

44 Station Street Cobram Vic 3644 www.moira.vic.gov.au info@moira.vic.gov.au

AGENDA

SCHEDULED MEETING OF COUNCIL

FOR

WEDNESDAY 24 JULY 2024 TO BE HELD AT COBRAM CIVIC CENTRE, PUNT ROAD COBRAM VIC 3644 COMMENCING AT 4.30PM

RECORDING

Consistent with section 13.3 of our Governance Rules, Council officers have been authorised to record the public session of this meeting using an audio recording device.

LIVE STREAMING

Council meetings are now live streamed to allow those interested in viewing proceedings greater access to Council decisions and debate, without attending the meeting in person.

1. WELCOME CALLING TO ORDER - CEO

2. PRAYER

Almighty God we humbly ask you to guide our deliberations for the welfare and benefit of the Moira Shire and its people whom we serve.

Amen

3. ACKNOWLEDGEMENT OF TRADITIONAL OWNERS

We, the Moira Shire Council, would like to acknowledge the traditional owners of the land upon which we meet and pay our respects to their Elders both past and present.

- 4. APOLOGIES / LEAVE OF ABSENCE
- 5. DISCLOSURE OF CONFLICTS OF INTEREST
- 6. CONFIRMATION OF MINUTES OF PREVIOUS MEETING

Recommendation: "That the minutes of the Scheduled Council Meeting held on Wednesday, 26 June 2024, as prepared, be confirmed."

7. ADMINISTRATOR ADDRESSES

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8. **EXECUTIVE REPORTS** OFFICER REPORTS FOR DETERMINATION 9. 9.1 OFFICE OF CEO 9.1.1 DRAFT VOLUNTEERING POLICY 3 9.2 CORPORATE PERFORMANCE 9.2.1 13 2024/2025 CIVICRISK MUTUAL MEMBERSHIP RENEWAL 9.2.2 C017/24 - PUSHING UP AND CRUSHING OF HILL GRAVEL 16 9.2.3 SERVICE PLANNING FRAMEWORK POLICY 20 9.2.4 BUSINESS CONTINUITY MANAGEMENT POLICY 28 9.2.5 AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN 35 9.2.6 RISK MANAGEMENT POLICY 51 9.3 COMMUNITY FAIR ACCESS FOR COMMUNITY SPORT POLICY 57 9.3.1 9.4 INFRASTRUCTURE YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN 72 9.4.1 9.4.2 DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION 87 OFFICER REPORTS FOR INFORMATION 10.1 OFFICE OF CEO 10.1.1 YARRAWONGA PRIMARY SCHOOL SITE 201 10.2 CORPORATE PERFORMANCE 10.2.1 CONTRACTS AWARDED UNDER DELEGATION REPORT 204 11. PUBLIC QUESTION TIME 12. **NOTICES OF MOTION** 13. PETITIONS AND JOINT LETTERS 14. COUNCIL SEAL 206 15. **URGENT BUSINESS**

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16.

CLOSE OF MEETING

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.1.1

(TALENT ACQUISITION OFFICER, BONNIE

SYKES)

(EXECUTIVE MANAGER PEOPLE & CULTURE, ANDREA NOONAN)

DRAFT VOLUNTEERING POLICY

Recommendation

That Council endorse the Draft Volunteering Policy, as shown in Attachment 1 to progress to community consultation for a minimum period of 21 days in accordance with Council's Community Engagement Policy.

1. Executive Summary

The practice of volunteering provides an immeasurable amount of support to local charities, organisations and public facilities within our Shire. The compassionate residents of Moira who contribute their time and energy to the benefit of another cause, for no financial advantage of their own, allow for our region to continue to offer a diverse, inclusive, and supportive environment to our residents, visitors, and passers-by. Volunteering also offers individuals the opportunity to socialise and become an active member of our community, to explore areas which they may not otherwise experience, to gain useful knowledge around an area of interest, and to meet likeminded individuals whose paths they may otherwise never cross.

Volunteering is a tool utilised by many Victorian Local Governments to engage their communities in a social outlet whilst leveraging their invaluable local knowledge and diverse skillsets. Further, the act of volunteering has been noted in numerous research papers advising on the advantages of volunteering at both an individual and community level, for health and wellness.

Currently, Moira Shire Council itself does not have volunteering programs or utilize volunteers directly, other than Community Asset Committees and their affiliations, legislated for under the Local Government Act 2020 (Vic) section 65. These committees are delegated power through a C7 – Community Asset Committee Instrument of Delegation and have their own governance structure as set out in these C7s.

Due to the internal governance of these committees, that have been explicitly left out of the scope of the Volunteering Policy. Members of these committees, however, contribute to the betterment of our Shire, and we acknowledge that and thank them.

A Policy document is required to ensure a consistent, transparent and approved method is being followed by all staff, and all necessary documentation is recorded and accessible, before volunteering programs are developed and volunteers sought and engaged.

2. Conflict of interest declaration

There are no conflict of interest declarations to consider.

3. Background & Context

Visitor Servicing is an area where many other Local Governments within Victoria utilise volunteering for various reasons. Volunteers were identified as a key component to the continual success of Visitor Servicing for our council moving forward. As no policy existed to guide the recruitment or lifecycle of these volunteers, these documents are required prior to engaging in volunteer recruitment. It was also seen as an essential component that any Volunteering Policy created could be applied broadly, so other areas within our Council that

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DRAFT VOLUNTEERING POLICY (cont'd)

identify that volunteers may be beneficial to their service, are able to build their volunteer roles with the foundations of this Policy.

The bones of a volunteering policy were constructed, and an internal working group was formed with various stakeholders to ensure a volunteering policy was created that could service multiple divisions within council.

Issues 4.

Clear delineation needing to be made between members of Community Asset Committee members and volunteers. This delineation has been made from the outset of the policy document.

5. **Strategic Alignment**

Council Plan

Incorporating volunteering into our organisation 1. A welcoming and inclusive place

> will allow us to facilitate a welcoming and inclusive environment to our residents and to the visitors to

our area.

4. Customer Focused and Responsive Volunteering enables us to maintain a highly

responsive service provision.

6. **Internal & External Engagement**

Engagement

Internal

Internal Working Group made up of:

- Team Leader Community Services
- Workplace Health and Safety Advisor
- Coordinator Governance
- Talent Acquisition Officer
- Moira Recreation Committee Support Officer
- Governance and Risk Advisor

Feedback

Barebones of policy document were moulded into a policy that satisfied all internal stakeholders.

Benchmarking completed to ensure consistency with other LGAs.

Also sent the Policy for Review to:

- Director of Community
- Executive Manager People and Culture
- Manager Economic Development, Tourism and Recreation

External

Volunteering Victoria Session attended to ensure the policy would meet all of the volunteering criteria.

External consultation to be conducted via Social Pin Point, social media and newspaper adverts once draft has been accepted by council.

Policy meets criteria as set out by Volunteering Victoria.

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DRAFT VOLUNTEERING POLICY (cont'd)

7. Budget / Financial Considerations

Throughout this process, minor areas of cost have been identified for Council (e.g. volunteer Police Checks, staff time to onboard, items of 'uniform' etc.), however, these costs will be far outweighed by the benefits to the community of this policy.

8. Risk & Mitigation

Risk

Financial impact of volunteers more than anticipated and exceeding any savings. Volunteer may injure themselves whilst volunteering

Mitigation

Groups of volunteers and cost effectiveness to be monitored continually by supervisor/manager. Volunteers are covered within our insurance policy.

9. Conclusion

Volunteering is without doubt of great benefit to the community and to the individual volunteer. Moira Shire Council should endorse this draft Volunteering Policy to go out to community consultation.

Attachments

1 Draft Volunteering Policy

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.1.1 (TALENT ACQUISITION OFFICER, **BONNIE SYKES**) (EXECUTIVE MANAGER PEOPLE & **CULTURE, ANDREA NOONAN)**

DRAFT VOLUNTEERING POLICY (cont'd)

ATTACHMENT No [1] - Draft Volunteering Policy

Moira Shire Council Volunteering Policy

Policy type Council Version Number

Responsible Director **Executive Manager People and Culture**

Responsible Officer People Business Partner

Date endorsed by ELT Date adopted by Council Scheduled for review

This policy will be reviewed four years from the date of

adoption, or sooner if required.

It is recognised that, from time to time, circumstances may change leading to the need for minor administrative changes to this document. Administrative changes do not materially alter the document (such as spelling/typographical errors, change to the name of a Council department, a change to the name of a Federal or State Government department). Administrative updates can be made in accordance with the Policy Framework Guidelines.



1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.1.1 (TALENT ACQUISITION OFFICER, BONNIE SYKES) (EXECUTIVE MANAGER PEOPLE & CULTURE, ANDREA NOONAN)

DRAFT VOLUNTEERING POLICY (cont'd)

ATTACHMENT No [1] - Draft Volunteering Policy

PURPOSE

Moira Shire Council is committed to providing high-quality services while working under the Council Plan 2021-25 strategic pillars. This policy outlines the guidelines and expectations for identifiable volunteers serving within the Moira Shire Council and aims to ensure a positive, community driven experience while maintaining ethical and sustainable practices, staff and volunteer satisfaction, and legal compliance.

SCOPE

This policy applies to Moira Shire Council Volunteers throughout their service. It does not apply to non-council volunteers including volunteers of other agencies and organisations. This policy is not intended to encompass community asset committee members or their affiliations.

DEFINITIONS

Term	Definition	
Council	Moira Shire Council	
Community Asset Committee	A committee with delegated power from the Chief Executive Officer for the purpose of managing a community asset in the municipal district.	
Moira Shire Council Volunteers	Individuals who willingly provide support and enable the provision of various tasks on behalf of council without expectation of financial benefit, who are branded with identifiable Moira Shire Council attire.	
National Standards of Volunteering	Set of standards created by Volunteering Australia to manage volunteers and volunteer programs	
NECCI	North East Council Contractors (Volunteer) Induction – a collaboration of councils who have developed and implemented an online general OHS induction course	

POLICY STATEMENT

Volunteering at Moira Shire Council is an opportunity for individuals to engage with Counciloperated services and contribute to their community. Volunteering will not be exploitative, nor should it be used to replace paid work, rather, it should be a form of complementary service, celebrated for its substantial benefits to the organisation, the community and the individual themselves.

1. Volunteer Eligibility and Recruitment:

All volunteers at Moira Shire Council must meet the following criteria:

- 1.1 Have a genuine interest in assisting our region and the required knowledge for the specific tasks they will be completing.
- 1.2 Successfully complete the volunteer application and screening process, including a police check, working with children check, and reference checks, as applicable and at the expense of Council.
 - 1.2.1.1 Information relevant to a volunteer's application (including but not limited to: gender, age, education level, medical history) will be securely stored by the Council and will only be used for the

Moira Shire Council - Volunteering Policy v1.1

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.1.1 (TALENT ACQUISITION OFFICER, BONNIE SYKES) (EXECUTIVE MANAGER PEOPLE & CULTURE, ANDREA NOONAN)

DRAFT VOLUNTEERING POLICY (cont'd)

ATTACHMENT No [1] - Draft Volunteering Policy

purposes of the volunteering application. No personal information will be used for other circumstances without express consent from the volunteer.

1.3 Attend and complete necessary training sessions and orientations as required.

Council has the right to offer or withhold an offer of a volunteer placement to any applicant at their discretion. The offer of a Council volunteer role is in no way a commitment to an offer of a future paid role at Council.

2. Role and Responsibilities:

Council's Responsibilities

Council is committed to providing a safe and fair environment for its volunteers, in doing this, Council will:

- · Provide volunteers with a healthy and safe workplace.
- Assist with the completion of Volunteer National Police Checks in collaboration with the individual volunteer.
- Provide NECCI induction to all volunteers before they are allocated tasks.
- Provide all relevant and supporting documents required including Code of Conduct, relevant policies and procedures.
- Define volunteer roles and develop unambiguous Role Statements.
- As required and available, offer additional training to volunteers to improve their skill set and assist them in the performance of their voluntary role.
- Not require a volunteer to perform any role or task that they are not appropriately qualified or skilled to undertake.
- · Provide feedback on performance.
- Inform volunteers of their responsibilities and ensure that their contribution complements but does not undermine, the work of paid employees.
- · Acknowledge and recognise the contributions of volunteers.
- Provide all volunteers with information on grievance and unsatisfactory performance policies and procedures.

Volunteer's Responsibilities

Volunteers play an important role for the services provided by Council and have a responsibility to comply with all the policies and procedures of Council. In addition, volunteers will be expected to:

- Undertake a Volunteer National Police Check.
- Undertake and maintain a Volunteer Working with Children Check and comply with Council's Child Safe Policy.
- · Complete NECCI induction and any other required training.
- Comply with all health and safety requirements and reporting of any issues, thereby contributing to a safe work environment for other volunteers, employees, and members of the public.

