provision for first grade commercial quality sanitary fixtures, fittings and anti-vandal style tapware to the following areas:

- Male and Female Ablutions and shower room
- Kitchen
- ATU's to be AS1428.1 Compliant

Provision of fixtures and tapware conforming to the WELS which identifies the following maximum flow rates.

- Showers @ max 9 l/minute 3 Star WELS
- Hand Basins @ 6 l/minute 6 Star WELS
- Sinks @ 6 l/minute 6 Star WELS
- Toilets @ Dual Flush 4 ½ / 3 litres 4 Star WELS

Current selections nominated as preferred by the City of Murray are;

UAT Toilets - Caroma Care 800 wall faced suites with backrest

All other Toilets – Caroma Slimline Induct Cistern dual flush (with twist type flushing mechanism)

Showerheads & taps – requested to be anti-vandal in public accessible areas. AS1428.1 requires specific tapware and shower hoses. Anti-vandal type not able to be installed in UAT's. Anti-vandal showerheads and time flow taps to be nominated for change room showers.

Mini-stops to be installed to all fixtures

Final nomination and scheduling of sanitary fixtures and fittings yet to be confirmed. Final selections to be confirmed during detailed design.

Sanitary Waste and Drainage and Trade Waste

Provision for the collection of all domestic waste discharges from fixtures and fittings via uPVC. Fixture and branch wastes to extend to all fixtures including:

- Toilets.
- Hand basins.
- Showers.
- Cleaners Sink.

Note: All exposed fixture wastes shall be chrome plated copper.

Provision for all required floor wastes and tundish wastes, maintenance access and inspection openings.

Provision for all required sanitary waste and drainage ventilation services terminating to atmosphere at roof level.

Provision for below ground PVC sanitary drainage services collecting waste discharges from fixture wastes, etc, with gravity connection to the sewer junction incorporating all required maintenance and inspection openings.



ACN 142 458 302
ABN 51 142 458 302

Provision for the collection of all trade waste discharges from fixtures and fittings via HDPE. Trade waste drains to extend from fixtures in kitchen including:

- Sinks

Note: All exposed fixture wastes shall be chrome plated copper.

Provision of Trade Waste Apparatus (grease arrestor) in accordance with Water Corporation requirements prior to discharging to sewer.

SRMO3 has existing gravity sewer running along the north east boundary at approximate depth of 1.75m. At the current change room location it is considered at a suitable depth to apply for a new junction and connect by gravity. Civil works are not required for a new sewer junction as the sewer runs along the site boundary to the rear of houses on Teague St and a standard junction can be requested by the plumbing sub-contractor. Waste from the bin store in location currently proposed will connect to the sewer via gravity connection.

SYO has an existing sewer junction adjacent the South Yunderup Sport and Recreation Club car park at approximate invert or 0.68AHD. Gravity connection is possible if boring is permitted under the tennis courts. If boring is not permitted under the courts a sewer pump station is recommended for the change rooms with rising main diverting around the hard courts to the existing sewer junction. A sewer pump station has been allowed for in the cost estimate. Waste from the bin store in location currently proposed will connect to the sewer pump station via gravity connection.

Cold Water Services

Provision for reticulated cold water supplies to all sanitary fixtures, fittings and tapware as required incorporating all required maintenance isolation valves.

Provision for isolation valves (mini stops) for each individual fixture.

Provision for connection to water main and install of meter and backflow device. Water mains to reticulate to change room building and connect to all fixtures, mechanical equipment, hot water units, hose taps, etc.

Provision for cold water pipework to be installed in 'Type B' copper or PE-X Cross-linked polyethylene pipe and fittings

Provision for external in-ground pipework to be installed in 'Type B' copper or PN16 Polyethylene.

Metering

Provision for sub-metering for domestic water service not currently included in scope. Master meter only.

Hot Water Services

Hot water plant as per the current proposal will be generated by a series of 315L Electric heavy duty Storage units located in the plumbing ducts. This location is suitable to feed hot water to all wet areas due to the central location.

Provision for tempered water supply (45°C-50°C) from new hot water units to the following areas:

- Change room amenities
- Umpires room
- UAT's



ACN 142 458 302
ABN 51 142 458 302

Provision of hot water supply (60°C) from new hot water units to the following areas:

- Kitchen sinks
- Cleaners sink

Provision for hot/tempered water services with connections to all fixtures and tapware and incorporating individual maintenance isolating valves (mini-stops).

Provision for hot/tempered water pipework to be installed in copper minimum class PE-X Cross-linked polyethylene pipe and fittings

Provision for rough-ins for fixtures to be PE-X Cross-linked polyethylene.

Provision for insulation to all reticulated hot/tempered water services throughout.

Provision to connect to install new hot water plant and services to suit new layout

Mechanical Waste and Water

Provision for the collection and disposal of all mechanical air conditioning plant condensate waste via floor drains and tundish wastes, with connection to stormwater disposal system or grated waste sump boxes as required. Provision for future connection recommended to the social space to prevent need to chase walls or expose drains at a later date.

Provision for all required valved cold water spur connections for mechanical air conditioning plant make up as required.

Stormwater Service

Provision for new on site stormwater drainage in accordance with the Shire of Murray's requirements and to AS3500 for the change room building.

SRMO3 will have downpipes to discharge over concrete stormwater sump and drain to soakwells with trafficable lids or trafficable poly drainage cells. The geotech report suggests a permeability rate of 4.7m/day and groundwater at suitable depth and recommends onsite disposal.

SYO is not suitable for onsite disposal as per the geotech report and all stormwater will be directed to discharge to the existing 300mm concrete drain and onsite compensating basin. The change room building will have downpipes discharge over concrete stormwater sump and drain to the comp basin.

Fire Hydrant and Hose Reel Service

N/A – Building floor area under 500m²

Associated Works

Builders Works:

The Contractor will provide the following works for the hydraulic scope of work

- Ceiling access panels for valve access and maintenance
- Access to install all services
- Allow to pay all headworks and application fees to Water Corporation

The Electrical sub-contractor will provide the following power supplies for the hydraulic scope of work

- Power supply to electronic fixtures in positions as nominated



ACN 142 458 302
 ABN 51 142 458 302

- Power supply to boiling water units in positions as nominated
- Power supply hot water units in positions as nominated

The Mechanical sub-contractor will provide the following works for the hydraulic scope of work

- Coordinated location of mechanical tundish points for drain connection
- Final location of evaporative cooler units for drain and water connections (if required)
- Final air intake locations to coordinate plumbing vent locations
- Final location of new heating water plant and gas connection

Concept Stage Hydraulic Services Estimate

Based on the proposed concept master plan attached the following Opinion of Probable Cost will apply;

SRMO3

1. Fixtures and Tapware (supply & install)	\$ 70 000.00
2. Sanitary Plumbing and Sewer	\$ 10 000.00
3. Trade Waste and grease trap	\$ 15,000.00
4. Domestic Cold Water Service	\$ 8 000.00
5. Domestic Hot water service (inlc. HWU's)	\$ 19 000.00
6. Stormwater drainage	\$ 11 200.00
7. Mechanical Drains	\$ 1 500.00

TOTAL \$134,700.00

SYO

1. Fixtures and Tapware (supply & install)	\$ 70 000.00
2. Sanitary Plumbing and Sewer (incl. pump station)	\$ 22 000.00
3. Trade Waste and grease trap	\$ 15,000.00
4. Domestic Cold Water Service	\$ 8 000.00
5. Domestic Hot water service (inlc. HWU's)	\$ 19 000.00
6. Stormwater drainage	\$ 11 200.00
7. Mechanical Drains	\$ 1 500.00

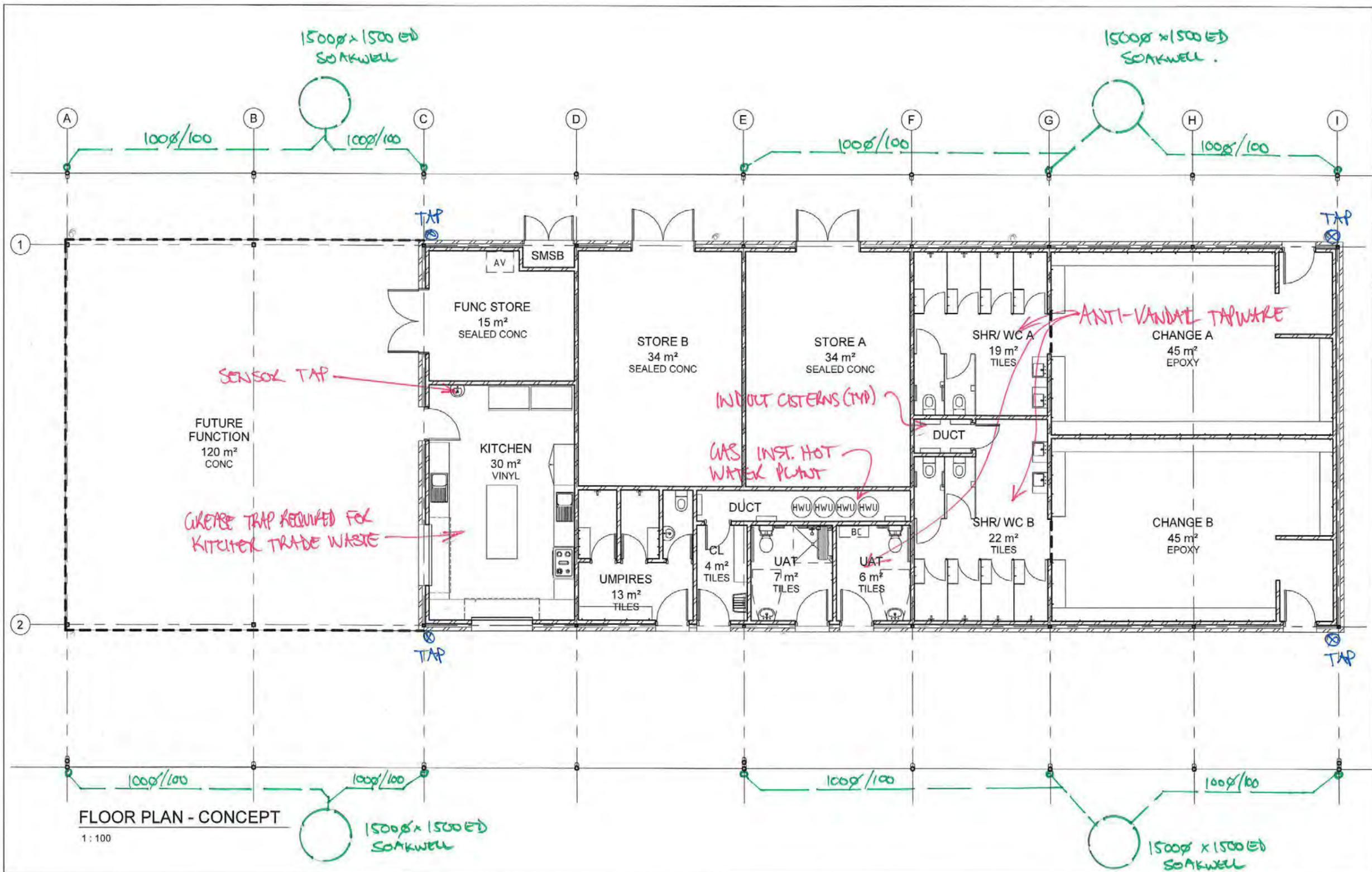
TOTAL \$144,500.00

The Probable Opinion of Cost excludes the following items -

1. Applicable Builder's Work
2. Applicable Government GST
3. Applicable Authority application fees for services connections
4. Water Corporation headworks fees (N/A)
5. Rock/Clay excavation and spoils disposal from site
6. Dewatering
7. Fire service
8. Landscape works
9. Rainwater Harvesting or reuse

Appendix 1 – HSK01-HSK03 Hydraulic concept mark-ups

Appendix 2 – Flow and Pressure Test of street fire hydrant



FLOOR PLAN - CONCEPT
 1:100

SK01 CONCEPT FLOOR PLAN
 Scale 1:100

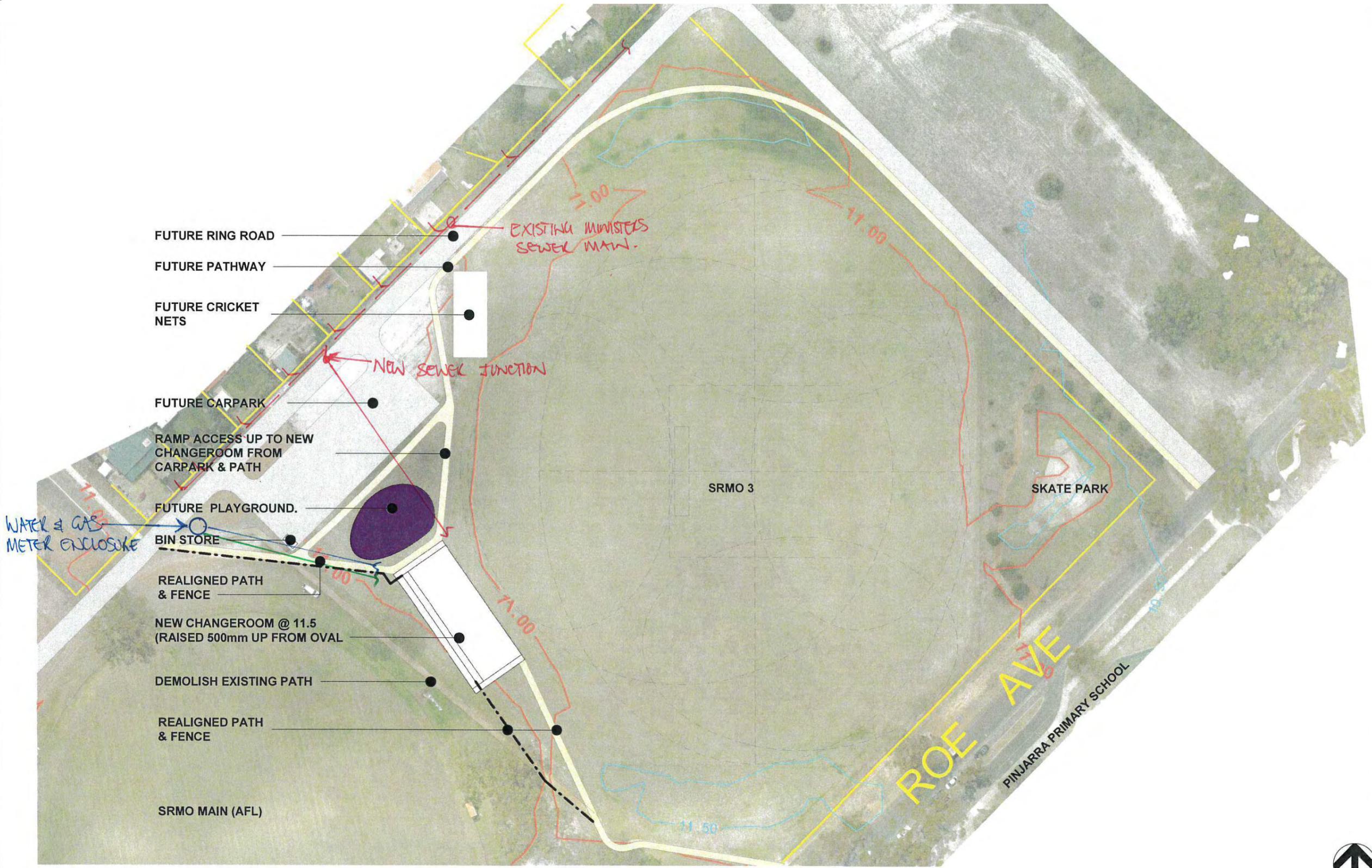
HSK01 4/6/2020

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number 22018
 MAY 2020



29/05/2020 2:58:32 PM



SITE PLAN

1 : 1000

SK02 SITE PLAN - SIR ROSS MCLARTY OVAL 3

Scale 1 : 1000

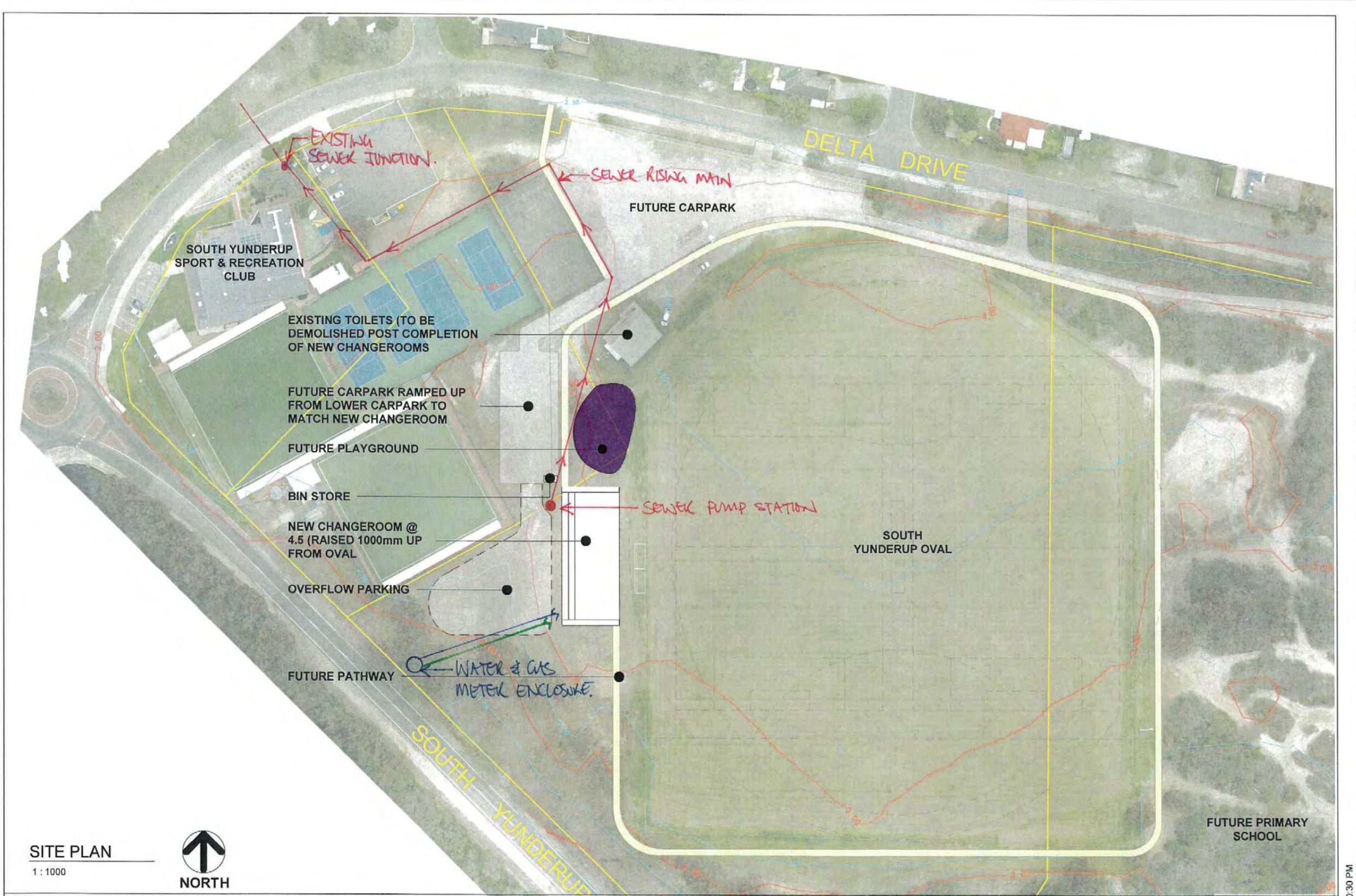
HSK02 4/6/2020

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020



29/05/2020 2:47:32 PM



SITE PLAN
 1:1000
 NORTH

SK03 SITE PLAN - SOUTH YUNDERUP OVAL

Scale 1:1000

MSK03 4/6/2020

SRMO & SYO CHANGEROOMS
 SHIRE OF MURRAY

Project number
 22018
 MAY 2020

site

29/05/2020 3:00:30 PM



CONSTRUCTION HYDRAULIC DESIGN
 1/218 Carr Place, Leederville WA 6007
 PO Box 358 North Perth WA 6906
 T 9206 2700
www.chdwa.com.au