Moira Shire Council - Volunteering Policy v1.1

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.1.1 (TALENT ACQUISITION OFFICER, BONNIE SYKES) (EXECUTIVE MANAGER PEOPLE & CULTURE, ANDREA NOONAN)

DRAFT VOLUNTEERING POLICY (cont'd)

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- Be responsible in making a realistic commitment in terms of both time and areas of involvement and to honour those commitments.
- To treat Council, personal, and confidential information in accordance with Council's Privacy Policy, Privacy and Data Protection Act 2014 and the Health Records Act 2001.
- Comply with all the requirements of their individual Role Statement and related procedures.
- Dress appropriately, inclusive of comfortable yet well-presented clothing.
- Maintain a professional and courteous demeanour while interacting with other volunteers, paid employees, and members of the public.
- Bring to the attention of management any issues that may have an adverse impact on their performance as a volunteer including conditions within Council venues where volunteer activities are conducted and any other concerns which may have an impact on their experience as a volunteer.
- Adhere to the Code of Conduct and other Council policies and procedures while undertaking duties or tasks on behalf of Council.
- Volunteers are not authorised to speak to media on Council's behalf and must adhere to the Social Media Policy and Protocol at all times.

1. A WELCOMING AND INCLUSIVE PLACE

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DRAFT VOLUNTEERING POLICY (cont'd)

ATTACHMENT No [1] - Draft Volunteering Policy

3. Insurance:

Volunteers, whilst carrying out their duties as prescribed by the role specific procedure, and following all relevant council policies, procedures, and guidelines, shall be covered by Council's public liability and professional indemnity insurance during the period of their volunteer shift.

4. Training and Professional Development:

Volunteers will receive training where appropriate and available to enhance their knowledge and skills necessary for effective service, however, volunteers are expected to hold the required minimum level of knowledge for the role they will be completing.

All volunteers must complete the online NECCI training for OHS procedures before commencing volunteer work. If training cannot be completed online, Council will attempt to make arrangements to ensure all individuals are provided with support and equal access where appropriate.

If and when opportunities for professional development become available these will be offered to volunteers by their Manager, at the Manager's discretion.

5. Supervision and Support:

Volunteers will be accompanied by staff members where possible who will provide guidance, support, and ongoing feedback.

Volunteers will receive regular communications from their relevant Team Leader or Manager and are encouraged to discuss any issues or concerns, or areas of perceived development they may have with them as soon as practicable.

Volunteers will have access to Council's Employee Assistance Program.

6. Recognition of volunteers

Council acknowledges the contribution that volunteers make to Council and the community and will recognise the contribution of Council volunteers each year during National Volunteers Week. Council's Volunteer Recruitment and Retention Procedure will set out the ways Council may do this.

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.1.1 (TALENT ACQUISITION OFFICER, BONNIE SYKES) (EXECUTIVE MANAGER PEOPLE & CULTURE, ANDREA NOONAN)

DRAFT VOLUNTEERING POLICY (cont'd)

ATTACHMENT No [1] - Draft Volunteering Policy

7. Grievances

Council Volunteers have the right to raise and have resolved any grievances they may have without fear of retribution. Council will treat every concern or complaint seriously in a confidential and sensitive manner and where possible, is committed to resolving any issues quickly.

Any concerns of grievances raised by volunteers should be directed to the People and Culture Team.

8. Termination or Suspension

There is no notice period or other requirements to terminate a volunteer relationship – the voluntary nature of the relationship means that either party can end it at any time.

Council reserves the right to terminate or suspend a volunteer's involvement in the volunteering team if there is a violation of this policy, any applicable legislation, a negative result for a WWCC or Police check, if there is a breach of conduct that jeopardizes the positive visitor and resident experience, or the reputation of Council.

9. Further Information

If you require further information, please contact the council on (03)58 719 222 and ask to speak to People and Culture or email info@moira.vic.gov.au with the subject line indicating you wish to discuss volunteering.

MONITORING AND EVALUATION

This policy will be reviewed every four years to ensure its relevance, effectiveness, and alignment with legal requirements and best practices. The policy will be monitored by the responsible officer and any major changes will need to be adopted by Council. Minor administrative changes may be made to the policy periodically to ensure it continues to meet legislative requirements. In this event, the document may be altered without consent of the executive leadership team.

RELATED LEGISLATION

Local Government Act 2020
Charter of Human Rights & Responsibilities Act 2006
Gender Equality Act 2020
Occupational Health and Safety Act 2004
Privacy and Data Protection Act 2014
Worker Screening Act 2020
Wrongs Act 1956

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.1.1 (TALENT ACQUISITION OFFICER, BONNIE SYKES) (EXECUTIVE MANAGER PEOPLE & CULTURE, ANDREA NOONAN)

DRAFT VOLUNTEERING POLICY (cont'd)

ATTACHMENT No [1] - Draft Volunteering Policy

RELATED POLICIES AND PROCEDURES

Complaint Handling Policy
Rights and Responsibilities of Volunteers – Volunteering Australia
Volunteer NECCI Induction Online Course Information
Social Media Policy and Protocol
Dealing With COVID-19 in the Workplace Policy
Draft Privacy Policy
Employee Code of Conduct
Child Safe Policy

DOCUMENT REVISIONS

Version	Summary of Changes	Approved by	Date
1	Original Policy adopted	Council	xxx
1.1	Administrative changes made to policy (details of administrative changes)	xxx	xxx
2	Changes made to original policy included xxxxxx	Council	xxxx
3	xxxxxx	Council	xxxx
3.1	Administrative changes made to policy (details of administrative changes)	xxx	xxx

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.1

(MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

2024/2025 CIVICRISK MUTUAL MEMBERSHIP RENEWAL

Recommendation

That Council:

- Authorise payment of the Membership Fee and Contributions for the renewal of the membership with CivicRisk Mutual Limited for the 2024/2025 financial year for a total of \$1,169,010 exc GST; and
- 2. Authorise the Chief Executive Officer to execute any agreements and other documents as are necessary to give effect to Council's membership and insurance renewal.

1. Executive Summary

Moira Shire Council has been invited to renew the membership with CivicRisk Mutual, providing insurance products and protections and risk management services for the 2024/2025 period.

2. Conflict of interest declaration

There are no known officer conflicts of interest.

3. Background & Context

Moira Shire Council transitioned from the MAV program of insurance to a Mutual Membership arrangement with CivicRisk Mutual Limited in June 2022. Council was the first Victorian Council to be included in the membership.

CivicRisk Mutual is both an unregistered managed investment scheme and a discretionary mutual fund.

As a managed investment scheme, money is contributed to acquire rights to benefits and the contributions are pooled or used for a common enterprise. While CivicRisk Mutual Limited falls within the definition of a managed investment scheme, its purpose and the benefits received by Members have the form of a facility to manage risk and not a facility for the purposes of making an investment. There is no investment dividend paid to Members.

Through the mutual discretionary fund Members contribute money which is pooled for the purposes of acquiring general insurance products and protections to cover the specified risks of the Members and for paying claims by Members, on a discretionary basis, up to a certain specified limit.

CivicRisk Mutual Limited is also a mutual owned by its Members. It operates purely for the benefit of its Members and not as an entity for profit.

Participating in CivicRisk Mutual Limited provides a range of Membership Benefits including risk protection and risk management support – it is not intended to make an investment or receive a return on the investment of money.

FILE NO:
5. TRANSPARENT AND ACCOUNTABLE
GOVERNANCE

ITEM NO: 9.2.1 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

2024/2025 CIVICRISK MUTUAL MEMBERSHIP RENEWAL (cont'd)

CivicRisk Mutual Limited issues an annual invitation to its Members inviting them to participate in the mutual for the coming Membership Period.

Membership Benefits are made up of rights to:

- participate in a Protection Program and have a claim for Protection considered and to receive claims management services for Protection claims;
- participate in Insurance Arrangements, which involves CivicRisk Mutual Limited negotiating and arranging insurance policies on behalf of Members, using the purchasing power of the group membership, and providing claims management services for insurance claims;
- participate in CivicRisk Mutual Limited's governance, through the Member Assembly or, for Members other than Affiliate Members, election of a Member Representative to the Board:
- receive property valuation services, including a five-year full valuation of the Member's building assets and contents and reviews of new buildings acquired by the Member during the year;
- receive risk management services, noting that some of these are not available to Affiliate Members;
- receive insurance claims management support; and
- receive insurance brokerage services, including for insurance required outside of the Group Insurance Arrangements.

Membership to this Mutual also provides a range of risk management services including:

- Risk Enhance Funding Grants
- Study Assistance Funding Grants
- Annual Risk Management Awards
- Professional Development Program
- Annual Training Program
- Risk Engineering Program
- Continuous Risk Improvement Program
- Fraud Prevention Software

4. Issues

A Member may resign their membership by giving CivicRisk Mutual Limited 12 months' notice in writing. It may not otherwise withdraw from CivicRisk Mutual Limited during a Membership Period except with CivicRisk Mutual Limited's consent.

The financial delegation limits necessitate a Council resolution.

5. Strategic Alignment

Council Plan

- 5. Transparent and accountable governance
- 5.01 Decisions will be evidence-based, financially viable and for the long term.
- 5.02 Responsibly manage our business, health and safety risks

FILE NO: 5. TRANSPARENT AND ACCOUNTABLE	ITEM NO: 9.2.1 (MANAGER GOVERNANCE, RISK AND
GOVERNANCE	PERFORMANCE, AMANDA CHADWICK)
	(ACTING DIRECTOR CORPORATE
	PERFORMANCE, EVA SALIB)

2024/2025 CIVICRISK MUTUAL MEMBERSHIP RENEWAL (cont'd)

6. Internal & External Engagement

The Chief Executive Officer and Acting Director Corporate Performance met with representatives of CivicRisk Mutual to discuss the ongoing membership.

7. Budget / Financial Considerations

Costs associated with the Membership and Insurance renewal form part of the operational budget.

Item	Value	Notes
Annual Membership Fee	\$10	
Public and Product Liability/ Professional Indemnity	\$448,000	Includes Community Support Liability, Corporate Travel & Personal Accident
Property/Loss of Revenue	\$439,000	
Motor Vehicle	\$204,000	Includes Marine Transit
Management Liability	\$38,000	Includes Councillors/Directors & Officers Liability, Employment Practice Liability & Statutory Liability
Crime	\$7,000	
Cyber Liability	\$33,000	
Contribution Total	\$1,169,010	

8. Risk & Mitigation

Insurance is a critical component of Council's overall risk management framework.

9. Conclusion

Moira Shire Council has renewed its membership with Civic Risk Mutual Limited for insurance and risk management services for the 2024/2025 financial year providing appropriate Insurance coverage and risk management services and support.

Attachments

Nil

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.2 (PROCUREMENT COORDINATOR, LISA KNIGHT) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

C017/24 - PUSHING UP AND CRUSHING OF HILL GRAVEL

Recommendation

That Council:

- 1. Award the schedule of rates contract C017/24 Pushing Up and Crushing of Hill Gravel to Mibus Bros (Aust) Pty Ltd for an initial term of 1 year, commencing 1 September 2024, with an option to extend in single periods of 2 years for a maximum contract period of 5 years (1+2+2).
- 2. Note that the anticipated expenditure against this Contract in the first year is approximately \$342,000 (exc GST) in accordance with the rates contained in Appendix B and that final expenditure would be defined by operational needs and available budget.
- 3. Note that Contract rates shall remain fixed for the first twelve months and will be subject to rise and fall based on the CPI calculations contained in the Conditions of Contract.
- 4. Authorise the Chief Executive Officer to sign the contract documents and approve contract extensions within the provisions of the Contract.

1. Executive Summary

Moira Shire Council invited submissions for the pushing up and crushing of hill gravel from Fords Pit located on School Road. Tungamah.

2. Conflict of interest declaration

There was no conflict of interest declared for this tender evaluation process.

3. Collaborative Procurement

As these services are specific to Moira Shire Council it was determined that a collaborative procurement approach was not appropriate.

4. Background & Context

The purpose of the contract is to produce approximately 160,000 tonne of material over two years to be used in Council's road re-sheeting and road construction program.

Raw hill gravel and gravel crushed to a diameter of 40mm or less and 60mm or less is to be produced in the following quantities in the first year of the contract:

• 80,000 tonne of raw hill gravel

These 80,000 tonnes of raw hill gravel are to be supplied as follows:

- 15,000 tonne crushed to 40mm or less, and
- 65,000 tonne crushed to 60mm or less.

FILE NO:
5. TRANSPARENT AND ACCOUNTABLE
GOVERNANCE

ITEM NO: 9.2.2 (PROCUREMENT COORDINATOR, LISA KNIGHT) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

C017/24 - PUSHING UP AND CRUSHING OF HILL GRAVEL (cont'd)

5. Contract Details

This is a Schedule of Rates Contract for an initial term of 1 year, commencing 1 September 2024. Upon mutual agreement of the Council and the Contractor, the Contract may be extended in single periods of 2 years for a maximum contract period of 5 years (1+2+2).