CONSTRUCTION HYDRAULIC DESIGN
 1/218 Carr Place, Leederville WA 6007
 PO Box 358 North Perth WA 6906
 T 9206 2700
www.chdwa.com.au

Project: **SIR ROSS MCLARTY OVAL**
 ROE AVENUE
 PINJARRA

WATER FLOW TEST RESULTS
 Recorded by: PAUL WHITE
 Date Recorded: 18-May-20 Time: 13.05
 Test Location: STREET FH ROE AVENUE

REF.: 20-043
 Date: 18TH MAY 2020

Client: **SITE ARCHITECTURE**

Purpose: Performance Test

Test Results:	L/sec	l/min	kPa
STATIC	0	0	680
	5.00	300	400
	10.00	600	250
	10.80	648	200
FULL FLOW	12.30	738	50
		0	
		0	
		0	
		0	

Design Conditions:

	1	2
Flow Rate:	600 l/min	1200 l/min
Pressure:	200 kPa	200 kPa

Project: **SOUTH YUNDERUP OVAL**
 DELTA DRIVE
 SOUTH YUNDERUP OVAL

WATER FLOW TEST RESULTS
 Recorded by: PAUL WHITE
 Date Recorded: 18-May-20 Time: 13.25
 Test Location: STREET FH WILLS WAY

REF.: 20-043
 Date: 18TH MAY 2020

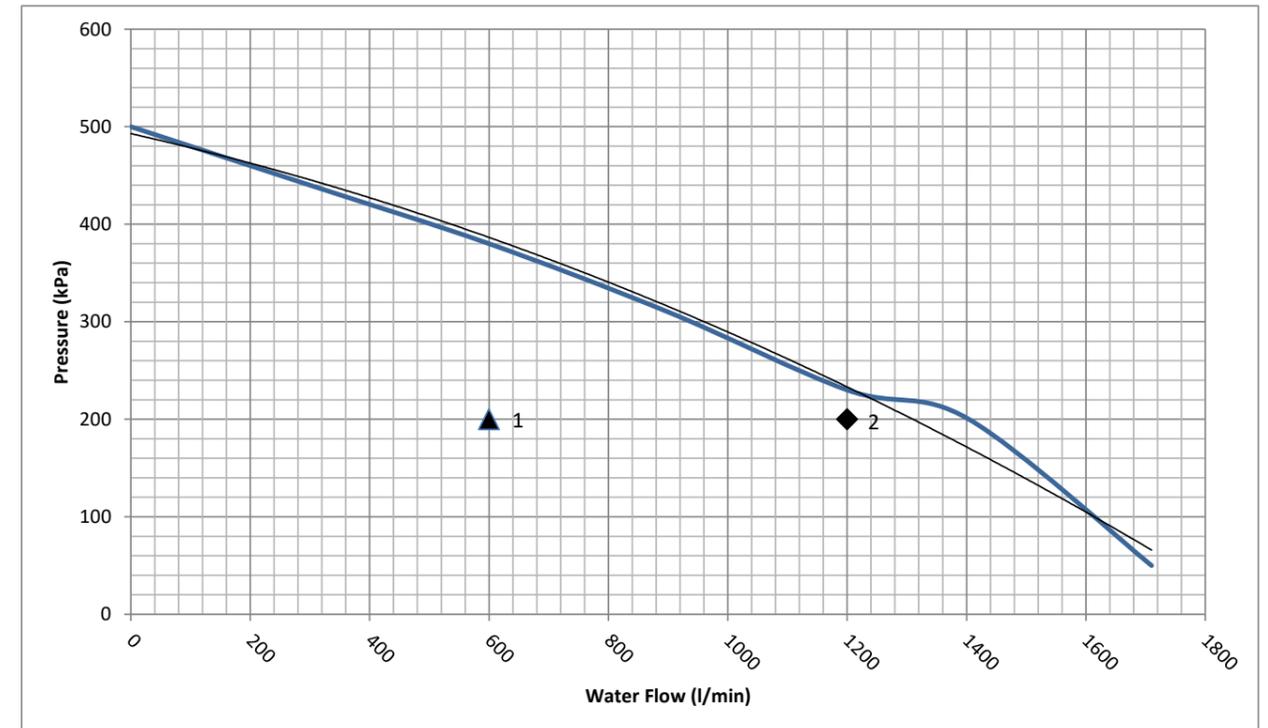
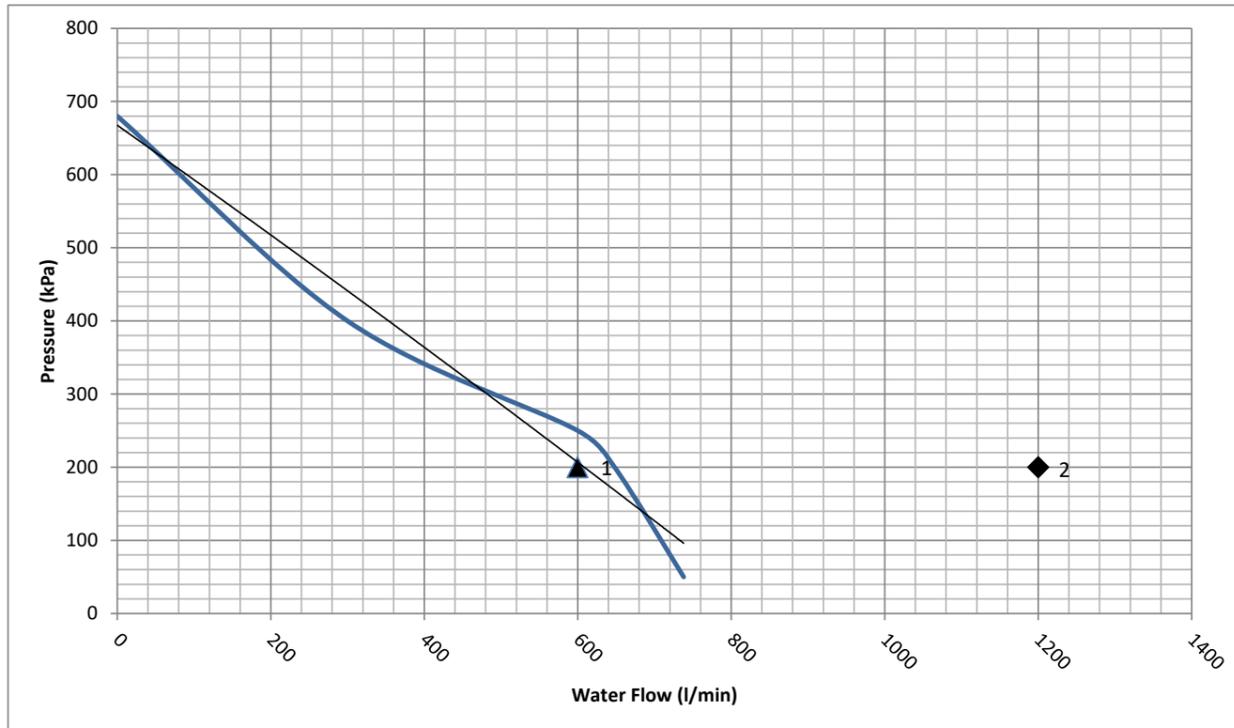
Client: **SITE ARCHITECTURE**

Purpose: Performance Test

Design Conditions:

	1	2
Flow Rate:	600 l/min	1200 l/min
Pressure:	200 kPa	200 kPa

Test Results:	L/sec	l/min	kPa
STATIC	0	0	500
	5.00	300	440
	10.00	600	380
	15.00	900	310
	20.00	1200	230
	23.40	1404	200
FULL FLOW	28.50	1710	50
		0	
		0	



DISCLAIMER & CLARIFICATIONS

AS 2419 'Fire Hydrant Installations' part 1 'System design, installation and commissioning' nominates the minimum required fire hydrant flow rates at a minimum residual pressure (recorded at the most remote on-site fire hydrant) for the fire compartment size they may serve.

Notwithstanding the performance results recorded by an independent third party specialist, the Water Corporation have a statutory obligation to service each building site with a standard domestic water supply service capable of discharging 20 litres per second at 15 metres head (147 kPa).

The Water Corporation is under no obligation to maintain or guarantee a constant flow and pressure for the life of the service, as a fire service is not a standard water supply.

It should be noted however that it is the property owner's responsibility to regularly monitor the performance of the fire service and carry out any rectification works needed to ensure that the performance of the fire safety systems connected to the town main are not compromised in the event that the Water Corporation water supply no longer satisfies the design requirements for the fire services system.

DISCLAIMER & CLARIFICATIONS

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9.04 GEOTECHNICAL

The following reports have been prepared by Structerre Engineers for the proposed location of the changerooms at Sir Sorss Mclarty Oval 3 & South Yunderup Oval.

Doc GE2.2.1



GEOTECHNICAL INVESTIGATION

For: Shire of Murray

Project Address: South Yunderup Oval – South Yunderup

Project Number: D237007

Job Number: J346153

Revision Number: 0

Date: 13/5/2020



WA | QLD | NSW



WA | QLD | NSW | VIC

TABLE OF CONTENTS

1. PROJECT DETAILS	.....
1.1. Introduction	.....
1.2. Site Description & Proposed Development	.....
1.3. Field Investigation – Scope of Works	.....
2. DESK STUDY	.....
2.1. Geological Setting	.....
2.2. Ground Surface and Groundwater Level	.....
2.3. Acid Sulfate Soils	.....
2.4. Site History	.....
3. RESULTS OF THE INVESTIGATION	.....
3.1. Subsurface Soil Profile	.....
3.2. Groundwater	.....
3.3. Percolation Testing	.....
4. GEOTECHNICAL CONSTRUCTION CONSIDERATIONS	.....
4.1. Site Classification	.....
4.2. Drainage	.....
4.3. Seismic Site Subsoil Class	.....
4.4. Earthworks	.....
4.5. Geotechnical Design Parameters	.....
4.6. Shallow Footings – Allowable Soil Bearing Capacities	.....
4.7. Indicative California Bearing Ratio (CBR)	.....
5. CONCLUSIONS	.....
6. LIMITATION OF FIELD INVESTIGATIONS	.....
7. REFERENCES	.....

TABLE 1 – HISTORICAL SITE INFORMATION	.....	3
TABLE 2 – SUBSURFACE SOIL PROFILE BH5 AND BH6	.....	3
TABLE 3 – SUBSURFACE SOIL PROFILE BH4	.....	4
TABLE 4 – IN SITU PERCOLATION TEST RESULTS	.....	4
TABLE 5 – ATTERBERG LIMIT TEST RESULTS	.....	5
TABLE 6 – SUMMARY OF SEISMIC PARAMETERS	.....	6
TABLE 7 – COMPACTION REQUIREMENTS	.....	6
TABLE 8 – SOIL PARAMETERS	.....	7
TABLE 9 – ALLOWABLE BEARING CAPACITIES FOR PAD FOOTINGS	.....	8
TABLE 10 – ALLOWABLE BEARING CAPACITIES FOR STRIP FOOTINGS	.....	9
TABLE 11 – INDICATIVE CBR VALUES	.....	9

APPENDIX 1 – SITE LOCATION MAP	.....	1
APPENDIX 2 – SITE PHOTOS	.....	2
APPENDIX 3 – BORELOGS	.....	3
APPENDIX 4 – LABORATORY TEST RESULTS	.....	4
APPENDIX 5 – BORELOG TERMINOLOGY	.....	5

WA | QLD | NSW | VIC



PROJECT No: D237007
JOB No: J346153
PROJECT ADDRESS: South Yunderup Oval – South Yunderup
CLIENT: Shire of Murray



PROJECT No: D237007
JOB No: J346153
PROJECT ADDRESS: South Yunderup Oval – South Yunderup
CLIENT: Shire of Murray

1. PROJECT DETAILS

1.1. Introduction

At the request of Dale Burton of Shire of Murray, Structerre Consulting (Structerre) have conducted a Geotechnical Investigation at South Yunderup Oval – South Yunderup. The purpose of the investigation was to provide the following:

- Desk top study including a summary of geology, groundwater, site history (obtained from historical photographs) and potential presence of Acid Sulfate Soils (ASS);
- Summary of encountered ground and groundwater conditions;
- Site Classification in accordance with AS2870;
- Earthquake site factor in accordance with AS1170.4;
- Recommendations for stormwater drainage design;
- Site preparation requirements (earthworks), including site traffic, excavation, reuse of materials and batter slopes;
- Ground bearing capacity and estimated settlements for pad and strip footings founded at 0.5m and 1.0m;
- Geotechnical design parameters for retaining structures and or deep foundations; and
- Preliminary pavement design parameter, indicative California Bearing Ratio (CBR) values determined from penetrometer results and ground conditions encountered.

This report details the scope of the geotechnical investigation, presents an interpretation of ground conditions and material properties across the site, provides geotechnical design parameters for the design of the proposed infrastructure, and evaluates the suitability of materials for use in earthworks. Interpretation of site conditions is based on the subsurface lithology revealed during the investigation programme, visual assessments of the in-situ materials and the results of in situ field tests.

Terms of reference for this investigation were presented in a Structerre Consulting proposal reference Q85165 (dated 15 April 2020), which was submitted to and accepted by Shire of Murray.

1.2. Site Description & Proposed Development

The site is located at South Yunderup Oval – South Yunderup, Shire of Murray. Delta Drive lies to the west and north of the site with South Yunderup Road to the southwest and bushland to the east.

The site is generally flat, and level as is the surrounding topography. At the time of the field investigation, the proposed building site was vacant.

We understand that the site is to be used for the construction of change room facilities.

1.3. Field Investigation – Scope of Works

The field investigation was carried out on 4 May 2020 and comprised:

- 3 x Sample Retrieval Probe boreholes to a depth of 2.5m over the site for material assessment and soil profiling;
- 1 x In-situ percolation test to determine the permeability of the materials within the upper 1.0m; and
- 3 x Perth Sand Penetrometer (PSP) tests in accordance with AS 1289.6.3.3-1997 to a depth of 1.35m (refusal) for evaluation of relative densities of the upper layers.

The borehole test locations are shown on the attached site plan in Appendix 1.

Suitably qualified geotechnical personnel from Structerre supervised the fieldwork and all fieldwork, interpretation and terminology used in this report are in accordance with the guidelines presented in AS1726-2017 Geotechnical Site Investigations.

2. DESK STUDY

2.1. Geological Setting

The Pinjarra sheet 1: 50,000 Environmental Geology Series (Part Sheets 2034 III and 2134 III, 1986) prepared by the Geological Survey of Western Australia indicates that the following geological layers underlie the site:

- SAND (S8 or S10) – very light grey at surface, yellow at depth, fine to medium grained, sub-rounded, quartz, moderately sorted of eolian origin (Bassendean Sand Qpb), underlain by;
- Estuarine and lagoonal deposits – clay, silt, marl with shell be limestones (Qrg).

2.2. Ground Surface and Groundwater Level

The Perth Groundwater Atlas (Waters & Rivers Commission) indicates the ground surface level at this site was approximately 3.0m Australian Height Datum (AHD).

No published groundwater information available for the site. It should be noted that the groundwater levels can vary significantly due to seasonal variation.

2.3. Acid Sulfate Soils

Information from publicly available Landgate website indicates that the site lies within a zone of high to moderate risk of ASS occurring within 3m of natural surface.



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray

2.4. Site History

Historical aerial photographs dating back to 1960 are publicly available through Landgate Map Viewer were assessed and a summary is presented in Table 1.

Table 1 – Historical Site Information

Date	Description
1960	The site is bushland
1974	South Yunderup Road developed
1985	Site cleared
2000	Sports oval developed
2020	Site remains relatively unchanged to the current day

3. RESULTS OF THE INVESTIGATION

3.1. Subsurface Soil Profile

The subsurface soil profile presented below was determined from the ground conditions encountered within the boreholes and through the interpretation of the PSP test results:

Table 2 – Subsurface Soil Profile BH5 and BH6

Depth to Base of Strata (m)	Material Description
0.1	Topsoil
1.2 – 1.3 (Ave. 1.3)	FILL: SAND (fine to medium grained), non-plastic, with gravel, trace clay, dense grading to very dense
Not Penetrated (>1.8m)	NATURAL: Sandy CLAY (fine to medium grained), low plasticity

Table 3 – Subsurface Soil Profile BH4

Depth to Base of Strata (m)	Material Description
0.1	Topsoil
1.0	FILL: SAND (fine to medium grained), non-plastic, dense grading to very dense
2.0	FILL: Sandy CLAY (fine to medium grained), low plasticity, trace gravel, very stiff
Not Penetrated (>2.5m)	NATURAL: SAND (fine to medium grained), non-plastic

The soils encountered are consistent with the expected site conditions as predicted from the Environmental Geology Map. It is important to note that there may be pockets of fill on site that are deeper than that encountered by the investigation boreholes. The subsurface soil conditions encountered are presented in the bore logs, within Appendix 3.

3.2. Groundwater

Groundwater was not encountered in any of the boreholes during or immediately after drilling. However, the groundwater is expected to be encountered approximately 1.0m below the existing ground level above the more cohesive materials.

3.3. Percolation Testing

Percolation testing of the in-situ soils was undertaken in one location. Results of the testing are summarised below:

Table 4 – In Situ Percolation Test Results

Test Location	Testing Depth	Soil Type	Permeability
BH5	0.75 - 1.0m	SAND	1.4m/day



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray

3.1. Laboratory Test Results

Selected representative soil samples were tested by Structerre's in-house NATA accredited laboratory for Atterberg Limits, shrink-swell index, organic content and soil compaction. The results are attached in Appendix 4.

3.1.1. Atterberg Limits

Atterberg Limits were tested by Structerre's in-house NATA accredited laboratory. Results of the testing are summarised below:

Table 5 – Atterberg Limit Test Results

Sample	Test Hole	Depth (m)	Soil Description	Liquid Limit	Plastic Limit	Plasticity Index	Linear Shrinkage
				% AS1289 3.1.2	% AS1289 3.2.1	% AS1289 3.3.1	% AS1289 3.4.1
1	BH4	1.1-1.5	Sandy CLAY trace gravel	26	12	14	3.5

Test results indicate that the natural sandy CLAY has low shrink swell capacity or degree of expansion.

A copy of the result is presented in Appendix 4.

4. GEOTECHNICAL CONSTRUCTION CONSIDERATIONS

4.1. Site Classification

AS 2870-2011 Residential Slabs and Footings provides guidance on site classification for residential slabs and footing design based on the expected ground surface movement and depth of expected moisture changes.

Although the proposed development falls outside the scope of AS 2870, site classification can be used to assist in the design of foundations. The foundation design should be undertaken by a Structural Engineer, taking into consideration ground bearing capacity and the acceptable total and differential settlements of the proposed foundation system.

Based on results of this investigation the site can be classified as a Class "S" provided that all unsuitable materials are removed and replaced with engineer-controlled sand fill materials in accordance with earthwork recommendations outlined in Section 4.4 in this report. The site in its current condition is classified as Class "P" due to the uncontrolled fill encountered.

4.2. Drainage

The existing ground conditions are not suitable for on-site disposal of stormwater runoff through the use of soakwells. It is recommended that all stormwater from roofed, paved and driveway areas be collected and detained to reduce peak flow rates prior to discharging offsite as per council requirements. Sub soil drainage may be required at this site to control groundwater perching in the upper soil layers.

4.3. Seismic Site Subsoil Class

The seismic subsoil site class has been assessed in accordance with AS 1170.4-2007, using the results of this investigation and published information.

Table 6 – Summary of Seismic Parameters

Hazard Factor	Site Sub-soil Class
0.09	Class Ce –shallow soil site

4.4. Earthworks

All earthworks shall be undertaken in accordance with AS 3798-2007 Guidelines on Earthworks for Commercial and Residential Developments and are to include the following:

- All unsuitable materials to be stripped and removed from the site. Unsuitable materials include topsoil, uncontrolled fill, deleterious and organic materials.
- It is considered that the near surface sand materials require improvement. Therefore, it is proposed to excavate and stockpile the materials for reuse, provided it is dry, free from clay/silt (i.e. <5%), organic and deleterious materials. The depth of excavation may vary depending on conditions encountered (i.e. groundwater) and is subject to inspection.
- Proof compact the exposed surface. The compaction requirements are set out in the table below, as per AS 3798-2007:

Table 7 – Compaction Requirements

Item	Application	Minimum relative compaction, %	
		Minimum density ratio (Standard Compaction Effort) (Cohesive soils)	Minimum density index (Cohesionless soils)
1	Residential - lot, fill, house, sites	95	70
2	Commercial – fills to support minor loadings, including floor loading of up to 20kPa and	98	75



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray

	isolated pad or strip footings to 100kPa		
3	Fill to support pavements		
	a) General fill	95	70
	b) Subgrade (to a depth of 0.3m)	98	75

- After excavation and proof compaction, the exposed surface is to be inspected and approved by a representative from this office prior to backfilling. At this stage it can be assessed whether any further materials need to be removed or whether further compaction of the base is required.
- A minimum of 0.6m sand cover is to be maintained above the reactive material in order to achieve a Class "S" site with $y_s = <10\text{mm}$.
- The ground level should be built up to design levels with imported fill, if required. The imported fill should consist of free draining sand with not more than 5% passing a 75 μm sieve and be free of organic matter and other deleterious materials. The fill materials should be placed in layers not exceeding 300mm loose thickness and compacted to achieve a minimum 8 PSP blows over the interval 150 – 450mm, 9 PSP blows over the interval 450 – 750mm and 11 PSP blows over the interval 750 -1050mm.
- After remedial earthworks have been completed, the earthworks should be inspected and approved by a representative from this office.

It is considered that standard small to medium sized earthmoving equipment would be appropriate for the proposed development. The near surface ground was generally competent and should not pose an issue to site traffic movements.

The material encountered on site can be deemed as 'easy' to excavate with medium sized earthwork equipment (i.e. a 20t excavator). Should excavations be required below groundwater level, dewatering will be necessary.

4.5. Geotechnical Design Parameters

Based on the on-site observations and the PSP results, the interpreted geotechnical soil parameters of the encountered materials are presented in Table 1:

Table 8 – Soil Parameters

Soil Type	Depths (m)	Friction Angle ϕ' ($^\circ$)	Cohesion c' (kPa)	Density γ (t/m^3)	Elastic Modulus E (MPa)
FILL: SAND	0 – 1.3	31	0	1.80	16
Sandy CLAY	1.3 – 2.5	27	1	19.0	38

4.6. Shallow Footings – Allowable Soil Bearing Capacities

Based on the findings of the current preliminary geotechnical investigation, shallow pad and strip footings are considered appropriate for the proposed development. Allowable bearing capacities for shallow footings at the site have been calculated under the following assumptions:

- The site preparation procedures specified in Section 4.4 have been carried out;
- The specified level of compaction has been achieved below the base of each footing;
- Loads are vertical and not eccentric;
- Isolated footings (i.e. interaction of foundations has not been considered);
- The foundations are flexible;
- A factor of safety (FoS) of 3.0 against bearing capacity failure;
- Maximum allowable settlement of 25mm.

The tables below present the allowable bearing pressures for pad and strip footings of various dimensions, with embedment depths of 0.5m and 1.0m below finished surface levels.

Table 9 – Allowable Bearing Capacities for Pad Footings

Minimum Depth of Embedment (m)	Minimum Plan Dimension (m)	Allowable Bearing Capacities (kPa)	Settlement (mm)
0.5	0.5	80	5
	1.0	100	10
	1.5	120	15
	2.0	140	25
1.0	0.5	100	5
	1.0	125	10
	1.5	155	15
	2.0	200	25



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
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Table 10 – Allowable Bearing Capacities for Strip Footings

Minimum Depth of Embedment (m)	Minimum Plan Dimension (m)	Allowable Bearing Capacities (kPa)	Settlement (mm)
0.5	0.5	90	5
	1.0	105	15
	1.5	130	25
1.0	0.5	95	5
	1.0	120	15
	1.5	150	25

The recommended allowable bearing capacities are dependent on the site being dry and well drained, so that the foundation material does not become saturated.

The actual allowable bearing capacity of a particular foundation will be dependent on its location, geometry and founding depth, as well as the founding horizon. Therefore, once specific foundation geometries have been determined and the earthworks completed, it is recommended that the allowable bearing capacity and associated settlements be verified.

Additionally, should undermining issue prevent the excavation of the near surface loose materials, it is recommended that the allowable bearing capacity be reviewed. However, this will likely result in lower allowable bearing capacities.

4.7. Indicative California Bearing Ratio (CBR)

The indicative California Bearing Ratio (CBR) value of the subgrade material, following earthworks can be estimated from the site investigation results and would be appropriate for preliminary design purposes. The indicative value is shown in the below table:

Table 11 – Indicative CBR Values

Material	Indicative CBR (%)	Compaction
SAND (In situ or Imported Fill)	12	95% of MMDD*

* Implies the maximum dry density ratio using Modified compaction in accordance with AS 1289 5.2.1-2003.

For detailed design and construction of the pavements, it is recommended that the CBR values be verified with laboratory Soaked CBR testing on the anticipated subgrade material.

5. CONCLUSIONS

A site investigation was carried out at the proposed commercial development site to assess the geotechnical conditions. Parameter and design recommendations are incorporated in the body of the report. The following conclusions have been drawn from the site investigation:

- The subsurface soil profile encountered comprised topsoil to 0.1m, dense to very dense sand fill and sandy clay fill to 1.5m and underlain by very stiff sandy clay and sand to the investigated depth of 2.5m.
- Groundwater or perched water was not encountered across the site to the depth of 2.5m.
- It is considered that the site is not suitable for on-site drainage.
- The site can be classified as an equivalent Class “S” in accordance with AS 2870-2011 provided the recommended earthworks are undertaken
- Recommended earthworks include stripping of fill sand and unsuitable materials, excavation of loose materials, proof compaction of the base, placement of engineered fill and compaction of final level.
- Allowable bearing capacity for pad footings range from 105kPa to 205kPa and from 85kPa to 140kPa for strip footings. The estimation of settlement of the footings is limited to 20mm.



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray

6. LIMITATION OF FIELD INVESTIGATIONS

This report has been prepared in accordance with generally accepted consulting practice for Shire of Murray using information supplied at the time and for the project specific requirements as understood by Structerre. To the best of our knowledge the information contained in this report is accurate at the date of issue, however it should be emphasised that any changes to ground conditions and/or the proposed structures may invalidate the recommendations given herein.

The conclusions and recommendations in this report are based on the site conditions revealed through selective point sampling, representing the conditions of the site in total, although the area investigated represents only a small portion of the site. The actual characteristics may vary significantly between successive test locations and sample intervals other than where observations, explorations and investigations have been made.

The materials and their geotechnical properties presented in this report may not represent the full range of materials and strengths that actually exist on site and the recommendations should be regarded as preliminary in nature. Allowances should be made for variability in ground conditions and any consequent impact on the development. Structerre accepts no responsibility and shall not be liable for any consequence of variations in ground conditions.

If ground conditions encountered during construction are different to that described in this report, this office should be notified immediately.

For and behalf of

STRUCTERRE CONSULTING


 Margie Mortera
 Geotechnical Assistant


 Checked By: David Harding
 Employee Title: Geotechnical Supervisor


 Authorised By: Luke Young
 Employee Title: Geotechnical Engineer
 BEng Civil (Hons)

Disclaimer

This report is at the request of the addressee and no liability is accepted by Structerre Consulting to any third person reading or relying upon the report, notwithstanding any rule of law and/or equity to the contrary and that this report is strictly confidential and intended to be read and relied upon only by the addressee.

Job #	Revision	Authored	Checked	Authorised
J346153	0	MM	DH	LY

7. REFERENCES

- Department of Water – Perth Groundwater Atlas
- Geological Survey of Western Australia 1:50,000 Environmental Geology Series
- AS 1170.4-2007 Structural design actions – Earthquake actions in Australia
- AS 1289.3.1.2-2009 Methods of testing soils for engineering purposes – Soil classification tests – Determination of the liquid limit of a soil
- AS 1289.3.2.1-2009 Methods of testing soils for engineering purposes – Soil classification tests – Determination of the plastic limit of a soil
- AS 1289.3.3.1-2009 Methods of testing soils for engineering purposes – Soil classification tests – Calculation of the plasticity index of a soil
- AS 1289.3.4.1-2009 Methods of testing soils for engineering purposes – Soil classification tests – Determination of the linear shrinkage of a soil
- AS 1289.6.3.3-1997 Methods of testing soils for engineering purposes – Soil strength and consolidation tests – Determination of the penetration resistance of a soil – Perth sand penetrometer test
- AS 1726-2017 Geotechnical site investigation
- AS 2870-2011 Residential slabs and footings
- AS 3798-2007 Guidelines on earthworks for commercial and residential developments
- AS 4055-2012 Wind loads for housing



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray

APPENDIX 1 – SITE LOCATION MAP



Note: Showing approximate test locations only

Nearmap dated 03/31/20

LEGEND

BH Borehole



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PROJECT: South Yunderup Oval - South Yunderup	
PROJECT #: D237007	CLIENT: Shire of Murray
JOB #: J346153	
SCALE: NTS	TITLE: Geotechnical Investigation Site Plan
DATE: 04 May '20	DRAWN BY: MM
	CHECKED BY: DH



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray

APPENDIX 2 – SITE PHOTOS



PHOTO 1



PHOTO 2

	PROJECT: South Yunderup Oval - South Yunderup	
	PROJECT #: D237007	CLIENT: Shire of Murray
	JOB #: J346153	
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	DATE: 04 May '20	DRAWN BY: MM



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



Project South Yunderup Oval - South Yunderup
 Client Shire of Murray

Test No.
BH04

Project No. D237007 Logged By Tony Broadway Machine Soil Retrieval Probe Easting 387054
 Job No. J346153-2 Date 04/05/2020 Hole Dia. 65mm Northing 6393943

APPENDIX 3 – BORELOGS

Depth	Graphic	Stratum Description	Consistency	PSP Blows/300mm				Samples		Moisture	Water Level
				4	8	12	16	Depth	Type		
		Topsoil:									
		SP: SAND: fine to medium grained, non-plastic, grey (FILL)	D - VD							D to M	
1		CL: Sandy CLAY: fine to medium grained, low plasticity, trace gravel, grey (FILL)	VSt					1.1 - 1.5	B		
										M to W	
2		SP: SAND: fine to medium grained, non-plastic, grey (Bassendean Sand)								W	
		Terminated at 2.50 m									
3											

Remarks

1. Termination reason: Target depth
2. Hole stability: Hole stable
3. Samples taken: As indicated
4. Co-ordinate system: WGS 84

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Project South Yunderup Oval - South Yunderup
Client Shire of Murray

Test No.
BH05

Project No. D237007 **Logged By** Tony Broadway **Machine** Soil Retrieval Probe **Easting** 387058
Job No. J346153-2 **Date** 04/05/2020 **Hole Dia.** 65mm **Northing** 6393918

Depth	Graphic	Stratum Description	Consistency	PSP Blows/300mm				Samples		Moisture	Water Level
				4	8	12	16	Depth	Type		
0		Topsoil:									
0		SP: SAND: fine to medium grained, non-plastic, grey (FILL)	D - VD							D to M	
1											
1		CL: Sandy CLAY: fine to medium grained, low plasticity, grey (Estuarine and Lagoonal Deposits)								M	
2		Terminated at 1.80 m								M to W	
3											

Remarks
 1. Termination reason: Refusal - interpreted on stiff clay
 2. Hole stability: Hole stable
 3. Samples taken: None
 4. Co-ordinate system: WGS 84

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Project South Yunderup Oval - South Yunderup
Client Shire of Murray

Test No.
BH06

Project No. D237007 **Logged By** Tony Broadway **Machine** Soil Retrieval Probe **Easting** 387007
Job No. J346153-2 **Date** 04/05/2020 **Hole Dia.** 65mm **Northing** 6393942

Depth	Graphic	Stratum Description	Consistency	PSP Blows/300mm				Samples		Moisture	Water Level
				4	8	12	16	Depth	Type		
0		Topsoil:									
0		SP: SAND: fine to medium grained, non-plastic, grey (FILL)	D - VD							D to M	
1		with gravel, trace clay, brown									
1		CL: Sandy CLAY: fine to medium grained, low plasticity, grey (Estuarine and Lagoonal Deposits)								M	
2		Terminated at 1.40 m								M to W	
3											

Remarks
 1. Termination reason: Refusal - interpreted on stiff clay
 2. Hole stability: Hole stable
 3. Samples taken: None
 4. Co-ordinate system: WGS 84

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PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



Sample No. 33602 **Client** Geotechnical
Job No. J346153 **Project** South Yunderup Oval, Delta Drive, South Yunderup

Laboratory testing carried out at Balcatta Laboratory 1 Erindale Rd, Balcatta WA 6021