6. Date of Public Notice

Paper	Date
Social Media	13 April 2024
The Age	13 April 2024
Border Mail	13 April 2024
Shepparton News	16 April 2024
Cobram Courier	17 April 2024
Numurkah Leader	17 April 2024
Yarrawonga Chronicle	17 April 2024

Submissions closed on 15 May 2024.

7. Receipt of Tenders

13 submissions were received.

8. Supervision

Superintendent – Manager Operations Superintendent Representative – Superintendent Works and Services

9. Panel Membership

- Superintendent Works and Services Operations
- Leading Hand Roads Nathalia
- Team Leader Roads Tungamah

The Procurement Coordinator moderated the tender evaluation.

10. Non-conforming tenders

No submissions were deemed non-conforming.

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.2

(PROCUREMENT OFFICER, LISA KNIGHT)
(ACTING DIRECTOR CORPORATE
PERFORMANCE EVA SALIB)

C017/24 - PUSHING UP AND CRUSHING OF HILL GRAVEL (cont'd)

11. Procurement Plan

The following evaluation criteria and weightings were used:

Weighted Evaluation Criteria	Weighting
Tendered Price	20%
Statement of Conformance	10%
Availability of Skills and Resources	10%
Track Record	20%
Occupational Health & Safety	30%
Contribution of Local Economy	10%
TOTAL	100.00%

12. Issues

No issues to report.

13. Strategic Alignment

Council Plan

5. Transparent and accountable governance

The Council Plan addresses the need for a well-run Council by implementing a transparent, engaging and accountable governance structure for current and future generations. The processes undertaken to award the contract meet the legislative and policy requirements relating to procurement and tendering.

14. Internal & External Engagement

Engagement Feedback

(who did you engage with?)

Internal Evaluation Panel Each member of the Evaluation Panel

participated and contributed to the evaluation

and moderation of the tender.

External N/A N/A

15. Budget / Financial Considerations

The recommended tender is within the approved budget.

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.2

(PROCUREMENT OFFICER, LISA KNIGHT) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

C017/24 - PUSHING UP AND CRUSHING OF HILL GRAVEL (cont'd)

16. Risk & Mitigation

To minimise the risks associated with the works under contract, the following conditions must be met:

- The successful contractor is to be the holder of Public Liability Insurance with a minimum coverage of \$20 million.
- Provide a Site Management Plan.
- Provide a Traffic Management Plan.
- Completed Contractor Verification Checklist
- Job Safety Analysis Statements
- All on-site personnel are required to undertake a Moira Shire Council Site Induction.
- A Plant Risk Assessment for each item of heavy plant to be supplied, hired or expected to enter the work site.

17. Conclusion

After consideration of the submissions, including price and specification requirements, the evaluation panel recommends Mibus Bros (Aust) Pty Ltd as the successful tenderer.

Attachments

- 1 Appendix A Evaluation Summary (Confidential) printed in separate document
- 2 Appendix B Schedule of Rates (Confidential) printed in separate document

ITEM NO: 9.2.3 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY

Recommendation

That Council adopt the Service Planning Framework Policy, as shown in Attachment 1.

1. Executive Summary

The purpose of the Service Planning Framework Policy (Policy) is to establish the principles of effective service planning to ensure that Council services meet the needs of the community and align with the Service performance Principles in the *Local Government Act 2020*.

The draft Policy was reviewed and endorsed by the Audit and Risk Committee on 18 July 2024 and is now tabled for consideration by Council.

2. Conflict of interest declaration

There are no conflict of interest declarations to consider.

3. Background & Context

The Policy forms part of the overarching Service Planning Framework and reinforces Council's commitment to continuously improve its services in line with the Service Performance Principles of the *Local Government Act 2020*.

The revised Policy includes a Roles Continuum to determine if Council is the most appropriate and cost-effective service provider. The Policy will also ensure that each service has appropriate measures in place to maintain key business activities, resources and services throughout a disruptive incident.

The Service Planning Framework will assist Council in objectively assessing current and proposed services to ensure that all services align with Council's Strategic Objectives, can be sustained long-term, comply with legislative and regulatory requirements, and meet the evidence-based needs of the community.

The next phase of the development of the Service Planning Framework will be to prepare and implement Service Planning templates and guidelines.

4. Strategic Alignment

This report aligns with the Council Plan objective of Transparent and Accountable Governance as we responsibly manage our business, health and safety risks.

5. Internal & External Engagement

The draft Service Review Planning Framework Policy was developed by the Acting Director Corporate Performance in consultation with the Manager Governance Risk & Performance and the Executive Leadership Team. The Audit and Risk Committee reviewed the draft Policy and have endorsed a recommendation to Council to consider the final Policy.

External consultation is not required.

ITEM NO: 9.2.3 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY (cont'd)

6. Budget / Financial Considerations

There are no budget considerations associated with the initial Policy; however, there may be budget considerations resulting from the development of the Service Review Planning Framework itself, and the individual business unit sub-plans. The budget considerations will be identified as part of the Service Review process and submitted within approved and adopted Council timelines.

7. Risk & Mitigation

This Policy forms part of the overarching Service Planning Framework and ensures that Council's services comply with government legislation, regulations and frameworks and are delivered consistent with council policies.

8. Conclusion

The Service Planning Framework Policy provides a strong commitment to continuously plan, review and improve Councils services in line with the Service Performance Principles of the *Local Government Act 2020.* It is now tabled for consideration by Council as recommended by the Audit and Risk Committee.

Attachments

1 Service Planning Framework Policy - July 2024

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.3

(MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY (cont'd)

ATTACHMENT No [1] - Service Planning Framework Policy - July 2024

Moira Shire Council

Service Planning Framework Policy

Policy type Council Version Number 2.0

Responsible Officer Manager Governance, Risk & Performance

Date adopted by Council

Scheduled for review This policy will be reviewed four years from the date of

adoption, or sooner if required.

It is recognised that, from time to time, circumstances may change leading to the need for minor administrative changes to this document. Administrative changes do not materially alter the document (such as spelling/typographical errors, change to the name of a Council department, a change to the name of a Federal or State Government department). Administrative updates can be made in accordance with the Policy Framework Guidelines.



ITEM NO: 9.2.3 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY (cont'd)

ATTACHMENT No [1] - Service Planning Framework Policy - July 2024

PURPOSE

The purpose of this policy is to establish a 'Service Planning Framework' which supports Council, and each service to:

- Develop a clear understanding and agreement on the purpose, scope and desired outcomes of each service, consistent with Council's Strategic Objectives and long-term financial sustainability targets.
- Ensure services comply with Government legislation, regulations and frameworks, and are delivered consistent with Council policies.
- Assist in understanding the true cost, resources and benefits as well as the impact on long-term sustainability of delivering the agreed services to the community.
- Develop an evidence-based approach to assess the level of community need and agreed standards for the service being delivered and consider if changes are needed to current service provision levels or if additional/different services are required.
- Clarify 'Council's role' (refer Council Role Continuum below) in the service and determine if Council is the most appropriate and cost-effective service provider. Identify if the community has access to other services or programs which could better meet their needs.
- Consider, and as required seek, community/service users' feedback about the adequacy and satisfaction levels in responding to agreed needs and expectations.
- Assess and monitor the effectiveness, efficiency and quality of the service delivery model.
- Identify service resource requirements for the longer term and consider what impact, if any, this will have on Council's long-term financial sustainability, including asset management.
- Consider, and if necessary, take steps to manage risks and community impacts associated with delivering (or not delivering) the service.
- Ensure services have appropriate measures in place to maintain key business activities, resources and services throughout a disruptive incident and minimise any adverse effects to the community or Council.
- Ensure that services are being delivered in a responsible, prudent and cost-effective manner, providing value for ratepayer money, consistent with Best Value Principles (Local Government Act 1989)

SCOPE

The Service Planning Framework applies to all current and proposed services for which Council is directly or indirectly responsible.

Moira Shire Council - Service Planning Framework Policy

ITEM NO: 9.2.3 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY (cont'd)

ATTACHMENT No [1] - Service Planning Framework Policy - July 2024

DEFINITIONS

Term	Definition	
Service	A group of programs, activities and projects which collectively aim to achieve agreed outcomes or objectives and are primarily focussed on external recipients.	
Service Level	The amount of activity (or standards) provided by a service. This may include quantitative descriptors of quality standards and qualitative statements outlining minimum standards.	
Service Model	Describes the activities of a service and how, where and when they are delivered.	
Service Demand	The demand for services generally projected out over a 10-year timeframe as part of the Service Planning Framework. Services can be neutral, in decline or growing. Their demand level is not a measure of efficiency or effectiveness.	
Project	An activity which either delivers services or programs but has a clearly defined start and end point and identifiable milestones and achievements.	
Sustainability	Financial resources required to deliver the services into the long-term.	
Service Performance	The Service Performance Principles are:	
Principles (Local Government Act 2020)	 Services should be provided in an equitable manner and be responsive to the diverse needs of the municipal community; Services should be accessible to the members of the municipal community for whom the services are intended; Quality and costs standards for services set by the Council should provide good value to the municipal community; A Council should seek to continuously improve service delivery to the municipal community in response to performance monitoring; Service delivery must include a fair and effective process for considering and responding to complaints about provision service. 	

POLICY STATEMENT

Council has a strong commitment to continuously plan, review and improve its services. In line with the Service Performance Principles (Local Government Act 2020), Council will ensure community expectations and standards are met in a cost-effective manner, and that agreed service outcomes are aligned to Council's long-term strategic objectives and comply with relevant legislation and policy.

Council's approach to service planning will be informed by the Council Plan and 2035 Community Vision.

Moira Shire Council - Service Planning Framework Policy

ITEM NO: 9.2.3 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY (cont'd)

ATTACHMENT No [1] - Service Planning Framework Policy - July 2024

Policy Implementation

Council's 'Service Planning Framework' will be progressively applied across all Council services, on a rolling five-year planning schedule.

The criteria used for prioritising services for the implementation of the 'Service Planning Framework' include:

- Council or CEO Directive;
- Financial pressures and considerations, including withdrawal or changes to external funding arrangements;
- · Legislative or regulatory changes;
- Evidence of changing demands or priorities for services, including consumer and community feedback;
- · Opportunities for improved (or new) service provision; and
- Organisational capacity, workloads and complementary activities.

Council Engagement

Engagement processes will be held with Administrators as part of the development of the Service Planning Framework and development of each Service Review. Administrators will be provided with documentation, and their guidance sought following the completion of:

- Service Planning for guidance on the preferred strategic service direction and key recommendations; and
- Service Review upon completion of a draft Service Review, for guidance on the proposed changes to levels of service arising from a Service Review, including cost and resources.

Roles and Responsibilities

The Directors have the overall responsibility, in consultation with the Manager Governance, Risk and Performance, for ensuring the quality and timely completion of service plans.

Implementation, Review and Reporting of Service Plans

Implementation of the 'Service Planning Framework':

- Service plans will be developed in accordance with this Policy and the prescribed templates and guidelines issued by the Manager Governance, Risk and Performance.
- As part of the planning process for each service, future service options will be prepared, and presented to the Executive Leadership Team (ELT) for feedback, and then to the CEO or Council (as relevant), for consideration and approval.
- Each service will create a five-year Service Plan which captures any required changes to the service. This Service Plan will consider any future assets, workforce planning, collaboration, management requirements, partnerships with key stakeholders, and consider the long- term financial sustainability of Council.

Moira Shire Council - Service Planning Framework Policy

ITEM NO: 9.2.3 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY (cont'd)

ATTACHMENT No [1] - Service Planning Framework Policy - July 2024

Implementation of Service Plans

- Any Service Plan which requires changes to existing services should undergo appropriate community and/or stakeholder engagement before implementation, in accordance with Council's Community Engagement Policy.
- Following approval or adoption of a Service Plan, service managers will be responsible for the ongoing implementation, review and progress reporting.
- Implementation of Service Plans will form part of Directors' and Managers' Strategic Performance Objectives.

Council Role Continuum

The following terms and definitions will be used to define the role that Council may have in service delivery as Service Plans are developed, this clearly articulates Council's role and commitment in the provision of services.

Term	Definition	
No Role	The Council chooses not to have a role in relation to a particular service or activity.	
Information Channel	Information about a service or activity of other bodies is channelled by the Council through, for example, brochures in Council offices and other public spaces, links to the other bodies' websites etc.	
Advocate	The Council may advocate to another government or other organisation for certain things to happen; this could range from a single event (such as writing to a Minister) through to an ongoing campaign.	
Participant	The council will participate in working groups, discussions facilitated by others and understand how this relates back to Council's role.	
Facilitator	A step further from advocacy where the Council may try to bring parties together to work out a solution to an issue affecting the Council area.	
Agent	Typically, this would involve the Council delivering a service, funded by a government agency, that is, or likely to be regarded as, the responsibility of another government.	
Part Funder	The Council either provides funding to another body to meet part of the cost of that body providing a function/service activity or receives funding from another body (usually a government agency) to meet part of the cost of the Council delivering it.	
Asset Owner	As the owner (or custodian) of an asset (road, footpath, building, playground etc.), the Council has responsibility for capital, operating and maintenance costs.	
Regulator	The Council has legislated roles in a range of areas which it is required to fund from its own funds (apart from fees for cost recovery government grants).	
Service Provider	The full cost (apart from fees for cost recovery, government grants etc) of a service or activity is met by the Council.	