SAMPLE DETAILS

BH No. / Depth : BH4 1.1-1.5m Sampling Method Client
 Sample History : 50°C Oven Dried Sample Preparation AS 1289 1.1

ATTERBERG LIMITS

Description	Method	Result (%)
Liquid Limit	AS 1289.3.1.2	26
Plastic Limit	AS 1289.3.2.1	12
Plasticity Index	AS 1289.3.3.1	14
Linear Shrinkage	AS 1289.3.4.1	3.5
Nature of Shrinkage		curling

APPENDIX 4 – LABORATORY TEST RESULTS

PARTICLE SIZE DISTRIBUTION

Method: AS 1289.3.6.1
Description: Particle size distribution by sieve analysis

Sieve Size (mm)	% Passing
19.0	100
2.36	100
0.425	84
0.075	37

AS 1726:2017 Clause 6.1

Material Description: Sandy CLAY trace gravel
AS Group Symbol: CL or OL



Wayne Rozmianiec 
 Laboratory Manager

Date: 11-May-20

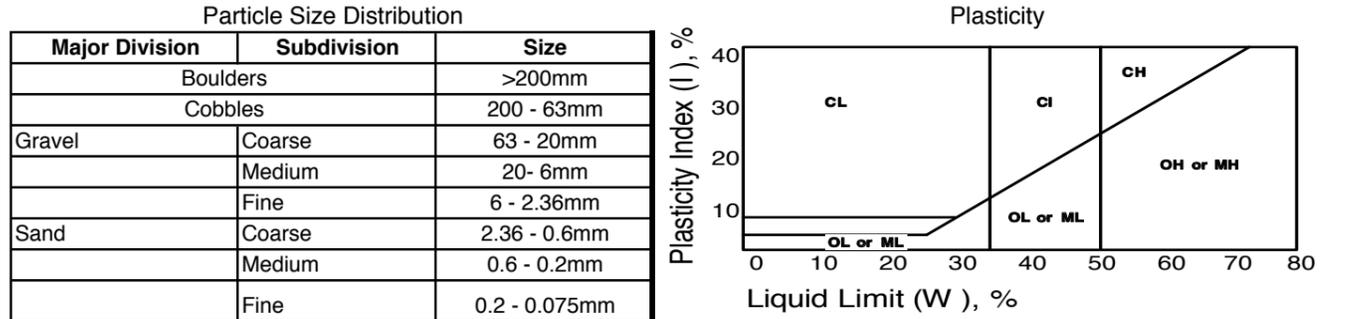


PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: South Yunderup Oval – South Yunderup
 CLIENT: Shire of Murray



- Residential
- Geotechnical
- Commercial & Infrastructure
- Inspect & Investigate
- Energy Assessment
- Environmental

BORELOG TERMINOLOGY



Consistency of Cohesive Soils

Term	Undrained Strength Su (kPa)	Field Guide
Very Soft	< 12	Exudes between the fingers when squeezed in hand
Soft	12 - 25	Can be moulded by light finger pressure
Firm	25 - 50	Can be moulded by strong finger pressure
Stiff	50 - 100	Cannot be moulded by Fingers. Can be indented by thumb.
Very Stiff	100 - 200	Can be indented by thumb nail
Hard	> 200	Can be indented with difficulty by thumb nail.
Friable	-	Crumbles or powders when scraped by thumbnail

Consistency/Density of Non-Cohesive Soils

Term	Density Index (%)	SPT "N" Value Comparison	Moisture Content
Very Loose	< 15	0 - 4	D Dry
Loose	15 - 35	4 - 10	M Moist
Medium Dense	35 - 65	10 - 30	W Wet
Dense	65 - 85	30 - 50	S Saturated
Very Dense	> 85	> 50	

Minor Components

Term	Assessment Guide	Proportion of Minor Component In:
Trace	Presence just detectable by feel or eye, but soil properties little or no different to general properties of primary component	Coarse grained soils: < 5 % Fine grained soils: <15%
With	Presence easily detected by feel or eye, soil properties little different to general properties of primary component	Coarse grained soils: 5 - 12 % Fine grained soils: 15 - 30%

Soil Legend

<input type="checkbox"/> FILL	<input type="checkbox"/> CLAY	<input type="checkbox"/> GRAVEL	<input type="checkbox"/> CONCRETE
<input type="checkbox"/> TOPSOIL	<input type="checkbox"/> SILT	<input type="checkbox"/> LIMESTONE	<input checked="" type="checkbox"/> COMBINATIONS
<input type="checkbox"/> PEAT	<input type="checkbox"/> SAND	<input type="checkbox"/> BEDROCK	eg: Clay, Silty, Sandy

USCS

GW Well graded gravel	SC Clayey sand	OL Organic low plasticity silt	CL Low plasticity clay
GP Poorly graded gravel	SM Silty sand	ML Low plasticity silt	CI Intermediate plasticity clay
SW Well graded sand		MH High plasticity silt	CH High plasticity clay
SP Poorly graded sand		OH Organic high plasticity silt	PT Peat

DOC:GE:3.003

APPENDIX 5 – BORELOG TERMINOLOGY

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Doc GE2.2.1

GEOTECHNICAL INVESTIGATION

For: Shire of Murray

Project Address: Sir Ross McLarty Sport Ground – Pinjarra

Project Number: D237007

Job Number: J346153

Revision Number: 0

Date: 7/5/2020

TABLE OF CONTENTS

1. PROJECT DETAILS	1
1.1. Introduction	1
1.2. Site Description & Proposed Development	1
1.3. Field Investigation – Scope of Works	2
2. DESK STUDY	2
2.1. Geological Setting	2
2.2. Ground Surface and Groundwater Level	2
2.3. Acid Sulfate Soils	2
2.4. Site History	3
3. RESULTS OF THE INVESTIGATION	3
3.1. Subsurface Soil Profile	3
3.2. Groundwater	4
3.3. Percolation Testing	4
4. GEOTECHNICAL CONSTRUCTION CONSIDERATIONS	4
4.1. Site Classification	4
4.2. Drainage	4
4.3. Seismic Site Subsoil Class	5
4.4. Earthworks	5
4.5. Geotechnical Design Parameters	6
4.6. Shallow Footings – Allowable Soil Bearing Capacities	6
4.7. Indicative California Bearing Ratio (CBR)	8
5. CONCLUSIONS	9
6. LIMITATION OF FIELD INVESTIGATIONS	10
7. REFERENCES	11

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PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

TABLE 1 – HISTORICAL SITE INFORMATION.....	3
TABLE 2 – SUBSURFACE SOIL PROFILE.....	3
TABLE 3 – IN SITU PERCOLATION TEST RESULTS.....	4
TABLE 4 – SUMMARY OF SEISMIC PARAMETERS.....	5
TABLE 5 – COMPACTION REQUIREMENTS.....	5
TABLE 6 – SOIL PARAMETERS.....	6
TABLE 7 – ALLOWABLE BEARING CAPACITIES FOR PAD FOOTINGS.....	7
TABLE 8 – ALLOWABLE BEARING CAPACITIES FOR STRIP FOOTINGS.....	8
TABLE 9 – INDICATIVE CBR VALUES.....	8
APPENDIX 1 – SITE LOCATION MAP.....	1
APPENDIX 2 – SITE PHOTOS.....	2
APPENDIX 3 – BORELOGS.....	3
APPENDIX 4 – BORELOG TERMINOLOGY.....	4

1. PROJECT DETAILS

1.1. Introduction

At the request of Dale Burton of Shire of Murray, Structerre Consulting (Structerre) have conducted a Geotechnical Investigation at Sir Ross McLarty Sport Ground – Pinjarra. The purpose of the investigation was to provide the following:

- Desk top study including a summary of geology, groundwater, site history (obtained from historical photographs) and potential presence of Acid Sulfate Soils (ASS);
- Summary of encountered ground and groundwater conditions;
- Site Classification in accordance with AS2870;
- Earthquake site factor in accordance with AS1170.4;
- Recommendations for stormwater drainage design;
- Site preparation requirements (earthworks), including site traffic, excavation, reuse of materials and batter slopes;
- Ground bearing capacity and estimated settlements for pad and strip footings founded at 0.5m and 1.0m;
- Geotechnical design parameters for retaining structures and or deep foundations; and
- Preliminary pavement design parameter, indicative California Bearing Ratio (CBR) values determined from penetrometer results and ground conditions encountered.

This report details the scope of the geotechnical investigation, presents an interpretation of ground conditions and material properties across the site, provides geotechnical design parameters for the design of the proposed infrastructure, and evaluates the suitability of materials for use in earthworks. Interpretation of site conditions is based on the subsurface lithology revealed during the investigation programme, visual assessments of the in situ materials and the results of in situ field tests.

Terms of reference for this investigation were presented in a Structerre Consulting proposal reference Q85165 (dated 15 April 2020), which was submitted to and accepted by Shire of Murray.

1.2. Site Description & Proposed Development

The site is located at Sir Ross McLarty Sport Ground – Pinjarra, Shire of Murray. Longo Avenue lies to the southwest of the site with Roe Avenue to the southeast, residential property to the northwest and bushland to the northeast.

The site is generally flat, and level as is the surrounding topography. At the time of the field investigation, the proposed site was vacant.

We understand that the site is to be used for the construction of change room facilities.

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PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

1.3. Field Investigation – Scope of Works

The field investigation was carried out on 4 May 2020 and comprised:

- 3 x Sample Retrieval Probe boreholes to a depth of 2.5m over the site for material assessment and soil profiling;
- 1 x In situ percolation test to determine the permeability of the materials within the upper 1.0m; and
- 3 x Perth Sand Penetrometer (PSP) tests in accordance with AS 1289.6.3.3-1997 to a depth of 2.0m for evaluation of relative densities of the upper layers.

The borehole test locations are shown on the attached site plan in Appendix 1.

Suitably qualified geotechnical personnel from Structerre supervised the fieldwork and all fieldwork, interpretation and terminology used in this report are in accordance with the guidelines presented in AS1726-2017 Geotechnical Site Investigations.

2. DESK STUDY

2.1. Geological Setting

The Pinjarra sheet 1: 50,000 Environmental Geology Series (Part Sheets 2034 III and 2134 III, 1986) prepared by the Geological Survey of Western Australia indicates that the following geological layers underlie the site:

- SAND (S8 or S10) – very light grey at surface, yellow at depth, fine to medium grained, sub-rounded, quartz, moderately sorted of eolian origin (Bassendean Sand Qpb), underlain by
- Guildford Clay (Qpg) – alluvium (clay, loam, sand and gravel)

2.2. Ground Surface and Groundwater Level

The Perth Groundwater Atlas (Waters & Rivers Commission) indicates the ground surface level at this site was approximately 11.0m Australian Height Datum (AHD).

No published groundwater information available for the site. It should be noted that the groundwater levels can vary significantly due to seasonal variation.

2.3. Acid Sulfate Soils

Information from publicly available Landgate website indicates that the site lies within a zone of moderate to low risk of ASS occurring within 3m of natural surface.



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

2.4. Site History

Historical aerial photographs dating back to 1979 are publicly available through Landgate Map Viewer were assessed and a summary is presented in Table 1.

Table 1 – Historical Site Information

Date	Description
1979	Site was vacant. Roads and Pinjarra Football & Netball Club developed.
2014	Site cleared for development
2015	Sir Ross McLarty Oval developed
2020	Site remains relatively unchanged to the current day

3. RESULTS OF THE INVESTIGATION

3.1. Subsurface Soil Profile

The subsurface soil profile presented below was determined from the ground conditions encountered within the boreholes and through the interpretation of the PSP test results:

Table 2 – Subsurface Soil Profile

Depth to Base of Strata (m)	Material Description
0.1	Topsoil
0.5	FILL: SAND (fine to medium grained), non-plastic, medium dense grading to dense
Not Penetrated (>2.5m)	NATURAL: SAND (fine to medium grained), non-plastic, dense grading to very dense

The soils encountered are consistent with the expected site conditions as predicted from the Environmental Geology Map. It is important to note that there may be pockets of fill on site that are deeper than that encountered by the investigation boreholes. The subsurface soil conditions encountered are presented in the bore logs, within Appendix 3.



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

3.2. Groundwater

Groundwater was not encountered in any of the boreholes during or immediately after drilling. However, the groundwater is anticipated to perch above the more cohesive materials.

3.3. Percolation Testing

Percolation testing of the in-situ soils was undertaken in one location. Results of the testing are summarised below:

Table 3 – In Situ Percolation Test Results

Test Location	Testing Depth	Soil Type	Permeability
BH2	0.75 - 1.0m	SAND	4.7m/day

4. GEOTECHNICAL CONSTRUCTION CONSIDERATIONS

4.1. Site Classification

AS 2870-2011 Residential Slabs and Footings provides guidance on site classification for residential slabs and footing design based on the expected ground surface movement and depth of expected moisture changes.

Although the proposed development falls outside the scope of AS 2870, site classification can be used to assist in the design of foundations. The foundation design should be undertaken by a Structural Engineer, taking into consideration ground bearing capacity and the acceptable total and differential settlements of the proposed foundation system.

Based on results of this investigation the site can be classified as a Class “A” provided that all unsuitable materials are removed and replaced with engineer-controlled sand fill materials in accordance with earthwork recommendations outlined in Section 4.3 in this report.

4.2. Drainage

The site is suitable for on-site disposal of stormwater runoff subject to the proposed development. For on-site disposal of stormwater runoff, soakwells of sufficient sizes are required, and should be positioned a minimum of 1.2m or the depth of soakwell (whichever is greater) from any proposed or existing foundations (including those beyond the boundaries of the site) to minimise the risk of differential settlement.

To aid with the design of on-site stormwater drainage, groundwater levels and field permeability results are presented in Section 3 of this report.



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

4.3. Seismic Site Subsoil Class

The seismic subsoil site class has been assessed in accordance with AS 1170.4-2007, using the results of this investigation and published information.

Table 4 – Summary of Seismic Parameters

Hazard Factor	Site Sub-soil Class
0.09	Class Ce –shallow soil site

4.4. Earthworks

All earthworks shall be undertaken in accordance with AS 3798-2007 Guidelines on Earthworks for Commercial and Residential Developments and are to include the following:

- All unsuitable materials to be stripped and removed from the site. Unsuitable materials include topsoil, uncontrolled fill, deleterious and organic materials.
- It is considered that the near surface sand materials require improvement. Therefore, it is proposed to rake to a depth of approximately 0.5m to ensure potentially unsuitable materials are removed, and the surface compacted.
- Proof compact the exposed surface. The compaction requirements are set out in the table below, as per AS 3798-2007:

Table 5 – Compaction Requirements

Item	Application	Minimum relative compaction, %	
		Minimum density ratio (Standard Compaction Effort) (Cohesive soils)	Minimum density index (Cohesionless soils)
1	Residential - lot, fill, house, sites	95	70
2	Commercial – fills to support minor loadings, including floor loading of up to 20kPa and isolated pad or strip footings to 100kPa	98	75
3	Fill to support pavements		
	a) General fill	95	70
	b) Subgrade (to a depth of 0.3m)	98	75



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

- After raking and proof compaction, the exposed surface is to be inspected and approved by a representative from this office prior to backfilling. At this stage it can be assessed whether any further materials need to be removed or whether further compaction of the base is required.
- The ground level should be built up to design levels with imported fill, if required. The imported fill should consist of free draining sand with not more than 5% passing a 75µm sieve and be free of organic matter and other deleterious materials. The fill materials should be placed in layers not exceeding 300mm loose thickness and compacted to achieve a minimum 8 PSP blows over the interval 150 – 450mm, 9 PSP blows over the interval 450 – 750mm and 11 PSP blows over the interval 750 -1050mm.
- After remedial earthworks have been completed, the earthworks should be inspected and approved by a representative from this office.

It is considered that standard small to medium sized earthmoving equipment would be appropriate for the proposed development. The near surface ground was generally competent and should not pose an issue to site traffic movements.

The material encountered on site can be deemed as 'easy' to excavate with medium sized earthwork equipment (i.e. a 20t excavator). Should excavations be required below groundwater level, dewatering will be necessary.

4.5. Geotechnical Design Parameters

Based on the on-site observations and the PSP results, the interpreted geotechnical soil parameters of the encountered materials are presented in Table 6:

Table 6 – Soil Parameters

Soil Type	Depths (m)	Friction Angle ϕ' (°)	Cohesion c' (kPa)	Density γ (t/m ³)	Elastic Modulus E (MPa)
FILL: SAND	0 – 0.5	30	0	1.80	16
SAND	0.5 – 2.5	35	0	1.85	33

4.6. Shallow Footings – Allowable Soil Bearing Capacities

Based on the findings of the current preliminary geotechnical investigation, shallow pad and strip footings are considered appropriate for the proposed development. Allowable bearing capacities for shallow footings at the site have been calculated under the following assumptions:

- The site preparation procedures specified in Section 4.4 have been carried out;
- The specified level of compaction has been achieved below the base of each footing;
- Loads are vertical and not eccentric;
- Isolated footings (i.e. interaction of foundations has not been considered);

- The foundations are flexible;
- A factor of safety (FoS) of 3.0 against bearing capacity failure;
- Maximum allowable settlement of 25mm.

The tables below present the allowable bearing pressures for pad and strip footings of various dimensions, with embedment depths of 0.5m and 1.0m below finished surface levels.

Table 4 – Allowable Bearing Capacities for Pad Footings

Minimum Depth of Embedment (m)	Minimum Plan Dimension (m)	Allowable Bearing Capacities (kPa)	Settlement (mm)
0.5	0.5	100	5
	1.0	130	10
	1.5	160	15
	2.0	200	25
1.0	0.5	115	5
	1.0	140	10
	1.5	180	15
	2.0	220	25



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

Table 8 – Allowable Bearing Capacities for Strip Footings

Minimum Depth of Embedment (m)	Minimum Plan Dimension (m)	Allowable Bearing Capacities (kPa)	Settlement (mm)
0.5	0.5	90	5
	1.0	120	15
	1.5	140	25
1.0	0.5	105	5
	1.0	140	15
	1.5	180	25

The recommended allowable bearing capacities are dependent on the site being dry and well drained, so that the foundation material does not become saturated.

The actual allowable bearing capacity of a particular foundation will be dependent on its location, geometry and founding depth, as well as the founding horizon. Therefore, once specific foundation geometries have been determined and the earthworks completed, it is recommended that the allowable bearing capacity and associated settlements be verified.

Additionally, should undermining issue prevent the excavation of the near surface loose materials, it is recommended that the allowable bearing capacity be reviewed. However, this will likely result in lower allowable bearing capacities.

4.7. Indicative California Bearing Ratio (CBR)

The indicative California Bearing Ratio (CBR) value of the subgrade material, following earthworks can be estimated from the site investigation results and would be appropriate for preliminary design purposes. The indicative value is shown in the below table:

Table 5 – Indicative CBR Values

Material	Indicative CBR (%)	Compaction
SAND (In situ or Imported Fill)	12	95% of MMDD*

* Implies the maximum dry density ratio using Modified compaction in accordance with AS 1289 5.2.1-2003.

For detailed design and construction of the pavements, it is recommended that the CBR values be verified with laboratory Soaked CBR testing on the anticipated subgrade material.

5. CONCLUSIONS

A site investigation was carried out at the proposed commercial development site to assess the geotechnical conditions. Parameter and design recommendations are incorporated in the body of the report. The following conclusions have been drawn from the site investigation:

- The subsurface soil profile encountered comprised topsoil to 0.1m, medium dense to dense sand fill to 0.5m and underlain by dense to very dense sand to the investigated depth of 2.5m.
- Groundwater or perched water was not encountered across the site to the depth of 2.5m.
- It is considered that the site is suitable for on-site drainage.
- The site can be classified as an equivalent Class “A” in accordance with AS 2870-2011 provided the recommended earthworks are undertaken
- Recommended earthworks include stripping of fill sand and unsuitable materials, excavation of loose materials, proof compaction of the base, placement of engineered fill and compaction of final level.
- Allowable bearing capacity for pad footings range from 100kPa to 220kPa and from 90kPa to 180kPa for strip footings. The estimation of settlement of the footings is limited to 25mm.



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

6. LIMITATION OF FIELD INVESTIGATIONS

This report has been prepared in accordance with generally accepted consulting practice for Shire of Murray using information supplied at the time and for the project specific requirements as understood by Structerre. To the best of our knowledge the information contained in this report is accurate at the date of issue, however it should be emphasised that any changes to ground conditions and/or the proposed structures may invalidate the recommendations given herein.

The conclusions and recommendations in this report are based on the site conditions revealed through selective point sampling, representing the conditions of the site in total, although the area investigated represents only a small portion of the site. The actual characteristics may vary significantly between successive test locations and sample intervals other than where observations, explorations and investigations have been made.

The materials and their geotechnical properties presented in this report may not represent the full range of materials and strengths that actually exist on site and the recommendations should be regarded as preliminary in nature. Allowances should be made for variability in ground conditions and any consequent impact on the development. Structerre accepts no responsibility and shall not be liable for any consequence of variations in ground conditions.

If ground conditions encountered during construction are different to that described in this report, this office should be notified immediately.

For and behalf of

STRUCTERRE CONSULTING

Margie Mortera
 Geotechnical Assistant

Checked By: David Harding
 Employee Title: Geotechnical Supervisor

Authorised By: Luke Young
 Employee Title: Geotechnical Engineer
 BEng Civil (Hons)

Disclaimer

This report is at the request of the addressee and no liability is accepted by Structerre Consulting to any third person reading or relying upon the report, notwithstanding any rule of law and/or equity to the contrary and that this report is strictly confidential and intended to be read and relied upon only by the addressee.

Job #	Revision	Authored	Checked	Authorised
J346153	0	MM	DH	LY



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

7. REFERENCES

Department of Water – Perth Groundwater Atlas

Geological Survey of Western Australia 1:50,000 Environmental Geology Series

AS 1170.4-2007 Structural design actions – Earthquake actions in Australia

AS 1289.6.3.3-1997 Methods of testing soils for engineering purposes – Soil strength and consolidation tests – Determination of the penetration resistance of a soil – Perth sand penetrometer test

AS 1726-2017 Geotechnical site investigation

AS 2870-2011 Residential slabs and footings

AS 3798-2007 Guidelines on earthworks for commercial and residential developments

AS 4055-2012 Wind loads for housing



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

APPENDIX 1 – SITE LOCATION MAP



Note: Showing approximate test locations only

Nearmap dated 03/31/20

LEGEND

BH Borehole

	PROJECT: Sir Ross McLarty Sport Ground - Pinjarra	
	PROJECT #: D237007	CLIENT: Shire of Murray
	JOB #: J346153	
Zemla Pty Ltd (ABN 71 349 772 837) ATF the Young Purich and Higham Unit Trust trading as Structerre Consulting 1 ERINDALE ROAD, BALCATTIA, WA 6021 TEL 9205 4500 FAX 9205 4501 EMAIL: wageotecheng@structerre.com.au	SCALE: NTS	TITLE: Geotechnical Investigation Site Plan
	DATE: 05 May '20	DRAWN BY: MM	CHECKED BY: DH



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray

APPENDIX 2 – SITE PHOTOS



PHOTO 1



PHOTO 2 - Sample taken at BH2

	PROJECT: Sir Ross McLarty Sport Ground - Pinjarra	
	PROJECT #: D237007	CLIENT: Shire of Murray
	JOB #: J346153	
Zemla Pty Ltd (ABN 71 349 772 837) ATF the Young Purich and Higham Unit Trust trading as StrucTerre Consulting 1 ERINDALE ROAD, BALCATT A, WA 6021 TEL 9205 4500 FAX 9205 4501 EMAIL: wageotecheng@strucTerre.com.au	SCALE: NTS	TITLE: Site Photographs
	DATE: 04 May '20	DRAWN BY: MM	CHECKED BY: DH



PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray



Project Sir Ross McLarty Sport Ground - Pinjarra
 Client Shire of Murray

Test No.
BH01

Project No. D237007 Logged By Tony Broadway Machine Soil Retrieval Probe Easting 393452
 Job No. J346153 Date 04/05/2020 Hole Dia. 65mm Northing 6389457

APPENDIX 3 – BORELOGS

Depth	Graphic	Stratum Description	Consistency	PSP Blows/300mm				Samples		Moisture	Water Level
				4	8	12	16	Depth	Type		
		Topsoil:									
		SP: SAND: fine to medium grained, non-plastic, grey (FILL)									
		SP: SAND: fine to medium grained, non-plastic, grey (Bassendean Sand)	MD - D							D to M	
1											
			VD								
										M to W	
2										W	
		Terminated at 2.50 m									
3											

- Remarks**
1. Termination reason: Target depth
 2. Hole stability:
 3. Samples taken: None
 4. Co-ordinate system: WGS 84

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Project Sir Ross McLarty Sport Ground - Pinjarra
Client Shire of Murray

Test No.
BH02

Project No. D237007 **Logged By** Tony Broadway **Machine** Soil Retrieval Probe **Easting** 393475
Job No. J346153 **Date** 04/05/2020 **Hole Dia.** 65mm **Northing** 6389424

Depth	Graphic	Stratum Description	Consistency	PSP Blows/300mm				Samples		Moisture	Water Level
				4	8	12	16	Depth	Type		
		Topsoil:									
		SP: SAND: fine to medium grained, non-plastic, grey (FILL)									
		SP: SAND: fine to medium grained, non-plastic, grey (Bassendean Sand)	MD - D							D to M	
1											
			VD								
										M to W	
2											
										W	
		Terminated at 2.50 m									
3											

- Remarks**
1. Termination reason: Target depth
 2. Hole stability:
 3. Samples taken: None
 4. Co-ordinate system: WGS 84

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 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 285 as trustee for the Young Purich and Higham Unit Trust trading as Strucrerre Consulting Engineers



Project Sir Ross McLarty Sport Ground - Pinjarra
Client Shire of Murray

Test No.
BH03

Project No. D237007 **Logged By** Tony Broadway **Machine** Soil Retrieval Probe **Easting** 387054
Job No. J346153 **Date** 04/05/2020 **Hole Dia.** 65mm **Northing** 6393943

Depth	Graphic	Stratum Description	Consistency	PSP Blows/300mm				Samples		Moisture	Water Level
				4	8	12	16	Depth	Type		
		Topsoil:									
		SP: SAND: fine to medium grained, non-plastic, grey (FILL)									
		SP: SAND: fine to medium grained, non-plastic, grey (Bassendean Sand)	D - VD							D to M	
1											
										M to W	
2											
										W	
		Terminated at 2.50 m									
3											

- Remarks**
1. Termination reason: Target depth
 2. Hole stability:
 3. Samples taken: None
 4. Co-ordinate system: WGS 84

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 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 285 as trustee for the Young Purich and Higham Unit Trust trading as Strucrerre Consulting Engineers

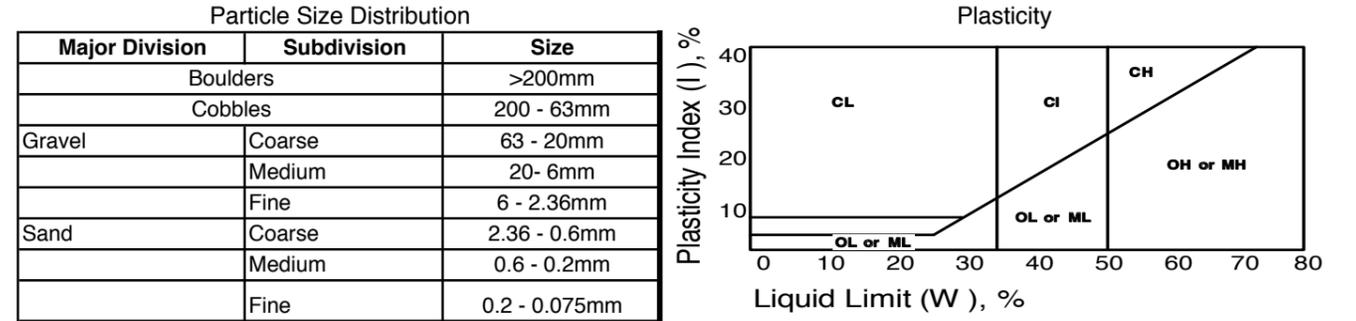


PROJECT No: D237007
 JOB No: J346153
 PROJECT ADDRESS: Sir Ross McLarty Sport Ground – Pinjarra
 CLIENT: Shire of Murray



- Residential
- Geotechnical
- Commercial & Infrastructure
- Inspect & Investigate
- Energy Assessment
- Environmental

BORELOG TERMINOLOGY



Consistency of Cohesive Soils

Term	Undrained Strength Su (kPa)	Field Guide
Very Soft	< 12	Exudes between the fingers when squeezed in hand
Soft	12 - 25	Can be moulded by light finger pressure
Firm	25 - 50	Can be moulded by strong finger pressure
Stiff	50 - 100	Cannot be moulded by Fingers. Can be indented by thumb.
Very Stiff	100 - 200	Can be indented by thumb nail
Hard	> 200	Can be indented with difficulty by thumb nail.
Friable	-	Crumbles or powders when scraped by thumbnail

Consistency/Density of Non-Cohesive Soils

Term	Density Index (%)	SPT "N" Value Comparison	Moisture Content
Very Loose	< 15	0 - 4	D Dry
Loose	15 - 35	4 - 10	M Moist
Medium Dense	35 - 65	10 - 30	W Wet
Dense	65 - 85	30 - 50	S Saturated
Very Dense	> 85	> 50	

Minor Components

Term	Assessment Guide	Proportion of Minor Component In:
Trace	Presence just detectable by feel or eye, but soil properties little or no different to general properties of primary component	Coarse grained soils: < 5 % Fine grained soils: <15%
With	Presence easily detected by feel or eye, soil properties little different to general properties of primary component	Coarse grained soils: 5 - 12 % Fine grained soils: 15 - 30%

Soil Legend

<input type="checkbox"/> FILL	<input type="checkbox"/> CLAY	<input type="checkbox"/> GRAVEL	<input type="checkbox"/> CONCRETE
<input type="checkbox"/> TOPSOIL	<input type="checkbox"/> SILT	<input type="checkbox"/> LIMESTONE	<input checked="" type="checkbox"/> COMBINATIONS
<input type="checkbox"/> PEAT	<input type="checkbox"/> SAND	<input type="checkbox"/> BEDROCK	eg: Clay, Silty, Sandy

USCS

GW Well graded gravel	SC Clayey sand	OL Organic low plasticity silt	CL Low plasticity clay
GP Poorly graded gravel	SM Silty sand	ML Low plasticity silt	CI Intermediate plasticity clay
SW Well graded sand		MH High plasticity silt	CH High plasticity clay
SP Poorly graded sand		OH Organic high plasticity silt	PT Peat

DOC:GE:3.003

APPENDIX 4 – BORELOG TERMINOLOGY

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APPENDIX 3

OTHER REPORTS

- 01 PCG MEETING - INDUCTION MEETING MINUTES
(DATED 19/05/2020)
- 02 FUNCTIONAL USE REQUIREMENTS
- 03 FEEDBACK & CHANGE LOG

10.01 PCG MEETING - INDUCTION MEETING MINUTES

The following minutes summarise the items discussed between Paul Edwards from Site Architecture Studio and some relevant personnel from the Shire of Murray at the PCG Induction Meeting Minutes..

Project : Shire of Murray – 2 change room Pavilions Concept Design
Meeting : PCG Meeting 1 – Induction Meeting
Time / Date: 1.20 – 3pm. 19 May 2020
Location: Shire of Murray



Attendees:
 Marlene Renton, Shire of Murray - Coordinator Sport and Recreation (Lead) MR
 Alan Smith, Shire of Murray - Director Infrastructure Services AS
 Dale Burton, Shire of Murray - Manager Building Services DB
 Paul Edwards Site Architecture Studio SAS

Apologies: Nil

MEETING NOTES (REV 1)

Item	Subject	Action
1.0	Introductions & communications Submission feedback - provided by RM.	
1.1	PCG Meetings / User group representation / participation, etc. Will be the people in the room and MR will be liaising with the usergroups directly. User groups wont have representation on the PCG and SITE will only be required to present to the usergroups if required (TBC).	Note
1.2	The new facilities will be on a seasonal hire or license (not a lease and non-exclusive club use) and the Shire will manage the facility.	Note
2.0	Project Objectives - MR	
	a) the design of a standard changeroom and kiosk facility to meet national sporting code facility guidelines for AFL, cricket, and soccer, and sporting club needs; AFL junior will have full use of kiosk and facility, cricket will be less use.	Note
	b) the provision of a total project cost estimate to build the Facility at two locations namely, a. Sir Ross McLarty Oval 3 b. South Yunderup Oval; and	Note
	c) (c) determine if there are cost savings associated with constructing both Facilities concurrently, approx. \$30-50k possible benefit estimated currently. Objectives discussed generally and confirmed no divergence / change.	Note
	Club Consultation – overview provided by MR Plan provided and commented on by the clubs was for a facility built in City of Mandurah (Holton Connor Architects). This has formed the basis for the brief yet the configuration can be changed to suit the clubs and Shire’s requirements.	Note
3.0	Scope : Brief – Standard Change room facility	
	Schedule of Areas –	
3.1	First Aid is not required (seniors), see general changes to SOA document	Note
3.2	External Store - Dimensions to be confirmed by Clubs (to suit any specific equipment requirements, i.e. goal posts, pads, etc).	MR
3.3	Kitchen - Confirm if Dry Store required or more space and tall lockable cupboards in kitchen preferred.	MR

Project : Shire of Murray – 2 change room Pavilions Concept Design
Meeting : PCG Meeting 1 – Induction Meeting
Time / Date: 1.20 – 3pm. 19 May 2020
Location: Shire of Murray

Item	Subject	Action
	Confirm what equipment is likely to be used by the clubs in the kitchen for calculating power load requirements and designating space. i.e. Cooking, heating, fridges (size and type), etc.	MR
3.4	Bins – locate in car park in separate enclosure. Suitably secured / roofed.	SAS
3.5	Veranda and roof extension – allow for a roofed extension in the concept plans which can be potentially infilled to create a function / social space in t	SAS / QS
3.3	inclusions / exclusions, refer to SOA comments	Note
3.4	Parking and access (vehicle and pedestrian) considerations and requirements. Include provision in Site plan for wheel chair access and deliveries and make an allowance in the cost estimates.	SAS
3.5	Buildings to be brickwork construction preferred.	SAS
3.6	Comms / Security – a dedicated comms room is not required. Comms will be required for any future electronic / wireless control for lighting / equipment and provision in the building should be made for this, i.e. adjacent the BMSB. There will be no dedicated security system for the building(s)	SAS / Elec Note
4.0	Deliverables	
4.1	Reporting requirements on the 2 different sites. Single report with separate site information provided is acceptable.	SAS
4.2	Cost reporting should include provision for Total Project Costs and have a separate line items for the following: parking allowance, landscaping / irrigation works, signage / wayfinding. Note there are no Shire costs allowances required to be included in the reports.	SAs/ QS Note
5.0	Program	
5.1	Draft Program tabled. Provide 3 weeks for user group review in lieu of 2. PCG meetings for future TBC depending on need. Shire have indicated critical to achieve final report for August Council meeting to achieve Sept 15th DSR funding grant application deadline. SAS to improve on program where possible.	SAS Note Note SAS
6.0	Services	
6.1	Electrical - Sub consultant to provide review and report. Shire to provide additional site loads from existing electrician contractor. Contractor details are Michael Badenhorst from MDE Electrical: michael@mdeelectrical.com.au 95313576 or 0405 498 470	Note MR
6.2	Hydraulic / Fire – inspection carried out on 18th May, report to follow. Buildings will be under 500sqm so Hydrant coverage is unlikely required. Water and sewer service location and connections to be determined and costed.	Note SAS