Moira Shire Council - Service Planning Framework Policy

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.3

(MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

SERVICE PLANNING FRAMEWORK POLICY (cont'd)

ATTACHMENT No [1] - Service Planning Framework Policy - July 2024

MONITORING AND EVALUATION

Service Managers will be required to prepare annual progress updates on the implementation of approved/adopted Services.

RELATED LEGISLATION

Local Government Act 2020

RELATED POLICIES AND PROCEDURES

Service Profile Template Service Planning Framework Community Engagement Policy 2035 Community Vision Council Plan Performance Reporting Policy

REFERENCES

VAGO Report – Delivering Local Government Services 2018 Local Government Performance Reporting Framework (LGPRF)

DOCUMENT REVISIONS

Version	Summary of Changes	Approved by	Date
1	Original Policy adopted	ELT	12 October 2021
2	Revised Policy adopted	Council	xxxx

ITEM NO: 9.2.4 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

BUSINESS CONTINUITY MANAGEMENT POLICY

Recommendation

That Council adopt the Business Continuity Management Policy, as shown in Attachment 1.

1. Executive Summary

The purpose of the Business Continuity Management Policy (Policy) is to establish the principles and framework of Business Continuity Management and outlines the responsibilities for effectively responding to business disruptions to ensure critical functions and services are maintained or restored in a timely fashion.

The draft Policy was reviewed and endorsed by the Audit and Risk Committee on 18 July 2024 and is now tabled for consideration by Council.

2. Conflict of interest declaration

There are no conflict of interest declarations to consider.

3. Background & Context

The Policy forms part of the overarching Business Continuity Management Framework and reinforces Councils commitment to ensuring that critical services to the community can resume as soon as possible in the event of a disruption.

The revised Policy defines the roles and responsibilities of key stakeholders and describes the principles of business continuity management including keeping the BCP current and taking into account changing circumstances.

The next phase of the development of the Business Continuity Management Framework will be the review and development of the Business Continuity Plan.

4. Strategic Alignment

This report aligns with the Council Plan objective of Transparent and Accountable Governance as we responsibly manage our business, health and safety risks.

5. Internal & External Engagement

The draft Business Continuity Policy has been developed by the Acting Director Corporate Performance in consultation with the Manager Governance Risk & Performance and the Executive Leadership Team. The Audit and Risk Committee reviewed the draft Policy and have endorsed a recommendation to Council to consider the final Policy.

External consultation is not required.

ITEM NO: 9.2.4 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

BUSINESS CONTINUITY MANAGEMENT POLICY (cont'd)

6. Budget / Financial Considerations

There are no budget considerations associated with the review and implementation of this Policy.

7. Risk & Mitigation

This Policy forms part of the overarching Business Continuity Management Framework and ensures that critical business functions can continue during a disruption event.

8. Conclusion

The Business Continuity Management Policy has been developed to reinforce Council's commitment to the continuation of critical services during a disruption event. It is now tabled for consideration by Council as recommended by the Audit and Risk Committee.

Attachments

1 Business Continuity Management Policy - July 2024

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.4

(MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

BUSINESS CONTINUITY MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Business Continuity Management Policy - July 2024

Moira Shire Council

Business Continuity Management Policy

Policy type Council Version Number 2.0

Responsible Officer Manager Governance, Risk and Performance

Date adopted by Council

Scheduled for review This policy will be reviewed four years from the date of

adoption, or sooner if required.

It is recognised that, from time to time, circumstances may change leading to the need for minor administrative changes to this document. Administrative changes do not materially alter the document (such as spelling/typographical errors, change to the name of a Council department, a change to the name of a Federal or State Government department). Administrative updates can be made in accordance with the

Policy Framework Guidelines.



ITEM NO: 9.2.4 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

BUSINESS CONTINUITY MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Business Continuity Management Policy - July 2024

PURPOSE

This Policy establishes the principles and framework of Business Continuity Management (BCM) and outlines the responsibilities for effectively responding to business disruptions to ensure critical functions and services are maintained or restored in a timely fashion.

Policy Objectives

This Policy aligns with Council's legislative obligations by ensuring that general business can continue until a disruptive incident ends.

The objectives of this Policy are to:

- Meet all internal and external obligations with regard to continuity of key services;
- Ensure the continuity of critical business functions;
- · Guide the BCM Team to effectively manage a disruptive incident;
- · Allocate BCM roles and responsibilities to staff in the event of an incident;
- Allocate management responsibility for the implementation, monitoring and review of the BCM documentation;
- · Provide a consistent approach to BCM aligned to ISO 22301:2020;
- Undertake an annual Business Impact Analysis (BIA) across all Council functions to gain an understanding of their activities and required supporting resources;
- Document cost effective business continuity arrangements for time critical activities to minimise disruption to critical community services:
- Enhance the capability of the BCM Management Team structure by undertaking annual exercises and testing business continuity arrangements and documentation;
- Embed BCM in Council culture and values by undertaking training and awarenessraising activities on an ongoing basis;
- Continually align with the Risk Management Framework.
- · Integrate BCM within Emergency Procedures.

Principles

This BCM policy is underpinned by the following principles:

- That the Business Continuity Plan (BCP) should cover all essential and time critical business functions and services;
- · That the BCP is to be kept current to take into account changing circumstances;
- That all staff and other parties (as per Scope) must be made aware of the BCP and their own roles within the Plan;
- That the BCP should be tested at least annually in a simulated environment to ensure that it can be implemented in an incident or loss of service situation and that management and staff understand how it is to be executed;
- That a formal risk assessment should be undertaken and continually reviewed to determine the requirements for the incident recovery plan; and
- · That MSC should develop a comprehensive BCP for each time critical activity.

Moira Shire Council - Business Continuity Policy

ITEM NO: 9.2.4 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

BUSINESS CONTINUITY MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Business Continuity Management Policy - July 2024

Roles and Responsibilities

Roles and responsibilities for BCM will be clearly defined within the Plan and sub-plans, and understood by Council, Executive, senior management, staff and other stakeholders.

Role	Responsibility
Council	Council approves the Business Continuity Policy.
	 Council has delegated various powers and functions to the CEO to enable Policy and procedures to assist with the management of Council risk profile.
CEO	CEO has overall accountability for an effective risk management program, including the business continuity management program.
	In the event of an incident or crisis the CEO will establish the Incident Management Committee and delegate a Chair who will manage the event until normal business operations resume.
	The CEO will be the primary spokesperson for the Council until normal business activities resume.
Director Corporate Performance	Must maintain a current working knowledge of the BCP and relevant sub-plans;
	To ensure that all relevant Policies are up-to-date.
	 To ensure that all staff assigned responsibilities within the BCP and sub-plans are aware of their roles and responsibilities.
Manager Governance,	To ensure that the BCP is maintained as current;
Risk and Performance	To coordinate and participate in monitoring and reviewing of the BCP; and
	 To ensure that the relevant levels of training are undertaken by staff assigned responsibilities within the BCP and sub-plans.
Audit & Risk Committee	To advise the Council with relevant information regarding Business Continuity Management to ensure appropriate policies, systems and procedures are implemented and maintained as current to manage risk to operations.
Managers	Ensure that staff have appropriate information and training in business continuity relevant to their position and role in the business continuity management plan.
Council Staff	Specific roles and responsibilities are outlined within critical function sub-plans.

Moira Shire Council - Business Continuity Policy

ITEM NO: 9.2.4 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

BUSINESS CONTINUITY MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Business Continuity Management Policy - July 2024

SCOPE

This Policy applies to all time critical activities and supporting resources, including all persons involved in the delivery of those activities - employees, volunteers, contractors, sub-contractors and representatives of Council.

DEFINITIONS

Term	Definition	
Business Continuity	Capability of the organisation to continue delivery of products or services at acceptable predefined levels following a disruptive incident.	
Disruptive Incident	An interruption to normal business operations, processes or services which can range from short-term to longer term unavailability, and which could lead to loss, emergency or crisis.	
Business Continuity Management	Holistic management process that identifies potential threats to an organisation and the impacts to business operations, if realised, might cause and which provides a framework for building organisational resilience with the capability of an effective response that safeguards the interests of key stakeholders, reputation, brand and value-creating activities.	
Business Continuity Plan	A collection of procedures and information that is developed, compiled and maintained in readiness for use in a business disruption event.	
Business Impact Analysis	A management level analysis, which evaluates the risks to disruption to critical business processes, including consideration of the effects on capability over time and the need for, and interdependencies of, resources.	
Business Disruption Event (Incident)	Situation that might be, or could lead to, disruption, loss, emergency or crisis.	
Business Continuity Management Committee + Team	This Committee provides the overall control and strategic response to an event. It has a governance role. The Business Continuity Management Team has an operational role in an event.	

POLICY STATEMENT

Moira Shire Council (MSC) recognises business continuity management (BCM) as an essential component of responsible management practice and an important element of the Council's approach to risk management. The purpose of this Policy is to formalise Council's commitment to BCM to ensure that critical services to the community can resume as soon as possible in the event of a disruptive incident.

ITEM NO: 9.2.4 (MANAGER GOVERNANCE, RISK AND PERFORMANCE, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

BUSINESS CONTINUITY MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Business Continuity Management Policy - July 2024

MONITORING AND EVALUATION

A review, at least annually, of BCM activities will be undertaken by the Manager Governance, Risk and Performance.

On advice of the Manager Governance, Risk and Performance, the Audit and Risk Committee will monitor and review the progress of the effective implementation of BCM throughout the Council and at least report annually to Council.

RELATED LEGISLATION

Local Government Act 2020 Charter of Human Rights & Responsibilities Act 2006 Gender Equality Act 2020

RELATED POLICIES AND PROCEDURES

Risk Management Policy Customer Service Charter Customer Experience Strategy (draft) Records Management Policy Community Engagement Policy Spokesperson Policy

REFERENCES

Insurance Policies
ISO 22301:2020
Risk Management Policy and Framework
Service Planning Framework
Business Continuity Plan
Business Continuity Debrief Template
Emergency Management Plan
Audit & Risk Committee Terms of Reference

DOCUMENT REVISIONS

Version	Summary of Changes	Approved by	Date
1	Original Policy adopted	CMT	10 August 2010
2	Revised Stand-Alone Policy Endorsed	Council	

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN

Recommendation

That Council adopt the revised Audit and Risk Committee Charter, as shown in Attachment 1.

1. Executive Summary

The Audit and Risk Committee Charter has been reviewed in line with the recommended review period of two years and provides the Audit and Risk Committee with a Terms of Reference to deliver their objectives in accordance with the *Local Government Act 2020* (the Act).

2. Background & Context

The Audit and Risk Committee Charter, prepared under the provisions of the *Local Government Act 2020* (s54) was adopted by Moira Shire Council on 27 May 2020.

A review was conducted in September 2020 to include additional reporting requirements and then a further review was conducted and endorsed in 2022 to increase the number of external independent members from three to five and to provide more clarity in the roles and responsibilities of the Committee.

The recent review of the Charter involved benchmarking across a number of Councils who had more recently updated their own Charters, including Monash, Knox, Merribek, Kingston, Macedon Ranges and Melbourne.

The review also took into consideration;

- The new composition of the Panel of Administrators:
- The Reporting requirements in the Risk Management Plan, endorsed by Council in May 2024:
- Recommendations from the Fraud and Corruption Internal Audit conducted in 2023;
- Recommendations from the Interim Letter issued by VAGO; and
- The opportunity to enhance the skill set of the External Independent Members.

In accordance with Section 54 of the Act, the Charter must specify the functions and responsibilities of the Audit and Risk Committee including the following:

- Monitor the compliance of Council policies and procedures with;
 - o the overarching governance principles: and
 - the Act and the regulations and any Ministerial directions
- Monitor Council financial and performance reporting;
- Monitor and provide advice on risk management and fraud prevention systems and controls;
- Oversee internal and external audit functions;

The Audit and Risk Committee must also adopt an annual Work Program. This has been included in the Charter as Appendix B.

FILE NO:
5. TRANSPARENT AND ACCOUNTABLE
GOVERNANCE

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

An Audit and Risk Committee must:

- Undertake an annual assessment of its performance against the Audit and Risk Committee Charter; and
- Provide a copy of the annual assessment to the CEO for tabling at the next Council Meeting.

An Audit and Risk Committee must:

- Prepare a biannual audit and risk report that describes the activities of the Audit and Risk Committee and includes it findings and recommendations; and
- Provide a copy of the biannual audit and risk report to the CEO for tabling at the next Council meeting.

The Chief Executive Officer must:

- Ensure the preparation and maintenance of agendas, minutes and reports of the Audit and Risk Committee; and
- Table reports and annual assessments of the Audit and Risk Committee at Council
 meetings when required by the Act and when requested by the Chairperson of the Audit
 and Risk Committee.

Amendments

The following amendments have been made to the Charter as part of the review:

- 1. Enhanced the membership of the Chair Administrator (Mayor) from 'ex officio' to an official member with voting rights.
- 2. Removed the requirement for a period of three years to lapse between appointments for an External Independent Member.
- 3. Enhanced the skill set of the External Independent Members to include experience in organisational culture and strategy.
- 4. Included the review of Council's Local Government Performance Reporting Framework and associated Governance processes.
- 5. Included a Fraud and Corruption Report in the Work Program as a standing item in response to an Internal Audit recommendation.
- 6. Updated the duties and responsibilities in relation to risk management to include Risk Management Reporting in line with the requirements of the Risk Management Plan.
- 7. Updated the Work Program to include Risk Management Reporting in line with the requirements of the Risk Management Plan.

3. Conclusion

The Audit and Risk Committee Charter has been reviewed in line with the recommended review period of two years and provides a number of amendments to enhance the membership and oversight of the committee in regard to Risk Management.

Attachments

1 Audit and Risk Committee Charter - July 2024

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024



ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



DOCUMENT CONTROL				
Version Number: 4				
Review Period:	This Charter shall be reviewed at least every 2 years.			

REVIEW HISTORY					
Version Number	Date Adopted	Reference Number			
1	27 May 2020	D20/25175			
2	25 November 2020	D20/67396			
3	22 June 2022	D22/32797			
4	24 July 2024	D24/55230			

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



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ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



1. Purpose

Moira Shire Council has established an Audit and Risk Committee (Committee) pursuant to Section 53 of the *Local Government Act 2020* (Act) to support Council in discharging its oversight responsibilities related to:

- financial and performance reporting;
- risk management;
- fraud prevention systems and control;
- · maintenance of a sound internal control environment;
- · assurance activities including internal and external audit; and
- Council's performance with regard to compliance with its policies and legislative and regulatory requirements.

It acts in this capacity by monitoring, reviewing, endorsing and advising on the above matters as set out in this Charter. This Charter has been developed in accordance with Section 54 of the Act.

2. Objectives

The Committee is established to assist relevant activities of management, the internal audit function and the external auditor to facilitate achieving overall organisational objectives in an efficient and effective manner.

As part of Council's governance obligations to its community, Council has constituted the Committee to facilitate the organisations ethical development through:

- the enhancement of the credibility and objectivity of internal and external financial reporting;
- effective management of financial and other risks and the protection of Council assets.
- · compliance with laws and regulations as well as use of best practice guidelines;
- the effectiveness of the internal audit function; and
- the provision of an effective means of communication between the external auditor, internal audit, management and the Council.

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



3. Authority

The Committee is an advisory committee of Council as set out in Section 53 of the *Local Government Act 2020*. The Committee does not have executive powers or authority to implement actions in areas over which management has responsibility and does not have any delegated financial responsibility. The Committee does not have any management functions and is therefore independent of management.

The Committee's role is to report to Council and provide appropriate advice and recommendations on matters relevant to its Charter in order to facilitate decision making by Council in relation to the discharge of its responsibilities.

4. Committee Composition

The Committee will comprise a maximum of seven members appointed by Council including:

- a maximum of five and a minimum of three external independent members; and
- two Administrators.

The Committee must not include any person who is a staff member of Moira Shire Council.

4.1 External Independent Members

- will be appointed for an initial three-year term and may serve an additional three-year term to a maximum of six years;
- a current member is able to reapply to be appointed for subsequent terms and may be reappointed subject to satisfactory performance;
- must collectively have expertise in financial management and reporting, risk management and audit, and also experience in public sector management;
- remuneration will be paid to each independent member of the Committee at a rate determined by Council.

4.2 Administrators

- When there are two Administrators appointed to Moira Shire Council, they automatically fill the administrator member positions on the committee
- Where there are three or more Administrators appointed to Moira Shire Council, the appointment of two administrators to the Committee will be made via Council resolution.

4.3 Chairperson

- is appointed by the Committee;
- must be an external independent member;
- is entitled to serve as Chairperson for multiple terms provided that no more than two terms are served consecutively;
- In the absence of the appointed Chairperson from a meeting, the Committee will appoint
 an acting Chairperson from the external independent members present.
- Will have a casting vote.

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



5. Committee Tenure

The consecutive service of external independent members shall be limited to two, three year terms. Having served two consecutive three year terms, external members are eligible to serve additional terms if they are reappointed through a competitive process. Subject to this Charter, there is no restriction to the total number of terms an external member may serve.

Notwithstanding anything in this Charter to the contrary, the term of an external independent member may be extended by a majority vote of the Committee for up to 1 year to enable the objectives of the Charter to be achieved. If a term of an external member is extended under these provisions the extension period shall be added to the existing term and considered as part of that term. For calculation purposes, a term shall include any period of time served regardless of whether it is more or less than three years.

6. Appointment of External Independent Members

Appointments of external independent members shall be made by Council by way of a public advertisement including print and social media. The terms of the appointment should be arranged to ensure an orderly rotation and continuity of membership despite changes to Council's elected representatives in order to minimise the loss of knowledge of Council's business that may occur on change of membership.

The evaluation of potential members will be undertaken by the Chair Administrator and Chief Executive Officer taking account of the experience of candidates and their likely ability to apply appropriate analytical and strategic management skills, and a recommendation for appointment put to Council.

External independent members will:

- · have senior business experience;
- possess appropriate qualifications and significant relevant experience in financial management and reporting, risk management, or audit
- · understand organisational culture and strategy; and
- be conversant with the Local Government financial and other reporting requirements.

7. Committee Membership

Because the responsibilities of the Audit and Risk Committee evolve in response to regulatory, economic and reporting development, is it important to periodically re-evaluate all member's competencies and the overall balance of skills on the committee in response to emerging needs.

If the Council proposes to remove a member of the Committee, it must give written notice to the member of its intention to do so and provide that member with the opportunity to be heard at a Council meeting which is open to the public, if that member so requests.

In addition, the Council may remove a member of the committee if they fail to attend three consecutive meetings without leave of the Committee by resolution duly passed, or on the recommendation of the Committee.

7.1 Committee Member Regulatory Obligations

Committee members are expected to be aware of their obligations under the Act. These obligations relate to misuse of position as a member of the Committee (Section 123), confidential information (Section 125) and conflict of interest (Sections 126 to 131). Details of these obligations are included in **Appendix A** to this Charter.

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



8. Meetings

8.1 Schedule of Meetings

The Committee shall meet at least quarterly, and a schedule of meetings will be developed and agreed to by the members. An additional meeting will be held in September to coincide with relevant Council reporting deadlines for the finalisation of the financial statements and the draft Annual Report to the Minister.

An Annual Work Program has been developed and detailed in **Appendix B** in accordance with Section 54(3) of the Act.

Committee members and the Internal and External Auditors can request the Chairperson to convene additional meetings if they feel that it is justified to address unexpected matters that may have arisen.

The Committee, without the presence of the Council management, shall meet with the Internal Auditors at the beginning of each meeting and with the External Auditors at least annually and invite the Chief Executive Officer to attend at their discretion.

8.2 Attendance

All Committee members are expected to attend each meeting in person where possible, although members can attend through electronic means with prior notice to the Chairperson.

The Committee will invite members of Council's management team, the Internal auditors and other personnel as appropriate to attend meetings. The Chief Executive Officer (CEO), Director Corporate Performance and Manager Governance, Risk and Performance will endeavour to attend all meetings.

Representatives of the External Auditor should be invited to attend at the discretion of the Committee but **must** attend meetings considering the draft annual financial report and results of the external audit.

8.3 Minutes and Agendas

Council shall provide secretarial and administrative support to the Committee. Meeting agendas and appropriate briefing materials will be sent electronically to every member at least five days before the meeting. A period of less than five days may be justified if exceptional circumstances exist, but no less than three.

Minutes of each meeting will be prepared and issued electronically to members prior to the next meeting for confirmation.

9. Quorum

A quorum is required to conduct the business of the Committee and shall comprise of 50% of members plus one. If, after 30 minutes from the scheduled starting time of a meeting a quorum cannot be obtained, the Chairperson may adjourn the meeting for a period not exceeding seven days from the date of adjournment.

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



10. Duties and Responsibilities

The Committee, through the CEO and following authorisation from the Council, and within the scope of its responsibilities, may seek information or obtain expert advice on matters of concern.

The following are the duties and responsibilities of the Committee in pursuing its Charter.

10.1. Internal Audit

- 10.1.1. To review the scope of the Internal Audit Program and the effectiveness of the function. This review should consider whether, over a period of years the Internal Audit Program systematically addresses:
 - internal controls over significant areas of risk, including non-financial management control systems;
 - internal controls over revenue, expenditure, assets and liability processes;
 - the efficiency, effectiveness and economy of significant Council programmes; and
 - compliance with regulations, policies, best practice guidelines and contractual arrangements.
- 10.1.2. Review and approve proposed scopes for each review in the annual Internal Audit Program and the appropriateness of special internal audit assignments undertaken by Internal Auditors at the request of Council or CEO.
- 10.1.3. Review progress on delivery of the annual Internal Audit Program and the level of resources allocated to internal audit and the scope of its authority.
- 10.1.4. Review reports on internal audit reviews, including recommendations for improvement arising from those reviews and the extent to which Council and management react to matters raised by internal audit, by monitoring the implementation of recommendations made by internal audit.
- 10.1.5. Ensure that the Committee is aware of and appropriately represented with regard to any proposed changes to the appointment of the internal audit service provider, including being appropriately briefed on the need for any proposed change.
- Recommend to Council, if necessary, the termination of the Internal Audit Contractor.

FILE NO: 5. TRANSPARENT AND ACCOUNTABLE

GOVERNANCE

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



10.2. External Audit

- 10.2.1. Discuss with the external auditor:
 - · the scope of the audit and the planning of the audit;
 - issues arising from the audit, including any management letter issued by the auditor and the resolution of such matters; and
 - any audit issues encountered in the normal course of audit work, including any restriction on scope of work or access to information.
- 10.2.2. Facilitate liaison between the internal and external auditor to promote compatibility, to the extent appropriate, between their audit programmes.
- 10.2.3. Ensure that significant findings and recommendations made by the External Auditor, and management's responses to them, are appropriate and are acted upon in a timely manner.
- 10.2.4. Critically analyse and follow up any internal or external audit report that raises significant issues relating to risk management, internal control, financial reporting and other accountability or governance issues, and any other matters relevant under the Committee's terms of reference. Review management's response to, and actions taken as a result of the issues raised.
- 10.2.5. Review the effectiveness of the external audit function and ensure that the Victorian Auditor General's Office (VAGO) is aware of the Committee's views.
- Consider the findings and recommendations of any relevant performance audits undertaken by VAGO and monitor Council's responses to them.
- 10.2.7. Review accounting position papers prior to the balance date, including papers concerning valuation of assets.
- 10.2.8. After the balance date and at the time of reviewing the draft financial report:
 - determine whether there have been any changes to circumstances that would indicate that key assumptions behind the finance team's initial advice and key judgement no longer hold true; and
 - assess the reasonableness of the valuation and fair value assessment outcomes.
- 10.2.9. Meet with the external auditor at least annually in the absence of management.

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AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



10.3. Financial and Performance Reporting

- Monitor ethical standards and related party transactions by determining whether the systems of control are adequate.
- 10.3.2. Review Council's draft annual financial report, focusing on:
 - · accounting policies and practices;
 - · changes to accounting policies and practices;
 - · the process used in making significant accounting estimates;
 - significant adjustments to the financial report (if any) arising from the audit process;
 - · compliance with accounting standards and other reporting requirements;
 - · significant variances from prior years.
- 10.3.3. Recommend adoption of the annual financial report to Council. Review any significant changes that may arise subsequent to any such recommendation but before the financial report is signed.
- 10.3.4. Review policies and processes related to procurement and tendering practices.
- Review the Annual Performance Statement and recommend its adoption to Council.
- 10.3.6. Review quarterly budget reviews and projections.
- 10.3.7. Review changes to the Local Government Performance Reporting Framework (LGPRF) and understand the impact of those changes on Council's performance indicators.
- 10.3.8. Review the completeness of corporate governance processes as prescribed in the Governance and Management Checklist of the Local Government (Planning and Reporting) Regulations 2020.

10.4. Risk Management

- 10.4.1. Monitor the risk exposure of Council by determining if management has appropriate risk management processes and adequate management systems.
- 10.4.2. Review annually the effectiveness of Council's Risk Management Framework, including evidence that shows the organisations risk management culture aligns with the Framework
- Review Council's Risk Appetite Statement and the degree of alignment with Council's Risk Profile.
- 10.4.4. Review Council's Risk Profile and the changes occurring in the Profile from meeting to meeting.
- 10.4.5. Review the insurance programme annually prior to renewal.
- 10.4.6. Review the approach to business continuity planning arrangements, including whether business continuity and disaster recovery plans have been regularly updated and tested.