Project : Shire of Murray – 2 change room Pavilions Concept Design
Meeting : PCG Meeting 1 – Induction Meeting
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Project : Shire of Murray – 2 change room Pavilions Concept Design
Meeting : PCG Meeting 1 – Induction Meeting
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Location: Shire of Murray

Item	Subject	Action
6.3	Mechanical - minimal work but report to consider ventilation requirements for wet areas, esp Umpries cubicles and Wet areas, Kiosk, etc.	SAS
7.0	Other	
7.1	Banskia Grove (Grandis Park) plan and section tabled (columnless) and generally liked by the Shire. SAS to consider this or similar trussed roof with skylights for this pavilion design.	Note SAS
7.2	Proposed new Ring road for SRMO program / details to be investigated and advice provided to SAS	MR / AD
7.3	Tired Seating (2 x rows of limestone blocks or similar) raised by SYO clubs. Possible future inclusion but not to be included in this design phase.	Note
7.4	Provide SAS with any fixture and fitting standards the Shire wish to include i.e. toilet cisterns, pans, seats, PTD's , Toilet Roll holders, Mirrors, hand basins (wall hung, etc.	DB
7.5	<p>Queries from Briefing Information (SAS Queries)</p> <ul style="list-style-type: none"> Confirming preferred option for SRMO to be Option B from Project Brief Document (notated as Option C in Stakeholder Consultation Summary). Option C (middle one) What is the design capacity for the facilities? Need to confirm the change room facilities are compliant with NCC. – numbers of showers / WC's – to district football (25) Hard copy of predicted usage (patronage) provided by the Shire) Assume Club store is to be shared depending on seasonal reqs? Or need all year round store? Dedicated store for each user group AFL JNR and Cricket SRMO - PCC mention raising building to create better viewing angle. Is this to be investigated or provision of fill included in the budget reporting. Yes, 0.5 – 1m to be investigated. SRMO – Masterplan shows playground near building. Assume playground location to be considered in design or just commentary in final report. Include in site planning of preferred location to suit access, parking, building, supervision, etc. SYO – Masterplan shows playground at bottom of carpark against bowling and tennis courts. Site plan to consider a better (preferred) location with respect to users of the oval and facility (refer Item 21 – BBQ/shelters/seating of masterplan). SYSR – Assume demolition of current transportable, after new works? Includes this in the costings or will this be by the Shire under separate budget or by clubs. SYO – existing toilets pavilion to be retained during 	Note Note Note SAS SAS SAS SAS / QS

Item	Subject	Action
	<p>works and demolition costs to be included in Concept Report costings.</p> <ul style="list-style-type: none"> Toilets to be for public use as well, i.e. accessibility from external ? – Only UAT? 2 x toilets - General public use on game days, accessible externally. Preference for 2 x UAT but can be 1 UAT and 1 standard. Any First Aid facilities required? Separate or in umpires change? No. Umpires to be equal gender friendly. Gender neutral provisions apply. Assumed 2 of Changerooms, UATs & Stores reqd. Only 1 x UAT required. Concept Floor Plan provided will be used primarily as scoping document. SAS to investigate floor plans to best suit needs of stakeholders for the buildings. Noted. Configuration of plan provided is required. Budget figures to be reviewed by QS. – not applicable as they were for a transportable / prefabricated building. 	Note SAS SAS SAS Note
7.6	Geotechnical information – Shire is to issue this when received.	MR

Distribution: All Present, Sub consultants: Elec, Mech, Hyd and QS.

Author: Paul Edwards Date: 21.05.20 (REV 1 – 22.05.20)

SIR ROSS MCLARTY OVAL 3 AND SOUTH YUNDERUP CHANGEROOMS CONCEPT DESIGN

CLUB QUESTIONNAIRE 1

10.02 FUNCTIONAL USE REQUIREMENTS

Clubs to complete and return to Marlene Renton at marlene.renton@murray.wa.gov.au

Closing date: Monday 25 May 2020

Please type directly into the document, save and email electronically.

AREA	ITEM	ANSWER – PINJARRA Cricket Club	ANSWER MDRSC (Soccer)	Pinjarra Junior Football Club
Storeroom	Dimensions – provide height & width of larger items you will be storing such as goal post, goals, trolleys We need to ensure your equipment fits the openings and the storeroom	SCORE BOARD IS APPROX 1M X 1M KIT BAGS 1M X .5M TRESTLE TABLES APPROX 1.5 X .6 GPOs in stores	6 x Fold up goals – largest 2m high by 5m long	PVC Goal posts= approx. 3meters The need for a trailer will probably be obsolete. Pull trolley would suffice. Current Juniors storage shed is approx. 7 x 4. All of this space is used.
Kiosk - Food	Attach copy of proposed menu (if you have one)	N/a	N/A	
	Will you be cooking chips (deep frying)	Yes	Yes	Yes
	Will you be cooking burgers / bacon / eggs etc	Yes	Yes	Yes
	Will you be preparing fresh food eg salad / sandwiches	Yes	Yes	We prep fresh salads for our burgers etc
Kiosk – Appliances	Will you have a coffee machine	Yes	Yes	Yes
	Would you like a wall mounted boiling water unit (hot drinks)	Yes	Yes	A wall mounted boiling water unit would be beneficial as we make heaps of milo's and they take up time on coffee machine
	Will you have a baen marie	Yes	Yes	Yes
	Will you have a bench mounted chip fryer	Yes	Yes	No we would prefer a free standing chip fryer as the bench ones are too small for the amount of chips we go through
	Will you have a pie warmer	Maybe	Yes	Yes
	How many fridges will you have eg domestic fridge for food, glass display fridge for cold drinks	1-2	2 Fridges Domestic Fridge/Freezer Glass Display drinks fridge	1 fridge for food, 1 glass display
	Will you have a freezer	Yes	As above	Yes
	Any other appliances? Kettles, sandwich makers, hot dog machines	KETTLE THERMOMIX SLOW COOKERS MICROWAVE	Sandwich maker Microwave Slow cooker Dishwasher	Sandwich maker(salamander) Gas stove hot plates (boiling) Hot plate eg hamburgers etc Slow cooker Microwave
Will you require an oven and if so for what foods	Yes To reheat To cook food for bain marie in bulk such as potato bake etc.	Pies, pizzas, casseroles, wedges, vegan food.	Yes – heating pies, baking	
Kiosk – Storage	Would you prefer a dry store (pantry) or extra kitchen room with more cupboards	Extra kitchen room	Cupboards please	Dry Store

A list of appliances you will use is important so that we can determine the power draw (load) required, as well as the location and type of GPOs. A Fit Out list will be compiled during the next 8 weeks.

10.03 FEEDBACK & CHANGE LOG

Item #	Description of Change	SITE Arch Comments	Status	Action
SRM03 Site Planning				
SRM03 - 1	Cricket Net Orientation	Cricket Nets moved to south of facility in same alignment as existing cricket nets for Main Oval as per advice from SoM based on meeting with Pinjarra Cricket Club	Closed	nil
SRM03 - 2	Building Orientation - Divert Bore Mains	SoM confirmed SAS recommendation to include an allowance of \$10k in the cost estimate to divert bore with changeroom building to be located in preferred location.	Closed	SAS to include \$10k allowance for bore diversion in QS cost estimate
SRM03 - 3	Building Orientation - Proposed Option a	SoM confirmed preference not to pursue alternative location	Closed	nil
SRM03 - 4	Building Orientation - Proposed Option b	SoM confirmed preference not to pursue alternative location	Closed	nil
SRM03 - 5	Lighting Tower Locations	Design team have provided indicative location for Tower Lights for the provision of electrical conduits including use of existing conduits where applicable.	Closed - Sketch included in updated concept report	nil
SRM03 - 6	Electrical Cost reduction options	As per separate advice, the facility as it stands without flood lighting would have existing SMSB without an upgrade. SoM confirmed option that the upgrade to the SMSB be upgraded when the flood lighting is proposed to be installed.	Closed	nil
SYO Site Planning				
Nil				
Building				
BUILD - 1	Colours of Façade	Colours shown indicatively based on Sports Clubs Colours. As this is a nil cost change, suggest colours be resolved in detailed design of project.	Closed	SAS to note colours to future resolution in report
BUILD - 2	Exterior Design	Noted no changes required as per feedback provided	Closed	No changes required to external design
BUILD - 3	Flip Storeroom	SoM confirmed SAS recommendation to retain storerooms to rear due to accessibility of the UATs & Umpires Change in particular in terms of safety and passive surveillance of these facilities.	Closed	nil
BUILD - 4	Roller Doors to Storerooms changed to max height and width	Noted - There are cost implications as you get a larger roller door. SAS would recommend basing on a standard required size. (3m max width x 2.4m high)	Closed	SAS have included roller door in amended design
BUILD - 5	Kitchen Island Bench	Noted - This level of detail will be subject to resolution in the detailed design of the project however will be noted as a requirement in the concept report.	Closed	SAS to note in report
BUILD - 6	Hot Plate to be griddle type	Noted - This level of detail will be subject to resolution in the detailed design of the project however will be noted as a requirement in the concept report.	Closed	SAS to note in report
BUILD - 7	Oven Location to rear wall.	Noted. This will mean the cooking will have limited bench space and is separated from the prep area, however SAS have actioned in updated report.	Closed	SAS have actioned in updated concept report

BUILD - 8	Remove Pantry/ Tall Cupd	This is subject to resolution in future design stages. SAS Recommend all dry food is stored in cupd to reduce exposure to insects etc. SAS would recommend at a minimum that caged dividers be installed to store space to account for differing store requirements.	Closed	Store to include caged dividers.
BUILD - 9	Store Space as Dry Store	Noted will use for dry store until needed for function. However SAS recommend that pantry/ dry store provided for future. It should also be considered that this space could be used to store bbq/ outdoor chairs/ tables. SAS recommend caged dividers to dry store to allow for differing store uses.	Closed	Store to include caged dividers.
BUILD - 10	Servery	Noted - SAS recommend retaining both serveries to allow for future, in particular requirement for liquor licensing and separate service of alcohol vs food.	Closed	No action to draft concept design
BUILD - 10	UAT within each Changeroom	This would be excessive for a grassed sports facility (vs indoor rec) considering there are 2 x UATs (one with shower) provided within facility. To add an additional UAT with shower to each changeroom would mean an extra 1.5m onto the end of the building (and thus significant cost). Note - as currently designed is NCC compliant and in line with other changeroom facilities designed by SAS. Also, the changeroom spaces themselves have been designed to be universally accessible for parents/ coaching staff (in wheelchairs) as required in the current design. SoM confirmed as per current design is acceptable pending advice from Shires Disability Access and Inclusion Committee	Closed	SoM to confirm if any change required following feedback from Shires Disability Access and Inclusion Committee
BUILD - 11	Entry Floor to Changeroom Location	Changeroom layout has been amended with changerooms running vertically rather than horizontally. This allows for access from both the verandah/ walkway side of the changeroom depending on preference.,	Closed	SAS has updated in latest Concept Design Report



Sir Ross McLarty Pavilion and South Yunderup Pavilion Concept Designs and Cost Reduction Options



Table 1: Concept Design Costings Including Reduced Footprint

4 August 2020

SHIRE OF MURRAY - NEW CHANGEROOMS

Schematic design cost estimate	SRMO 1	SRMO 2	SYO 1	SYO 2	SYO 3
	Changerooms building	\$ 950,000.00	\$ 860,000.00	\$ 950,000.00	\$ 860,000.00	$ 785,000.00
External works and services	\$ 295,000.00	\$ 285,000.00	\$ 320,000.00	\$ 310,000.00	\$ 305,000.00
Construction Cost (excl GST)	\$ 1,245,000.00	\$ 1,145,000.00	\$ 1,270,000.00	\$ 1,170,000.00	\$ 1,090,000.00
Design and construction contingency (10%)	\$ 125,000.00	\$ 115,000.00	\$ 127,000.00	\$ 117,000.00	\$ 109,000.00
Construction Cost + Contingency (excl GST)	\$ 1,370,000.00	\$ 1,260,000.00	\$ 1,397,000.00	\$ 1,287,000.00	\$ 1,199,000.00
Consultant fees (10%)	\$ 137,000.00	\$ 126,000.00	\$ 140,000.00	\$ 129,000.00	\$ 120,000.00
Loose furniture and equipment	excluded	excluded	excluded	excluded	excluded
Council fees and charges	excluded	excluded	excluded	excluded	excluded
ESD initiatives (solar, greywater, etc.)	excluded	excluded	excluded	excluded	excluded
Cost escalation to tender (beyond 2020)	excluded	excluded	excluded	excluded	excluded
Total Project Cost (excl GST)	\$ 1,507,000.00	\$ 1,386,000.00	\$ 1,537,000.00	\$ 1,416,000.00	\$ 1,319,000.00

Notes

- * This cost estimate is preliminary only based on Site Architects' design drawings, report and preliminary services consultant input
- * In our opinion, any cost advantages associated with the projects being built concurrently are negligible based on the following:
 - There would be no foreseeable reduction in site costs (establishment, amenities, services, temp fencing, insurances, clean up, etc.)
 - There would be no foreseeable reduction in supervision costs unless it is acceptable to have split (part-time) supervision on each project.
 - The projects are large enough as standalone projects to ensure competitive pricing (no foreseeable further discounting in the current market)

Projects

SRMO 1 - with covered spectator

SRMO 2 - without covered spectator

SYO 1 - with covered spectator

SYO 2 - without covered spectator

SYO 3 - without covered spectator (reduced footprint)

Table 2: SRMO Reduced Footprint - Potential Cost Savings

Building Costs – Reference: Concept Report - Owens Consulting Quantity Survey

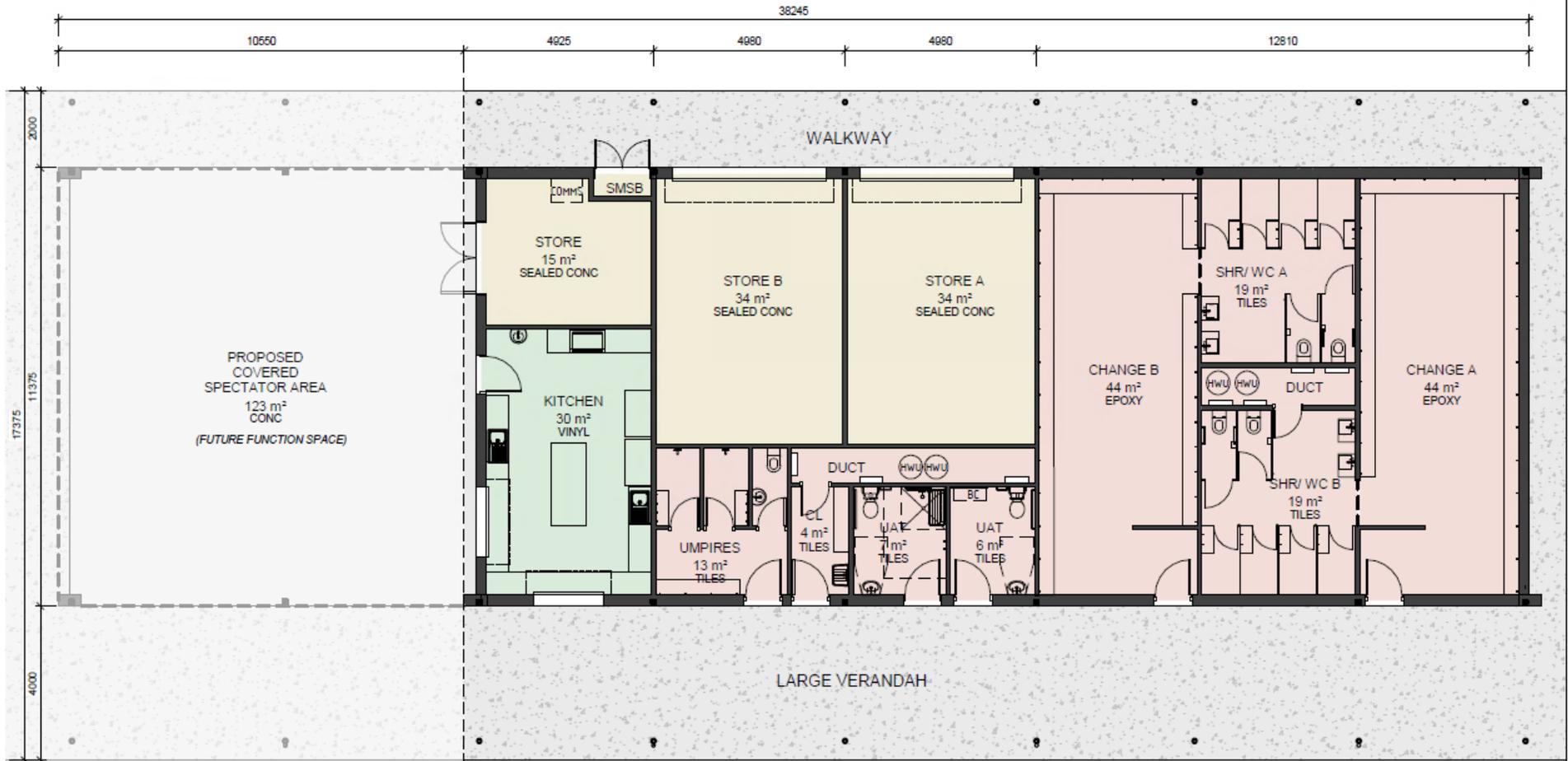
Item No	Item	QS	Reduction	New budget
433	Caged divider storeroom - remove	\$ 2,000	\$ 2,000	\$ -
436	Wall tiling kitchen - reduce	\$ 6,600	\$ 2,600	\$ 4,000
447	Kitchen stainless steel fitout - reduce	\$ 13,500	\$ 3,500	\$ 10,000
452	Hand dryers - remove	\$ 2,000	\$ 2,000	\$ -
455	Kitchen equipment - reduce	\$ 10,000	\$ 2,000	\$ 8,000
470	Exposed aggregate concrete paving - alternate material	\$ 19,800	\$ 9,800	\$ 10,000
181	Re-align existing footpath - remove, not required	\$ 9,000	\$ 9,000	\$ -
182	Demolish footpath - remove, not required	\$ 6,000	\$ 6,000	\$ -
184	Bin store enclosure - remove, by Shire	\$ 15,000	\$ 15,000	\$ -
185	Re-align existing fencing - remove, not required	\$ 4,000	\$ 4,000	\$ -
		\$ 87,900	\$ 55,900	\$ 32,000