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



10.5. Fraud Prevention Systems and Controls

- 10.5.1. Review Council's Fraud Prevention policies and controls, including the Fraud Control Plan and fraud awareness programmes at least every two years.
- 10.5.2. Receive reports from management about actual or suspected instances of fraud or corruption including analysis of the underlying control failures and action taken to address each event.
- 10.5.3. Review reports by management about the actions taken by Council to report such matters to the appropriate integrity bodies.

10.6. Compliance Management

- 10.6.1. Review the systems and processes implemented by Council for monitoring compliance with relevant legislation and regulations and the results of management's follow up of any instances of non-compliance.
- Receive reports from management on the status of Councils Policy Register for monitoring compliance and currency.
- 10.6.3. Review the processes for communicating Council's Employee Code of Conduct to employees and contractors and for monitoring compliance with the Code.
- 10.6.4. Obtain briefings on any significant compliance matters.
- 10.6.5. Receive reports from management on the findings of any examinations by regulatory or integrity agencies (whether related to investigations at Council or other agencies), such as the Ombudsman, IBAC, Victoria Government Inspectorate, WorkSafe etc. and monitor Council's responses.

11. Reporting

The Committee shall, after every meeting, forward the Minutes of that meeting to the next Scheduled Meeting of the Council, including a report explaining any specific recommendations and key outcomes.

The Chairperson will prepare a report to Council through the CEO on the Committee's activities twice per annum. One of these reports will be prepared after the meeting at which the annual financial report and the annual performance statements have been considered and recommended to Council for adoption, such report indicating how the Committee has discharged its responsibilities as set out in this Charter for the previous year.

The Committee shall annually conduct an evaluation of the:

- · satisfaction of the internal audit function; and
- Audit and Risk Committee's performance

and report to Council.

The Committee shall conduct a biannual review and assessment of the adequacy of the Charter and request Council approval for proposed changes.

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



Appendix A Committee Member Regulatory Obligations

Guidance to Members

LGA Section	LGA Requirement				
Misuse of Position					
123(1)	A Committee member must not intentionally misuse their position to: a) Gain or attempt to gain, directly or indirectly, an advantage for themselves or for any other person; or b) Cause, or attempt to cause, detriment to the Council or another person.				
123(3)	Circumstances involving misuse of a position by a member of the Committee include: a) Making improper use of information acquired as a result of being a member of the Committee; or b) Disclosing information that is confidential information; or c) Directing or improperly influencing, or seeking to direct or improperly influence, a member of Council staff; or d) Exercising or performing, or purporting to exercise or perform, a power, duty or function that the person is not authorised to exercise or perform; or e) Using public funds or resources in a manner that is improper or unauthorised; or f) Participating in a decision on a matter in which the member has a conflict of interest.				
Confiden	itial Information				
125	A member of the Committee must not intentionally or recklessly disclose information that the member knows, or should reasonably know, is confidential information. There are some exemptions to this requirement, the key one being that if the information disclosed by the member has been determined by Council to be publicly available.				
Conflicts	of Interest				
126	A member of the Committee has a conflict of interest if the member has: a) A general conflict of interest as described in Section 127; or b) A material conflict of interest as described in Section 128.				
127	A member of the Committee has a general conflict of interest in a matter if an impartial, fair-minded person would consider that the members private interests could result in that member acting in a manner that is contrary to their public duty as a member of the Committee.				
128	A member of the Committee has a material conflict of interest in a matter if an affected person would gain a benefit or suffer a loss depending on the outcome of the matter.				
Part 6, Di the matte	tote e guidance is not verbatim from the Act and does not include all details as explained in vision 1 of the Act. For a full understanding of the requirements of the Act in relation to rs summarised above, members are expected to make themselves fully aware of the ents of the Act.				

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



Appendix B Annual Work Program

Item	AGENDA ITEM	Annual Statements	Quarter 1	Quarter 2	Quarter 3	Quarter 4
===		September	October	February	May	July
INTERNA	AL AUDIT					
10.1.1 10.1.5 10.1.6	Review of Internal Audit Program including effectiveness of the function.				х	
10.1.2	Review and approve proposed scopes for annual Internal Audit Program reviews. (or as required)				х	
10.1.3 10.1.4	Receive Internal Audit Action Status Report		х	x	х	x
EXTERN	AL AUDIT					
10.2.1	Discuss external auditors proposed audit scope				Х	
10.2.3	Review VAGO Interim Management Letter				Х	
10.2.5	Review of External Audit function and report findings to VAGO	х				
10.2.6	Annual Review of VAGO Indicators	х				
10.2.7	Review Valuation Accounting Paper (prior to balance date)				х	
10.2.9	Meet with External Auditor (without Management)	х				
FINANCI	AL AND PERFORMANCE REPORTING					
10.3.1	Receive Purchase Card Usage Report				×	
10.3.2	Review Draft Management Letter	Х				
10.3.3 10.3.5	Review of Annual Financial Statements and Performance Report	x				
10.3.4	Review of Procurement Policy and Guidelines (2 years)		х			
10.3.6	Receive Quarterly Budget Review and Projections		Х	x	х	
10.3.7	Review of Local Government Performance Reporting Framework	х				
10.3.8	Review of Governance & Management Checklist	х				
	Review the Long-Term Financial Plan (LTFP) (and financial sustainability)					х

ITEM NO: 9.2.5 (MANAGER GOVERNANCE & RISK, AMANDA CHADWICK) (ACTING DIRECTOR CORPORATE PERFORMANCE, EVA SALIB)

AUDIT AND RISK COMMITTEE CHARTER AND WORK PLAN (cont'd)

ATTACHMENT No [1] - Audit and Risk Committee Charter - July 2024

Audit and Risk Committee Charter



Item	AGENDA ITEM	Annual Statements September	Quarter 1 October	Quarter 2 February	Quarter 3 May	Quarter 4 July
RISK MA	NAGEMENT			,		
	Review Operational Risk Register (including Fraud) – Extreme, High & Medium		х	x	х	х
10.4.1	Review Project Level Risks (as required)		х	х	х	х
	Receive Claims and Incident Report		х	х	Х	Х
	Receive IT Risk Management Report		х		Х	
10.4.2	Review Risk Management Framework			х		
10.4.3	Review Risk Appetite Statement			Х		
10.4.4	Review Risk Profile			х		
10.4.5	Review Strategic Risk Register		х		Х	
10.4.6	Review insurance programme (prior to renewal)		×			
10.4.7	Review of the Business Continuity Plan and IT Disaster Recovery Plan				х	
FRAUD F	PREVENTION SYSTEMS AND CONTROLS					
10.5.1	Review Fraud Control Plan, Policy and Awareness Programs (2 years)			х		
10.5.2 10.5.3	Receive report on Fraud and Corruption Incidents and reporting		х	x	х	x
COMPLIA	ANCE MANAGEMENT					
10.6.1	Receive report on monitoring compliance			х		
10.6.2	Review Policy Register		х		Х	
10.6.3	Review the process for implementation of the Employee Code of Conduct.			×		
10.6.4	Receive report on Major Projects and Legal Proceedings		х	×	х	х
10.6.5	Receive report of findings from regulatory integrity agencies (IBAC, WorkSafe Ombudsman)		х		х	
REPORT	ING & ADMINISTRATION					
Election	of Chairperson					Х
Chairper	sons Report					Х
Committe	ee Self-Assessment					Х
Action Re	egister Report		Х	х	Х	Х
Attendan	ce Register Report		Х	х	Х	Х
Conduct	Charter Review (2 years)				Х	
Biannual	Committee Report			х		х

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.6 (GOVERNANCE AND RISK ADVISOR, NATALIE EVANS) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

RISK MANAGEMENT POLICY

Recommendation

That Council adopt the revised Risk Management Policy, as shown in Attachment 1.

1. Executive Summary

The purpose of the Risk Management Policy is to provide an overarching commitment on how Council will manage risks as well as defining the key roles and responsibilities of Risk Management within Council.

A review of Council's existing Risk Management Policy has determined the need for a rewrite to ensure that the policy is in line with the intended direction of Council in regard to risk management practices.

This report seeks Council adoption of the revised Risk Management Policy.

2. Conflict of interest declaration

There are no officer conflicts associated with this report.

3. Background & Context

The Risk Management Policy was last adopted in October 2019. A review of the Policy has determined the need for a rewrite to ensure that the Policy is in line with the intended direction of Council in regard to risk management practices.

The Policy rewrite ensures alignment with Council' Risk Appetite Statement and the Risk Management Plan which has been recently endorsed which aligns with risk management standards (ISO 31000) and previous audits undertaken on risk management.

A summary of the amendments to the revised Policy include:

- Enhanced Purpose and Scope
- Additional Definitions including Risk Appetite, Control and Emerging Risk
- Inclusion of a Policy Context that references the broader Risk Management Framework
- Inclusion of roles and responsibilities
- Inclusion of Performance Measures
- Inclusion of Monitoring and Evaluation processes.

4. Strategic Alignment

Council Plan

5. Transparent and accountable governance Having an effective Risk Management Policy

aligns with Council's goals of responsible management of business, health and safety risks.

ITEM NO: 9.2.6 (GOVERNANCE AND RISK ADVISOR, NATALIE EVANS) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

RISK MANAGEMENT POLICY (cont'd)

5. Internal & External Engagement

The revised Risk Management Policy has been developed in consultation with the Governance & Risk Coordinator, Manager Governance, Risk & Performance and Acting Director Corporate Performance and was also circulated to the Executive Leadership Team for feedback.

The revised policy was endorsed by Council's Audit and Risk Committee on 18 July 2024.

6. Budget / Financial Considerations

There are no budget considerations associated with the review and implementation of this Policy. There may be budget considerations around implementation of controls and further mitigations relating to risks identified by Council.

7. Risk & Mitigation

This Policy forms part of the overarching Risk Management Framework.

8. Conclusion

It is recommended that Council adopt the revised Risk Management Policy.

Attachments

1 Risk Management Policy

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 9.2.6

(GOVERNANCE AND RISK ADVISOR,

NATALIE EVANS)

(ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

RISK MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Risk Management Policy



ITEM NO: 9.2.6 (GOVERNANCE AND RISK ADVISOR, NATALIE EVANS) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

RISK MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Risk Management Policy

PURPOSE

The purpose of this policy is to define Moira Shire Council's commitment to risk management, and the proactive management of the Strategic, Operational and Project Risks that have an impact on the achievement of Council's objectives. Proactive risk management supports the protection of community, employees, business assets, service delivery, environment and financial sustainability.

SCOPE

This policy applies to all service and functional areas. Risk management is not a stand-alone function separate from the main activities and processes of the organisation. It is an integral part of all organisational processes, including strategic planning, project and change management process.

DEFINITIONS

Term	Definition
Council	Moira Shire Council.
Control	Measure that maintains and/or modifies risk.
Emerging Risk	Emerging risks are those risks that are newly developing or evolving and therefore are difficult to identify and/or evaluate.
Event	Occurrence or change in a particular set of circumstances.
Risk	The effect of uncertainty on objectives. It is characterised by a reference to the likelihood and consequences of a potential event.
Risk Appetite	The risk appetite of council is determined by the types and amount of risk that it is willing to accept.
Risk Management	Coordinated activities to direct and control an organisation with regard to risk.
Risk Management Framework	A formal, structured approach to risk management.
Operational Risk	Events/incidents that impact the delivery or services or programs by a department in the internal operating environment.
Project Risk	Events/incidents that impact individual projects or programs of work.
Strategic Risk	Events/incidents that are those risks that can cause a shift in Council's strategic objectives.

POLICY CONTEXT

This policy provides the overarching principles for Council's Risk Management Framework which includes:

- Risk Appetite Statement.
- Risk Management Plan.
- · Audit and Risk Committee.
- Supporting documents and policies that complement risk management including fraud prevention, business continuity management, project management, occupational health and safety and codes of conduct.

The Framework will enable:

 A formal, structured approach to risk management that is appropriate to the organisation's activities and operating environment;

Moira Shire Council - Draft Risk Management Policy

1

ITEM NO: 9.2.6 (GOVERNANCE AND RISK ADVISOR, NATALIE EVANS) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

RISK MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Risk Management Policy

- A risk management approach consistent with the principles of AS ISO31000:2018 Risk Management – Guidelines; and
- · Continuous evaluation and improvement of managing risks.

POLICY STATEMENT

Council is committed to managing risks to maximise opportunities and minimise adverse outcomes in all activities and processes of the organisation. In doing this, Council will:

- Consider risks associated with all activities and planning processes in accordance with the Council's endorsed risk appetite and tolerance levels.
- Ensure the criteria to be used for risk and control assessments are those detailed in the Risk Management Plan.
- Ensure accountability for activities within Council's Risk Management Plan is allocated to those with the levels of authority necessary for decision making.
- Develop and maintain a Strategic and Operational Risk Register.
- Ensure all employees with roles and responsibilities within the Risk Management Framework receive appropriate training.
- Ensure those allocated responsibility for managing risks or being accountable for critical controls, establish and maintain appropriate monitoring and reporting mechanisms.
- Undertake reporting on risks in accordance with the Risk Management Plan.
- Ensure all adjustments to the Risk Register, including addition of risks, removal of risks and/or changes to risk level are undertaken in accordance with the Risk Management Plan

ROLES AND RESPONSIBILITIES

The following is a broad overview of the roles and responsibilities as they relate to this policy. The full list of roles and responsibilities relating to the management of risks are detailed within Council's Risk Management Plan.

Council	Reviews and adopts the Risk Management Policy and Risk Management Plan.				
	Defines Council's risk appetite.				
	 Applies risk management principles to the decision-making process. 				
Chief Executive Officer	Promotes a strong risk management culture.				
	Ensures a Risk Management Policy and Framework is in operation.				
Audit and Risk Committee	Monitors implementation and effectiveness of the Risk Management Framework through regular reviews and reporting.				
Governance and Risk Coordinator	Coordinates the review of the Risk Management Framework.				
Coordinator	Provides risk related support and advice to the organisation.				
All other staff	Understand the Risk Management Framework and any role they may have as a Risk or Control owner.				

PERFORMANCE MEASURES

The measurement of risk management performance within Council will involve two distinct activities:

Maturity – This measures the maturity of the Risk Management Plan within Council
against industry best practice.

Moira Shire Council - Draft Risk Management Policy

2

ITEM NO: 9.2.6 (GOVERNANCE AND RISK ADVISOR, NATALIE EVANS) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

RISK MANAGEMENT POLICY (cont'd)

ATTACHMENT No [1] - Risk Management Policy

 Compliance - This provides assurance that Council is complying with the Risk Management Framework.

The full detail of the performance measures is detailed in Council's Risk Management Plan.

MONITORING AND EVALUATION

Through its regular reporting mechanisms as detailed in Council's Risk Management Plan, Council will ensure that:

- · Treatment plans are meeting milestones and are effective.
- Risk levels remain relevant.
- · Controls continue to operate effectively.
- · New emerging risks are recorded.
- · Risk information is up to date.
- The monitoring components are essential to sound governance and are applied systematically to strategic, operational and project level risk.

RELATED POLICIES AND PROCEDURES

Risk Appetite Statement Risk Management Plan Fraud Prevention and Control Policy Business Continuity Plan Project Management Framework

RELATED LEGISLATION

Local Government Act 2020 Charter of Human Rights & Responsibilities Act 2006 ISO 31000 Risk Management

DOCUMENT REVISIONS

Version	Summary of Changes	Approved by	Date
1	Original policy adopted	Council	16/06/2003
2	Policy reviewed	Council	19/09/2005
3	Policy reviewed	Council	31/08/2007
4	Policy reviewed	Council	15/02/2012
5	Policy reviewed	Council	20/02/2012
6	Policy reviewed	Council	18/09/2016
7	Policy reviewed	Council	23/10/2019
8	Policy rewritten	Council	

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY

Recommendation

That Council adopt the Moira Shire Fair Access for Community Sport Policy, as shown in Attachment 1.

1. Executive Summary

The Moira Shire Fair Access for Community Sport Policy aims to build capacity and capabilities of Moira Shire Council to improve the access to, and use of, community sports infrastructure for women and girls.

At present, many Victorian women and girls don't have access to the best courts or grounds, have facilities of lesser standard, or are relegated to less convenient competition and training times. These barriers make it difficult for many to participate or reach their best.

The Moira Shire Fair Access for Community Sport Policy and associated Action Plan has been developed and exhibited for public comment from the 22 May 2024 to the 23 June 2024. The community consultation period has now closed.

This Fair Access for Community Sport Policy will help to ensure women can fully participate in and enjoy the benefits of community sport, with fair opportunity and access to their local facilities.

2. Conflict of interest declaration

None

3. Background & Context

The Policy seeks to address known barriers experienced by women and girls in accessing and using community sports infrastructure. It aims to progressively build capacity and capabilities of Moira Shire Council in the identification, and elimination of systemic causes of gender inequality in policy, programs, communications, and delivery of services in relation to community sports infrastructure.

The development of the policy is a requirement of the State Government. If not developed and adopted by Council by July 2024, Moira Shire Council will be ineligible to receive Sport and Recreation Victoria (SRV) funding.

Further, clubs, leagues and associations seeking to access Victorian Government community sport infrastructure funding programs will be asked to demonstrate how they are supporting the gender equitable access and use policy of the relevant local government authority from 1st October 2024.

The Policy and Action Plan has been cross-checked and approved by the Office for Women in Sport. They were exhibited for public comment from the 22 May 2024 to the 23 June 2024. The community consultation period has now closed. Despite a broad and direct promotion effort, no community feedback was received.

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1

(COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

4. Issues

The introduction of the Policy is mandated by State Government, and as such is not necessarily driven by the needs of our unique community. The Actions contained within the policy have been left deliberately broad, so that they can be achievable for Council and our sports clubs with the understanding of how the clubs operate and their unique constraints and attributes.

The policy and associated Action Plan will be reviewed at regular intervals and amended (if required) on a regular basis. This is to ensure that Moira Shire continue to achieve the best outcomes for our community, and future generations.

Any amendments or reviews made to the Policy must be approved in the same manner as the initial Policy was approved, that is, sharing with the Office for Women in Sport and Recreation for review.

5. Strategic Alignment

Council Plan

1. A welcoming and inclusive place

The development of the policy provides Council with measurable actions that promote the inclusion of women and girls in sport.

6. Internal & External Engagement

Engagement

Internal

A request for Feedback on the Draft Policy was sent via internal email to key staff from the following departments/ teams:

Recreation
Governance
Community Development
Communications

Grants

Feedback

Feedback on the format of the policy was received from Governance. No other feedback was received.

External

Draft Policy was provided to Jenny Sloan and David Booth from Sport and Recreation Victoria.

Office for Women in Sport were engaged through the development of the Policy and Associated Action Plan.

Broader community and sports clubs

SRV provided feedback on the document and suggested possible actions.

Office for Women in Sport have received three versions of the Draft policy and provided feedback. OWS approved final version.

The opportunity for public feedback through the public consultation period from 22 May 2024 to 23 June 2024. The link to the consultation page was promoted through social media, local newspapers, website and sent directly to sports clubs. No feedback was received.

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1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER)

(DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

7. **Budget / Financial Considerations**

There is no budget associated with the development of the Policy, however, there are indirect financial implications for delivering the associated actions.

8. Risk & Mitigation

Risk Mitigation

Financial There are indirect financial implications for delivering the

> associated actions. It could be considered that sports development budget be reviewed in 2025/26 to allow for

the development actions to be realised.

Economic (regional context or

The development of this policy will allow Council to broader economic impact) continue to seek SRV funding for sports infrastructure

projects N/A

Environmental

This policy has not received any negative feedback from Reputational

sports clubs. The Policy will deliver fairer use of public

sporting assets

Legislative Compliance This policy is a requirement of the Victorian Government.

Conclusion 9.

The community consultation phase of this policy development is complete. The Policy and Action Plan were exhibited for public comment from the 22 May 2024 to the 23 June 2024.

It is recommended that the Fair Access for Community Sport Policy is now adopted.

Attachments

- 1 Draft Fair Access for Community Sport Policy For Adoption
- 2 Draft Fair Access for Community Sport Policy Action Plan
- 3 Draft Fair Access for Community Sport Policy and Action Plan Social Pinpoint Overview Report - 27 May to 24 June 2024

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1

(COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [1] - Draft Fair Access for Community Sport Policy - For Adoption

OFFICIAL

Moira Shire Council

Fair Access Policy for Community Sport

Policy type Council

Version Number

Responsible Director Dire

Responsible Officer Team Lea

Date endorsed by ELT Date adopted by Council

Scheduled for review

Director Community

Team Leader Recreational Development

This policy will be reviewed four years from the date of adoption, or sooner if required.

It is recognised that, from time to time, circumstances may change leading to the need for minor administrative changes to this document. Administrative changes do not materially alter the document (such as spelling/typographical errors, change to the name of a Council department, a change to the name of a Federal or State Government department). Administrative updates can be made in accordance with the Policy Framework Guidelines.



1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [1] - Draft Fair Access for Community Sport Policy - For Adoption

OFFICIAL

PURPOSE

The Moira Shire Council Fair Access Policy for Community Sport (the Policy) seeks to address known barriers experienced by women and girls in accessing and using community sports infrastructure. The Policy aims to progressively build capacity and capabilities of Moira Shire Council in the identification, and elimination of systemic causes of gender inequality in policy, programs, communications, and delivery of services in relation to community sports infrastructure.

Moira Shire Council will undertake take the necessary and proportionate steps towards implementation of the Policy.

BACKGROUND

Sport is a highly visible and valued feature of Moira Shire Council's culture and identity. The sport and active recreation sector provide opportunities for enriching our communities through the promotion of respect and fair mindedness for all people, while also supporting the physical and mental wellbeing of all Victorians. Moira Shire Council is well positioned to design and implement place-based, integrated actions plans that progress gender equality in community sport.

The Victorian Government is committed to developing an environment for all Victorians to live in a safe and equal society, have access to equal power, resources, and opportunities, and are treated with dignity, respect, and fairness. A reform agenda has been developed to change the systems that have perpetuated gender inequality by designing an enduring structure that requires implementation and tracking of progress over time.

This reform agenda includes addressing the traditional structures and way community sport and recreation organisations operate through the implementation of all nine (9) recommendations from the 2015 Inquiry into Women and Girls in Sport and Active Recreation.

This includes recommendation six (6):

"...encourage facility owners and managers to review access and usage policies to ensure women and girls have a fair share of access to the highest quality facilities at the best and most popular times"

and

"facilitating a universal adoption of policies, strategies and audit tools will drive change further"

As a defined entity of the Gender Equality Act 2020, Moira Shire Council conducts Gender Impact Assessments (GIA) on all new policies, programs, communications, and services, including those up for review, which directly and significantly impact the public. The access and use of community sports infrastructure is an example of policy that has a direct and significant impact on the public.

Moira Shire Council - Fair Access Policy for Community Sport

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1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1

(COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [1] - Draft Fair Access for Community Sport Policy - For Adoption

OFFICIAL

SCOPE

The Policy enables effective and efficient integration of the requirements of the Gender Equality Act 2020, the Local Government Act 2020 and the Public Health and Wellbeing Act 2008 and other legislative frameworks.

The scope of the Policy is to support Moira Shire Council to take positive action towards achieving gender equity in the access and usage of community sports infrastructure. This complies with the Gender Equality Act 2020 and aligns with Municipal Public Health and Wellbeing Plans or Council Strategies.

OBJECTIVES

To support Moira Shire Council to take positive action towards achieving gender equity in the access and use of community sports infrastructure.

To build capacity and capabilities of Moira Shire Council in the identification and elimination of systemic causes of gender inequality in policy, programs, communications, and delivery of services in relation to community sport and recreation.

To ensure an effective place-based response for the gender equitable use and access of community sports infrastructure.

To promote gender equality in policies, programs, communications, and services as they relate to community sports infrastructure.

For Moira Shire Council, the Policy applies to the following community sports infrastructure:

Recreation Facilities
Cobram Sports Stadium
Nathalia Sports & Community Centre
Aquatic and Leisure Facilities
Cobram Memorial Swimming Pool
Nathalia Memorial Swimming Pool
Ray Denman Memorial Swimming Pool Numurkah
Strathmerton Outdoor Pool
Yarrawonga Mulwala Swimming Pool
Numurkah Aquatic & Fitness Centre
Recreation Reserves
Cobram Showground Apex Park
Cobram Scott Reserve
Yarrawonga Showground
Yarrawonga JC Lowe Oval Reserve
Numurkah Showgrounds and Recreation Reserve
Nathalia Showgrounds and Recreation Reserve
Tungamah Recreation Reserve
Strathmerton Recreation Reserve
Katamatite Recreation Reserve
Recreation Reserves Continued
Katunga Recreation Reserve

Moira Shire Council - Fair Access Policy for Community Sport

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1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER)

(DIRECTOR COMMUNITY SCOTT

WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [1] - Draft Fair Access for Community Sport Policy - For Adoption

OFFICIAL

Picola Recreation Reserve	
Waaia Recreation Reserve	
Yarroweyah Recreation Reserve	
Wunghnu Recreation Reserve	
Yalca Recreation Reserve	
Invergordon Recreation Reserve	

POLICY FRAMEWORK

The Policy is designed to comply with the Gender Equality Act 2020, and the wider Victorian Government gender equality strategy.

Moira Shire Council acknowledges:

- a. the disadvantaged position some individuals have had in the sport and recreation sector because of their gender; and
- that achieving gender equality will require diverse approaches for women, men, trans and gender diverse people to achieve similar outcomes for people of all genders.