Table 3: Pavilion Cost Saving Options

Design Option	QS	Option 1 Reduced Footprint (-\$75,000)		Option 2 Reduced Footprint (-\$75,000) + Construction Reductions (- \$56,000)	
		Revised	Savings	Revised	Savings
SRMO1 With covered area	1,507,000	1,409,000	98,000	1,342,000	165,000
SRMO2 Without covered area	1,386,000	1,288,000	98,000	1,226,000	166,000
SYO1 With covered area	1,537,000	1,441,000	97,000	1,373,000	164,000
SYO2 Without covered area	1,416,000	1,319,000	97,000	1,251,000	165,000

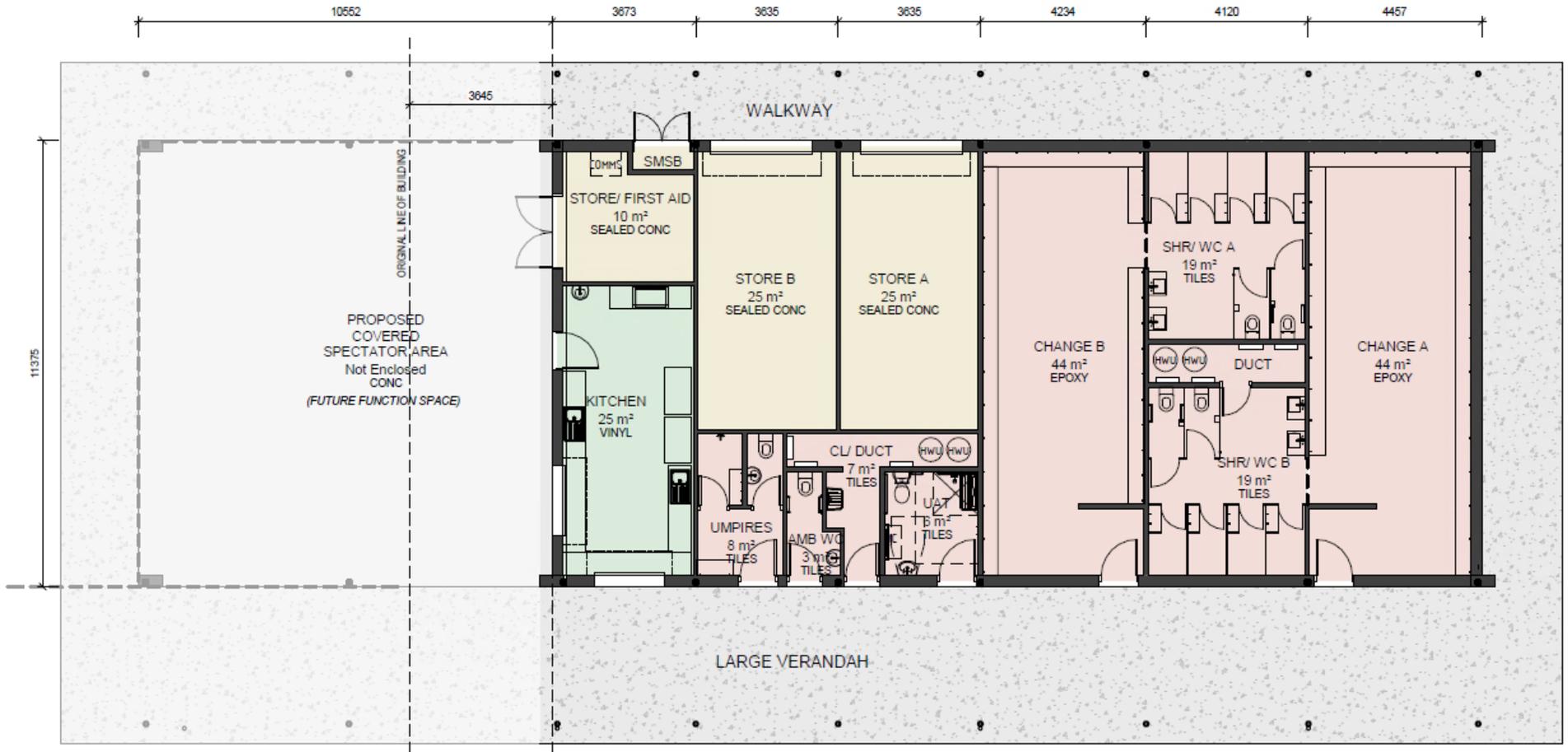
Note that the 10% contingencies have been applied to each option which has increased the savings.

Full Floor Plan



FLOOR PLAN - CONCEPT
 1 : 100

- CHANGEROOM AMENITIES
- KIOSK
- STORE

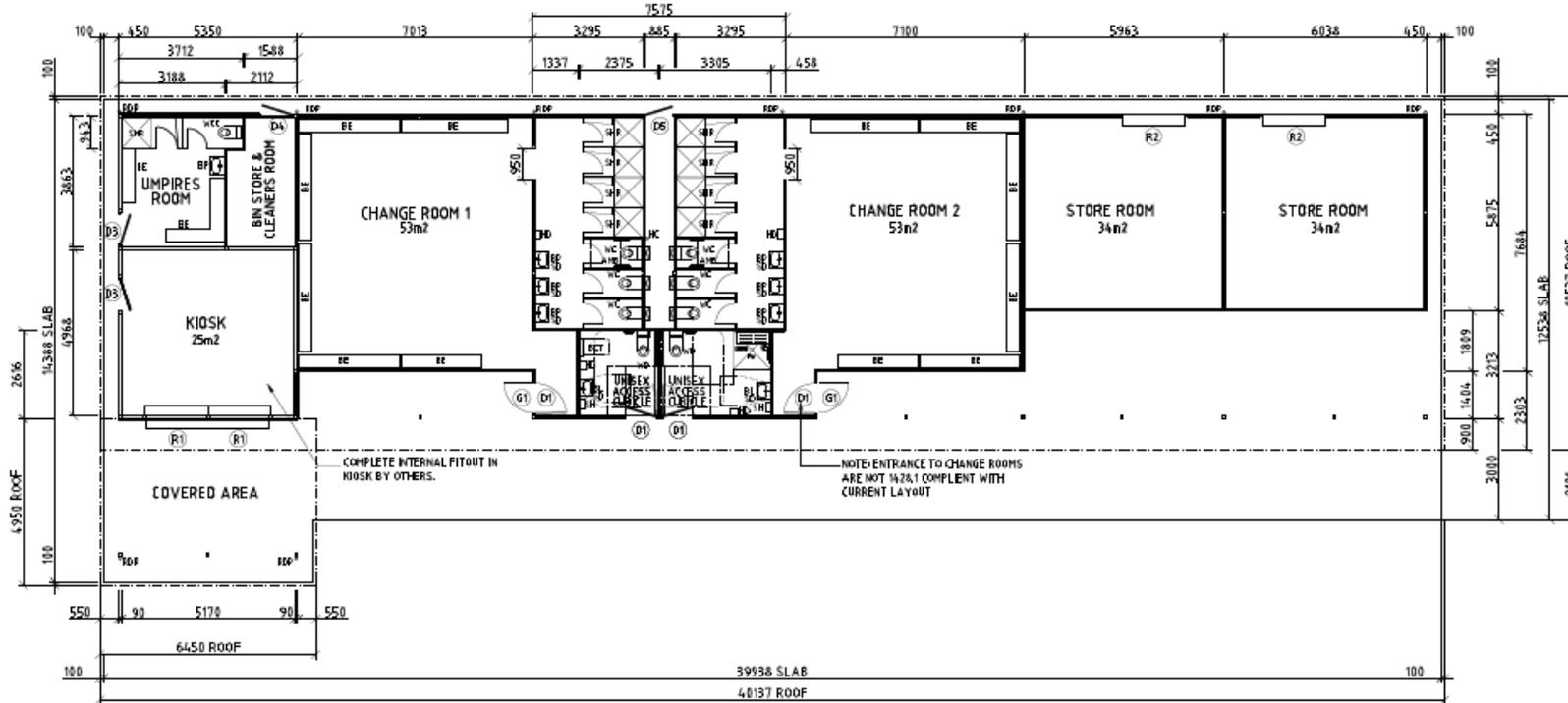


FLOOR PLAN - CONCEPT
1 : 100

- CHANGEROOM AMENITIES
- KIOSK
- STORE

Item 11.10
Ordinary Council Meeting 27 August 2020
Landmark Pro – Modular design: Prefabricated Steel frame and cladding

ALL DIMENSIONS IN MILLIMETRES - DO NOT SCALE



FLOOR PLAN
SCALE 1:150

DISCLAIMER:
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REVISION	DATE	DRAWN BY
6	-	-
5	-	-
4	-	-

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CLIENT NAME
CCS STRATEGIC
PROJECT
SOUTH YUNDERUP OVAL & SIR CHANGROOM FACILITIE

Outstanding Council Resolutions - August 2020



Open Resolutions/Items

Name	Owner	Start Date	End Date	Status	Complete %	Recommendation/Council Decision	Progress Comment	Last Updated
OCM 23 July 2020 - Item 11.10 Approval of Innovation Voucher Scheme	David Arkwright, Dean Unsworth	23/07/2020		In Progress	20	<ol style="list-style-type: none"> 1. supports the establishment of the Enterprise Support Grant Fund (ESGF) between DevelopmentWA and the Shire of Murray in an amount of \$950,000 (ex-GST), the funding to be contributed by DevelopmentWA; 2. accepts the \$2.5 million (ex-GST) from the State Government towards the ESGF; 3. acknowledges that a further \$400,000 (ex-GST) is to be funded by way of Agri Innovation Precinct rent and State and Federal Grant Applications towards the ESGF; 4. endorses the Memorandum of Understanding in Appendix 16 be signed between DevelopmentWA and the Shire of Murray, with the Chief Executive Officer authorised to sign; 5. supports the Enterprise Support Grant Fund on the condition that industry matches the funding on a 1:1 basis; and 6. that the Enterprise Support Grant Fund, is then managed and implemented in accordance with the Annexures to the MoU. 	Meeting with DevWA scheduled for 19 August to discuss all arrangements	David Arkwright Aug 13, 2020 11:30 AM
OCM 23 July 2020 -Item 11.9 Request for Self-supporting Loan & Funding Contribution towards Pinjarra Bowling and Recreation Club New Bowling Green	Marlene Renton, Leanne McGuirk	23/07/2020		In Progress	10	<p>That Council:</p> <ol style="list-style-type: none"> 1. supports the construction of a new 40m x 40m synthetic green and supporting infrastructure at the Pinjarra Bowling and Recreation Club in 2020/21 at a cost of \$296,368 ex GST; 2. endorses a Shire cash contribution of \$26,500 (ex GST) from the Asset Enhancement Reserve. 3. endorses a self-supporting loan from WA Treasury Corporation via the Shire up to the amount of \$120,000 over 5 years; and 4. endorses the clubs funding submission to the Department of Local Government Sport and Cultural Industry 'Community Sport and Recreation Facility Fund' Small Grant Round 2, 2020/21, and rank the project 1 from 1. 		Leanne McGuirk Aug 13, 2020 11:30 AM
OCM 25 June 2020 - Item 16.1 Confidential Report – Business Plan Outcome and Sale of Lots 301 to 305 Dewar Road and Lots 306 to 310 Beau Sovereign Court, North Dandalup (Formerly Lot 102 Lakes Road)	Robert Marlborough	25/06/2020		In Progress	50	That Council: endorses the Officers Recommendation included in the report for Item 16.1 provided under confidential cover.	Finalised deposited plan lodged with Landgate. Waiting for section 70A notifications to be finalised. Quotes being sourced for settlement and acquisition of created titles and for Auction. Written request submitted to DPLH to be granted management of Lot 311 for the purposes of public recreation, Following a quote process engaged with McLeods Barristers and Solicitors to finalise land transaction for the release of new titles and lodgement of Section 70A Notification. Quotes being sourced to conduct auction of lots.	Robert Marlborough Aug 11, 2020 03:52 PM

Name	Owner	Start Date	End Date	Status	Complete %	Recommendation/Council Decision	Progress Comment	Last Updated
OCM 25 June 2020 - Item 11.14 Murray Aquatic & Leisure Centre – Licence Proposal – Pre and After Hours and School Holiday Care Program – A1 Fun Pty Ltd	Ben Jordan	25/06/2020		In Progress	50	That Council: 1. approves for the Chief Executive Officer to negotiate, prepare and endorse a new Licence with A1 Fun Pty Ltd for the use of portions of the Murray Aquatic & Leisure Centre, subject to the Minister of Lands consent, to a. provide a School Holiday Care programme with a hire fee of \$105 per day (ex GST) Monday to Friday, during school holidays, public holidays excepted; b. provide a Before School Care with hire fee of \$90 per week; c. provide an After School Care programme with a hire fee of \$155 per week; d. or provide all three services for a hire fee of \$300 per week; 2. includes profit share arrangements for School Holiday, Before or After School Care Services at a rate of 20% of the profit generated from the services being returned to the Shire to assist with Murray Aquatic & Leisure Centre improvements, with a further 20% of profit being allocated to the community. 3. includes a commencement date of 6 July 2020; and 4. the licence term being 2 years with an option of a further two years, subject to the approval of the Chief Executive Officer.	Draft agreement prepared by governance, Final review of document in progress prior to sending for signing. Assessing implications of amendments to potential venue use changes in the future (Basketball Association & relocation of PSHS) to ensure availability is unaffected and no adjustments are required to agreement.	Ben Jordan Aug 11, 2020 03:25 PM
OCM 25 June 2020 - Item 11.10 Murrayfield Airport Business Case	David Arkwright	25/06/2020		In Progress	10	That Council: 1. acknowledges completion of the Murrayfield Airport Business Case and Investment Prospectus, and agrees to release the documentation to strategic stakeholders subject to the approval of the owners of Murrayfield Airport; 2. agrees to the Shire continuing to liaise with the owners of Murrayfield Airport to help facilitate investment by both the public (State and Australian governments) and private sectors; 3. agrees to the Shire facilitating discussions between the owners of Murrayfield and the Golden Group (or other appropriate land holding) regarding an alternative location for the future Murrayfield development; and 4. undertakes public consultation and liaison with strategic stakeholders on the Murrayfield Airport Business Case and provides a report back to Council for consideration.	Meeting currently being organised with the Golden Group. Project partners discussing community engagement	David Arkwright Jul 10, 2020 10:31 AM
OCM 25 June 2020 - Item 11.8 Application for Rating Exemption - Access Housing Australia Ltd	Tracie Unsworth	25/06/2020		In Progress	50	That Council decline Access Housing Australia Ltd's request to apply the rates exemption on their owned and leased properties retrospectively to the financial year ended 30 June 2019.	Jackson McDonald, lawyers for Access Housing, advised of Council decision. A meeting has been scheduled with Duane Moroney from Access Housing on 14 July to discuss with the CEO & Shire President.	Tracie Unsworth Aug 6, 2020 11:23 AM

Name	Owner	Start Date	End Date	Status	Complete %	Recommendation/Council Decision	Progress Comment	Last Updated
OCM 25 June 2020 - Item 11.6 Amendment No. 316 to Town Planning Scheme No. 4 - Proposed Equestrian Zone, Lots 462 and 502 South Western Highway, Blythwood	Rod Peake	25/06/2020	30/09/2020	In Progress	50	That Council: 1. pursuant to Section 75 of the Planning and Development Act 2005 resolves to prepare Amendment No 316 to the Shire of Murray Town Planning Scheme No. 4 to rezone portion of Lot 462 and Lot 502 South Western Highway, Blythwood, from Rural and Private Recreation to Special Use – Equestrian, with a range of suitable conditions that limit the use of the site to equestrian related activities and provide for the orderly progressive development of the land, including the need for a structure plan to guide development. 2. pursuant to Regulation 35(2) of the Planning and Development (Local Planning Schemes) Regulations 2015 specifies that the Amendment is a standard amendment as it is considered not to comfortably fall within either the complex or basic amendment categories and will not result in any significant environmental, social, economic or governance impacts on land within the Scheme area; 3. authorises the Shire President and Chief Executive Officer to sign and seal the scheme amendment documents prepared to the satisfaction of the Director Planning and Sustainability; 4. authorises the amendment to be forwarded to the Environmental Protection Authority for consideration of the need for environmental assessment in accordance with section 81 of the Planning and Development Act; and 5. following compliance with sections 81 and 82 of the Act, proceeds to advertise the amendment for a period of at least 42 days.	Scheme Amendment documents prepared.	Rod Peake Aug 3, 2020 08:18 AM
OCM 25 June 2020 - Item 11.2 Significant Tree Protection	Gemma Iseppi	25/06/2020	30/09/2020	In Progress	50	That Council: 1. pursuant to Section 75 of the Planning and Development Act 2005, resolves to prepare Amendment No 315 to the Shire of Murray Town Planning Scheme No. 4 to introduce provisions associated with significant tree protection, generally in accordance with that set out in Appendix 4; 2. pursuant to Regulation 35(2) of the Planning and Development (Local Planning Schemes) Regulations 2015 specifies that the Amendment is a standard amendment as it is considered not to comfortably fall within either the complex or basic amendment categories and will not result in any significant environmental, social, economic or governance impacts on land within the Scheme area; 3. authorises the Shire President and Chief Executive Officer to sign and seal the scheme amendment documents prepared to the satisfaction of the Director Planning and Sustainability; 4. authorises the amendment to be forwarded to the Environmental Protection Authority for consideration of environmental assessment in accordance with section 81 of the Planning and Development Act; and 5. following compliance with sections 81 and 82 of the Act, proceeds to advertise the amendment for a period of at least 42 days.	Documentation prepared	Rod Peake Aug 3, 2020 08:18 AM
OCM 28 May 2020 - Item 16.1 Edenvale Tea Rooms	Leanne McGuirk, Robert Marlborough	28/05/2020	30/08/2020	In Progress	90	That Council: 1. subject to the Minister for Lands prior written consent, supports the Chief Executive Officer negotiating and endorsing a lease arrangement with Fairbridge Western Australia (Inc) to operate the Edenvale Tea Rooms within the Edenvale Homestead on a portion of Lot 316 (Reserve 36703) Henry Street, Pinjarra: a. for a period of 2 years with a similar option period; b. with the annual rental commencing at \$50 per annum, plus GST with an annual review being applied in accordance with the (Perth All Groups) Consumer Price Index and a further review should a liquor licence be granted; c. the lessee being responsible for all normal outgoings and the maintenance and repair of all equipment and chattels provided to operate the Tea Room: and d. with appropriate Key Performance Indicators and core hours being applied.	Draft lease being resolved. Full inventory of all historical items and café equipment has been completed. Painting and fit-out of new furnishings underway. Application has been lodged with Heritage Council in relation to internal building works (ie. doorway being installed). Anticipated opening of café first week in August 2020. McLeods finalising the draft lease.	Fayhe Hide Jul 16, 2020 10:59 AM

Item 11.11
Ordinary Council Meeting 27 August 2020

Name	Owner	Start Date	End Date	Status	Complete %	Recommendation/Council Decision	Progress Comment	Last Updated
OCM 22 June 2017 – Item 16.1 Dwellingup Community Compact Draft Position Statement – Bauxite Mining in and Around Dwellingup - CONFIDENTIAL	Dean Unsworth	1/07/2018	30/06/2022	In Progress	33	That Council: 1. supports the recommendations of the Chief Executive Officer as presented in the table of 12 actions recommended by the Dwellingup Community Compact; 2. delegates to the Shire President and Chief Executive Officer to negotiate further with the Dwellingup Community Compact and Alcoa regarding the proposed Dwellingup Discovery Forest, but that Council fully supports this concept in principle; and 3. requests a further report following further negotiations with stakeholders and following the future public meeting with the community.	Next Technical Advisory Committee meeting being arranged for late July 2020.	Faythe Hide Jul 16, 2020 11:02 AM
OCM 23 August 2018 - Item 11.6 Land Encroachments & Other Structures – Closure of Unmade Road – Ballee Island, South Yunderup	Robert Marlborough	23/08/2018	30/06/2021	In Progress	66	That Council: 1. approves for the Chief Executive Officer to formally progress with the Minister for Lands, through the Department of Planning, Lands and Heritage the closure of the unmade road reserve and the creation of a new Crown Reserve for the purposes of "foreshore" on Ballee Island, South Yunderup, with the following outcomes to be achieved: (a) the Crown Reserve land is to be managed by the Shire under a management order; (b) the new Crown Reserve boundaries are to be established in such a way to ensure 3 metre setbacks are provided to accommodate the patio encroachment from Lot 87 Ballee Island and the existing dwelling encroachment from Lot 83 Ballee Island; (c) a 5 metre wide easement being established within the new Crown Reserve to provide ongoing protection to existing Water Corporation infrastructure; (d) define the areas proposed in point 2; 2. pending the closure of the unmade road reserve and the creation of the new Crown Reserve actively encourage the Department of Planning, Lands and Heritage to facilitate suitable formal lease arrangements and the appropriate Peel Region Scheme consents, for an initial period of 10 years; (a) with the owner of Lot 82 Ballee Island for existing cottage (dwelling) adjacent to this property; (b) with the owner of Lot 83 for Gazebo and other structure adjacent to this property; 3. after receiving confirmation from the Department of Planning, Lands and Heritage that points 1 and 2 are supported and being actioned a further report be prepared for Council to consider the full cost breakdown of survey and other associated costs; and 4. authorises the Chief Executive Officer to continue engaging with the landowners of Lots 82, 83 and 87 Ballee Island to determine equitable contributions towards the cost of the survey works.	Subject to funding as part of Budget Review 2020. Waiting for Budget Revision for the allocation of sufficient funds.	Robert Marlborough Aug 5, 2020 09:33 AM
OCM 22 November 2018 – Item 11.9 Pinjarra Massacre Memorial Project	Leanne McGuirk	22/11/2018	30/06/2021	Deferred	30	That Council supports: 1. the Pinjarra Massacre Memorial Project in principle, including the development of a concept plan; 2. allocation of in kind workforce resources to assist in the development of a concept plan; 3. further consideration of the provision of financial and/or in kind support, following the completion of a concept plan; and 4. investigation into the opportunities of a Joint Management Agreement over Crown Reserve 31032.	This project is driven by the Department of Planning, Lands & Heritage and the Gnaala Karla Booja members, with the Shire playing a supporting role as one of the stakeholders. The project has been deferred by DPLH due to inherent political issues within the GKB members, with funding for preparation of a plan being returned by MDAA to DPLH late 2019. Advice from State is that project has been deferred pending internal consideration / decision by DPLH. Meeting was held between Shire and DPLH in late June 2020 where it was decided that project needs to be driven and lead by community, with the State and Shire providing an enabling role.	Leanne McGuirk Jul 6, 2020 09:24 AM

Name	Owner	Start Date	End Date	Status	Complete %	Recommendation/Council Decision	Progress Comment	Last Updated
OCM 27 June 2019 – Item 11.24 Lower Murray River – Foreshore Stabilisation Guidelines	Alan Smith	27/06/2019	30/06/2021	In Progress	85	That Council: 1. supports the introduction of Foreshore Stabilisation Guidelines for the Lower Murray River; 2. continues to engage with Community Associations to inform and add value to the introduction of the Foreshore Stabilisation Guidelines for the Lower Murray River; 3. seeks approval from the Department of Water and Environmental Regulation (DWER) and Department of Planning Lands and Heritage (DPLH) for any required environmental and structural works within the Foreshore Stabilisation Guidelines for the Lower Murray River riverbanks that abut areas under the management of the Shire of Murray; and 4. once approvals have been obtained from DWER and DPLH for environmental and structural works on the Riverbanks, an engagement strategy be initiated to enable ongoing liaison directly with the community within proximity of the Lower Murray River.	A project has been initiated to progress the design of the riverbank retaining wall to the satisfaction of both the Department of Water and Environmental Regulation and the Department of Planning, Lands and Heritage. In addition foreshore guidelines are being investigated to give adjacent residents an understanding of works that are permitted within the foreshore area that in turn align to the stabilisation guidelines.	Alan Smith Jun 11, 2020 01:35 PM
OCM 19 December 2019 – Item 15.2 Plus 8 Peel Capacity Building Program	David Arkwright	19/12/2019	30/06/2021	In Progress	20	That Council, in the event of a successful application to the State Government's X Tend grant program: 1. approves the proposed delivery of capacity building programs for startups and SME's – predominantly in the food and agri-business sector, but also in other sectors as may be determined at the time of implementation; 2. approves that priority be given to Murray and Peel startups and SME's, with the option to include enterprise from beyond the Peel Region; 3. approves the working relationship with Spacecubed Ventures Pty Ltd, to deliver the capacity building programs as set out in the application to the X-tend grant fund; and 4. endorses the Shire's contribution of \$44,825 be funded over two financial years, with \$19,825 transferred from the 2019/20 Economic Development Initiatives budget and the remaining \$25,000 from recognised savings in the LTFP 2020/21 allocation for the GRV revaluation expenses.	State government funding and Shire of Murray funding confirmed. Leap and Sprint Events planned for April to June 2020 have been delayed by COVID and will take place when meeting restrictions are lifted. Level 3 will allow this initiative to proceed, but the Shire will be reviewing the content of the events to ensure they are practical and linked to enterprise needs.	David Arkwright Jul 16, 2020 11:11 AM
OCM 27 February 2020 Item - 11.8 Reviving the Harvest Highway Concept	David Arkwright	27/02/2020	30/06/2021	In Progress	30	That Council: 1. approves that the Shire of Murray joins with the Shires of Waroona, Harvey and Serpentine Jarrahdale, and the Peel and Southwest Development Commissions to investigate the feasibility of reviving the Harvest Highway concept; 2. approves that a sum of \$10k be allocated to the project from the March 2020 Budget review; 3. notes that the initiative may expand to include other Local Governments; and 4. approves that the Shire of Murray coordinate the project, including receiving financial contributions from other agencies.	Consultant (Savagely Creative) appointed and feasibility study underway. Short term branding and marketing initiatives also added to the work.	David Arkwright Jul 16, 2020 11:12 AM
OCM 27 February 2020 Item - 11.9 Housing and Accommodation Investment Prospectus	David Arkwright	27/02/2020	30/06/2021	In Progress	50	That Council: 1. approves that an Investment Prospectus be prepared, featuring a selected set of sites in and around the Pinjarra Town Centre suitable for mixed use development and incorporating housing and accommodation, and that this prospectus be used to test the market through a Request for Proposals process with developers, investors and other parties; 2. approves the appointment of Syme Marmion to undertake a Housing and Accommodation Feasibility and Investment Prospectus, at a cost of \$18,114 (exc. GST), with the Chief Executive Officer authorised to negotiate up to \$25,000 (exc. GST) if additional relevant work is identified over and above the Scope of Works; 3. approves that the funding for the Housing and Accommodation Feasibility and Prospectus is accounted for in the March 2020 Budget review; 4. agrees that Council owned properties (Lots 1 and 2 James St, and 73 and 74 Forrest Street), be included in the Investment Prospectus to test a market response; and 5. agrees that select private landowners be approached with a view to their properties potentially being included in the Investment Prospectus – specifically properties that have the capability of meeting the core objectives of the Pinjarra Revitalisation Strategy.	Syme Marmion background work completed and initial set of recommendations for Pinjarra and Dwellingup discussed.	David Arkwright Jul 16, 2020 11:25 AM

Item 11.11
Ordinary Council Meeting 27 August 2020

Name	Owner	Start Date	End Date	Status	Complete %	Recommendation/Council Decision	Progress Comment	Last Updated
OCM 27 February 2020 Item - 11.10 Support to Southern Dirt	David Arkwright	27/02/2020	30/06/2021	In Progress	40	That Council: 1. approves that funding be set aside of \$15,000 for 2020/2021 and \$10,000 for 2021/2022 - to support the activities of Southern Dirt in the Shire of Murray and the wider Peel region; 2. agrees that the \$15,000 contribution in the 2020/2021 financial year be specifically directed to the activities that Southern Dirt is undertaking as part of its recently approved REDS grant through the Peel Development Commission; and 3. agrees that the \$10,000 contribution to Southern Dirt in the 2021/2022 financial year be made subject to an agreement between Southern Dirt and the Shire of Murray as to the specific activities that the funding will support, and also subject to confirmation that other Local Governments and organisations in the Peel region are also providing funding support for key activities to be carried out by Southern Dirt in that financial year.	Southern Dirt has commenced work on Peel Food Event for 2021, and building a beef cluster. SD has also advanced the Peel network and is now seeking funding from Lottery West for a substantial on-line platform for southern WA. Southern Dirt also developing a support program for farmers on smaller land holdings	David Arkwright Jun 5, 2020 09:07 AM
OCM 26 March 2020 - Item 10.1.1 Amalgamation of Shire of Murray and Shire of Waroona Local Emergency Management Committees	Ron Porter	26/03/2020	30/06/2021	In Progress		That Council: 1. provides in principle support to combine the Shire of Murray and Shire of Waroona Local Emergency Management Committees; 2. requests that consultation be undertaken to ensure the amalgamation is achievable and practicable for all Agencies and Stakeholders; and 3. requests that another report be prepared for consideration at the Local Emergency Management Committee meeting scheduled for the 6 May 2020 outlining the future direction on amalgamation of the Shire of Murray and Shire of Waroona Local Emergency Management Committees.	Item providing in-principle support for amalgamation endorsed by Shire of Waroona LEMC on the 4 March 2020. 02/06/2020 Shire of Waroona LEMC recommendation endorsed at Ordinary Council meeting (OCM20/05/083) on 26 May 2020. 11/06/2020 Email distributed to stakeholders of both LEMC memberships requesting them to carry out a risk analysis from their agency perspective. Feedback due by 3 July 2020. 13/08/2020 Item supporting the formalised amalgamation of the LEMC's endorsed at Shire of Murray LEMC on the 5 August 2020.	Ron Porter Aug 13, 2020 08:40 AM

Delegated Decisions of Development Approvals for July 2020

Application Number Display	Reason For Permit	Site Address Full Address	Decision Type	Decision	Lodged Date Date	Decision Date Date
616-227-2	Boat Shed and Rock Wall	102 Culeenup Road, North Yunderup WA 6208	Delegate	Issued	22/07/2020	23/07/2020
616-233-1	PRS Referral for Pylon Sign	6 Husband Road, Barragup WA 6209	Delegate	Issued	5/06/2020	8/07/2020
616-235-1	Floating Dock for Pontoon Boat	116 Culeenup Road, North Yunderup WA 6208	Delegate	Issued	8/07/2020	14/07/2020
P088/2020	Colourbond Steel Shed	Lot 823 Hugel Lane, Ravenswood WA 6208	Delegate	Issued	20/05/2020	9/07/2020
P099/2020	Outbuilding	832 Pinjarra Road, Furnissdale WA 6209	Council	Issued	27/05/2020	27/07/2020
P107/2020	Renovations to dwelling plus garage and patio	21 Rivergum Esplanade, South Yunderup WA 6208	Delegate	Issued	10/06/2020	9/07/2020
P110/2020	Cool Room Extension, Machinery Shed and Awning	43 Kirkham Road, Meelon WA 6208	Delegate	Issued	22/06/2020	28/07/2020
P111/2020	Storage room	290 South Yunderup Road, South Yunderup WA 6208	Delegate	Issued	22/06/2020	14/07/2020
P113/2020	Relocation of building envelope	Lot 108 Corio Road, Ravenswood WA 6208	Delegate	Issued	24/06/2020	31/07/2020
P114/2020	Zincalume gable shed 12m long x 10m wide x 3.9m wall height	23 Passive Place, Barragup WA 6209	Delegate	Issued	24/06/2020	14/07/2020
P119/2020	Change building envelope to construct a retaining wall around the house	96 Wandering Drive, North Dandalup WA 6207	Delegate	Issued	1/07/2020	7/07/2020
P121/2020	Patio - R-Code Variation rear setback	71B Banksia Terrace, South Yunderup WA 6208	Delegate	Issued	1/07/2020	27/07/2020
P123/2020	Ancillary Accommodation	72 Dewar Road, North Dandalup WA 6207	Delegate	Issued	3/07/2020	15/07/2020
P124/2020	Outbuilding	25 Ronlyn Road, Furnissdale WA 6209	Delegate	Issued	3/07/2020	28/07/2020
P125/2020	Oversized extension to outbuilding	4 Lever Way, South Yunderup WA 6208	Delegate	Issued	3/07/2020	27/07/2020
P126/2020	R-Code Variation for Patio	10 Redgum Road, Pinjarra WA 6208	Delegate	Issued	8/07/2020	14/07/2020

P127/2020	variation to building envelope and outbuilding	36 Summerhill Drive, Stake Hill WA 6181	Delegate	Issued	7/07/2020	7/07/2020
P128/2020	Variation of Building Envelope	122 Avoca Retreat, North Dandalup WA 6207	Delegate	Issued	7/07/2020	10/07/2020
P129/2020	Sea Container	87 Davis Road, Barragup WA 6209	Delegate	Issued	8/07/2020	8/07/2020
P134/2020	Ancillary Accommodation	6 Hastings Road, Barragup WA 6209	Delegate	Issued	10/07/2020	13/07/2020
P135/2020	Conservation Works	Lot 6161 South Western Highway, Blythwood WA 6208	Delegate	Issued	10/07/2020	24/07/2020
P137/2020	Patio and Kitchen Fit-Out	6 Amarantus Place, Pinjarra WA 6208	Delegate	Issued	10/07/2020	28/07/2020
P140/2020	Detached Extension	16 Pericho Close, Ravenswood WA 6208	Delegate	Issued	17/07/2020	31/07/2020
P141/2020	Patio	156 Jolly Rambler Boulevard, Ravenswood WA 6208	Delegate	Issued	21/07/2020	22/07/2020
P142/2020	Variation to Building Envelope and Outbuilding	Lot 102 James Eden Drive, West Pinjarra WA 6208	Delegate	Issued	22/07/2020	22/07/2020
P146/2020	Granny Flat	1076 Lakes Road, Nambeelup WA 6207	Delegate	Issued	29/07/2020	31/07/2020
P148/2020	Variation of Building Envelope for Dwelling	Lot 107 Corio Road, Ravenswood WA 6208	Delegate	Issued	31/07/2020	31/07/2020
P230/2019	Petrol Station	630 Pinjarra Road, Furnissdale WA 6209	Delegate	Issued	22/01/2020	3/07/2020