Moira Shire Council will:

- engage fairly and equitably with all staff, governance working groups, state sporting organisations, regional sport assemblies (where applicable) and members of our sport and recreation community, regardless of their gender, in a positive, respectful, and constructive manner; and
- engage in the process of gender impact assessments to assess the implications for women, men, trans and gender diverse people of any planned action, including policies and communications. This is a strategy for making all voices, concerns and experiences, an integral dimension of the design, implementation, monitoring of policies and programs.

POLICY STATEMENT

This Statement of Intent establishes the expectation that gender equality is considered and prioritised in all current and future planning, policy, service delivery and practice as they relate to community sports infrastructure.

- a. Moira Shire Council recognises that gender equality is the attainment of equal rights, responsibilities, and opportunities of women, men, trans and gender diverse people. Equality does not mean that women, men, trans and gender diverse people will become the same but that their rights, responsibilities, and opportunities will not depend on their gender.
- b. Moira Shire Council recognises that gender equity is the provision of fairness and justice in the distribution of benefits and responsibilities based on gender. The concept recognises that people may have different needs and power related to their gender and these differences should be identified and addressed in a manner that rectifies gender related imbalances.

Moira Shire Council - Fair Access Policy for Community Sport

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1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [1] - Draft Fair Access for Community Sport Policy - For Adoption

OFFICIAL

MONITORING AND EVALUATION

a. Actions

Moira Shire Council commits to undertake a GIA on all current community sports infrastructure access and use policies and processes, and to consider opportunities to strengthen gender equitable access and use of community sports facilities in alignment with the Fair Access Principles.

If the process of assessing current policies and processes identifies opportunities to develop or strengthen gender equitable access and use of community sports facilities in alignment with the Fair Access Principles, Moira Shire council commits to developing and adopting a locally relevant gender equitable access and use policy and action plan no later than 1 October 2024.

Moira Shire Council acknowledges that the requirement to have a gender equitable access and use policy and action plan (or equivalent) in place, and the ability to demonstrate progress against that policy and action plan (or equivalent), forms part of the eligibility criteria for Victorian Government funding programs relating to community sports infrastructure from 1 July 2024.

Moira Shire Council has also identified specific actions to progress gender equitable access and use of community sports infrastructure in its Fair Access Action Plan.

b. Responsibility

The Team Leader Recreation is responsible for implementing Moira Shire Council's Fair Access Policy fro Community Sport. Management personnel, staff, volunteers, and stakeholders (for example SSAs and RSAs) at Moira Shire Council have a shared responsibility to support the policy, as outlined in the table below.

Rola	Responsibility
Moira Shire CEO and Executive	 To promote a gender-aware and gender-responsive culture and community and championing the Fair Access Policy. To promote, encourage and facilitate the achievement of gender equality and improvement in the status of women and girls in sport and active recreation.

Moira Shire Council - Fair Access Policy for Community Sport

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1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [1] - Draft Fair Access for Community Sport Policy - For Adoption

OFFICIAL

Role	Responsibility
Moira Shire Manager Economic Development, Tourism & Recreation and Team Leader Recreation	 Lead the review of sport and recreation policies and processes. Develop and adopt gender equitable access and use policies To communicate policy updates to all staff and members To monitor compliance and issues To promote, encourage and facilitate the achievement of gender equality and improvement in the status of women and girls Support the undertaking of Gender Impact Assessment and submission of progress reports as per the Gender Equality Act 2020 obligations
Moira Shire Council officers	 Support the review of sport and recreation policies and processes Support the formal adoption process of new or revised gender equitable policies. Undertake Gender Impact Assessment and submission of progress reports as per the Gender Equality Act 2020 obligations
Moira Shire Recreation Officer	 To communicate and educate sport and recreation infrastructure user groups and users.
Moira Shire Sports Club and Community Asset Committees	 To adhere to and communicate the policy when required. To attend training / awareness programs.

RELATED LEGISLATION

Local Government Act 2020 Charter of Human Rights & Responsibilities Act 2006 Gender Equality Act 2020 Equal opportunity Act 2010

RELATED POLICIES AND PROCEDURES

Gender Equality Action Plan 2021-2025 Moira Shire Council Recreation Strategy 2016-2026 Small Town Sports Sustainability Strategy 2023 (Draft)

Moira Shire Council - Fair Access Policy for Community Sport

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1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1

(COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [2] - Draft Fair Access for Community Sport Policy - Action Plan

Moira Shire Fair Access for Community Sport



ACTION PLAN

Principle 1: Community sports infrastructure and environments are genuinely welcoming, safe, and inclusive.

Actions to achieve progress	Timeframe	Responsibility	Indicator of Success
Amend Gender Impact Assessment templates to make them simpler and more useful.	August 2024	Moira Shire Council Governance Department	Gender Impact assessments are seen as useful tool providing guidance for project development.
Ensure facility audits are up to date and consider where updates are required to make them friendly for females and all users	Every 3 years	Moira Shire Council Recreation Team	Facility audits complete and up to date
Provide education to clubs on ways they can create a welcoming, inclusive, and safe club.	Ongoing from December 2024	Moira Shire Council Recreation Team/ Valley Sport	Training and development is accessible for all clubs

Principle 2: Women and girls can fully participate in all aspects of community sport and active recreation, including as a player, coach, administrator, official, volunteer and spectator.

Actions to achieve	Timeframe	Responsibility	Indicator of Success
progress			
Promote opportunities for women and girls to participate	Quarterly from June 2024	Moira Shire Council Recreation Team	Playing opportunities included and promoted in council external communication channels.

Principle 3: Women and girls will have equitable access to and use of community sport infrastructure:

a. of the highest quality available and most convenient

b. at the best and most popular competition and training times and locations

to support existing and new participation opportunities, and a variety of sports.

Actions to achieve	Timeframe	Responsibility	Indicator of Success
progress			
Continue to assist the community with grant applications for infrastructure that provide women and girls with an equitable standard of facilities	Ongoing	Moira Shire Council Recreation Team	More grant applications submitted for funding
Review Council grant guidelines to ensure projects that support	2025	Moira Shire Council Community Development Department	Projects that support participation by women and girls are prioritised

1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [2] - Draft Fair Access for Community Sport Policy - Action Plan

OFFICIAL

participation by women and		in the assessment of
girls are prioritised.		grant applications.

Principle 4: Encourage and support all user groups who access and use community sport infrastructure to understand, adopt and implement gender equitable access and use practices.

Actions to achieve	Timeframe	Responsibility	Indicator of Success
progress			
Support organisations (for example, Women's Health	Ongoing from November 2024	Moira Shire Council Community Services	Participation of sport and recreation groups in
Network) to provide gender	2024	Team	training.
awareness training and			
development opportunities			
to local clubs and groups.			

Principle 5: Prioritise access, use and support to all user groups who demonstrate an on-going commitment to gender equitable access and use of allocated community sport infrastructure.

Actions to achieve	Timeframe	Responsibility	Indicator of Success
progress			
Encourage sporting and community groups to ensure equitable access to preferred timeslots for training and matches	Ongoing from June 2025	Moira Shire Council Recreation Team	Sporting and community groups schedule matches and training equitably.

1. A WELCOMING AND INCLUSIVE PLACE

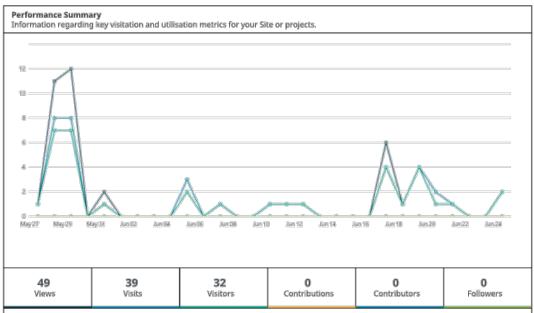
ITEM NO: 9.3.1

(COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [3] - Draft Fair Access for Community Sport Policy and Action Plan - Social Pinpoint Overview Report - 27 May to 24 June 2024

Moira Matters Report Type: Project Project Name: Fair Access Policy and Action Plan Date Range: 27-05-2024 - 24-06-2024 Exported: 24-06-2024 15:17:27



Views - The number of times a Visitor views any page on a Site.

Visits - The number of end-user sessions associated with a single Visitor.

Visitors - The number of unique public or end-users to a Site. A Visitor is only counted once, even if they visit a Site several times in one day.

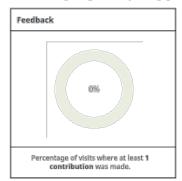
Contributions - The total number of responses or feedback collected through the participation tools.

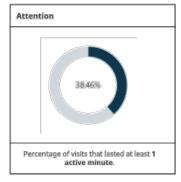
Contributors - The unique number of Visitors who have left feedback or Contributions on a Site through the participation tools.

Followers - The number of Visitors who have 'subscribed' to a project using the 'Follow' button.

Conversions

Information regarding how well your engagement websites converted Visitors to perform defined key actions.







1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1

(COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [3] - Draft Fair Access for Community Sport Policy and Action Plan - Social Pinpoint Overview Report - 27 May to 24 June 2024

Participation

Information regarding how people have participated in your projects and activities.

Contributions by Activit	rity y is a breakdown of contribution	ns across each tool
Activity	Contributions	96

	Top Activities Top Activities is the top 5 tools that received the highest contributions					
	Activity	Page Name	Contributions	Contributors		
碣	Forum	Fair Access Policy and Action Plan	0	0		
8	Gather	Fair Access Policy	0	0		

Projects

Peak Visitation

Date

The current number and status of your Site's projects (e.g. engagement websites)

Engagement Time				
O Days	Но		49 Minutes	
Jun 17th 2024 Wednesday				

Peak Visitation Day

Top Visited Pages Summary information for the top five most visited Pag	es.		
Page Name	Visitation %	Visits	Visitors
Fair Access Policy and Action Plan	100%	36	29
Do you have any feedback on the draft Fair Access Policy or Action Plan?	8.33%	3	3

1. A WELCOMING AND INCLUSIVE PLACE

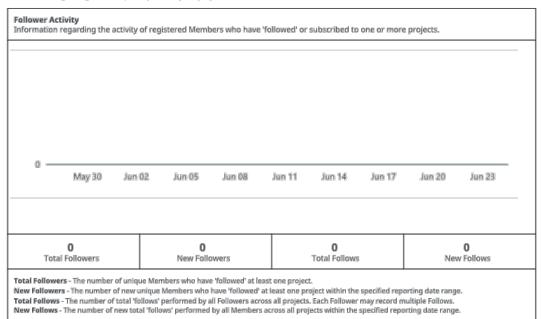
ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

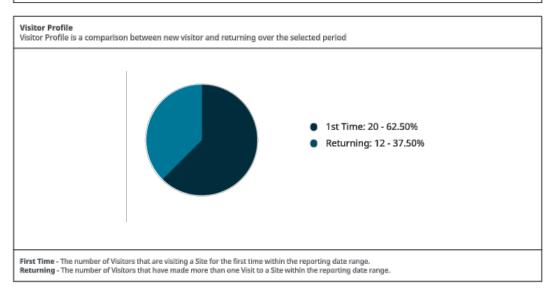
FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [3] - Draft Fair Access for Community Sport Policy and Action Plan - Social Pinpoint Overview Report - 27 May to 24 June 2024

People

Information regarding who has participated in your projects and activities.





1. A WELCOMING AND INCLUSIVE PLACE

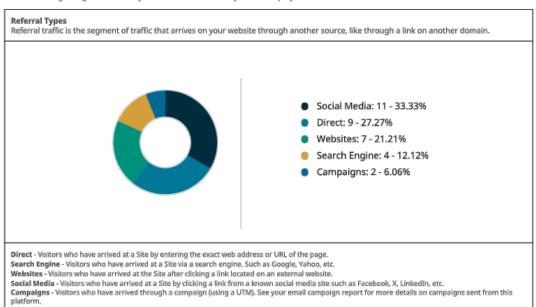
ITEM NO: 9.3.1 (COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [3] - Draft Fair Access for Community Sport Policy and Action Plan - Social Pinpoint Overview Report - 27 May to 24 June 2024

Acquisition

Information regarding the method by which Visitors arrived to your Site or projects.



1. A WELCOMING AND INCLUSIVE PLACE

ITEM NO: 9.3.1

(COORDINATOR RECREATION PLANNING AND DEVELOPMENT, CORRENE COOPER) (DIRECTOR COMMUNITY SCOTT WILLIAMS)

FAIR ACCESS FOR COMMUNITY SPORT POLICY (cont'd)

ATTACHMENT No [3] - Draft Fair Access for Community Sport Policy and Action Plan - Social Pinpoint Overview Report - 27 May to 24 June 2024

Downloads

Information regarding your downloads, the total set of unique documents downloaded, total downloads of all files, and your top downloads.



Top Downloads Top file downloads in your selection, ordered by the number of downloads.				
File Title	File Type	Downloads		
Fair Access Action Plan.pdf	PDF	13		
Fair_Access_Policy.pdf	PDF	13		
DRAFT - Moira Shire Council - Community Sport Fair Access Policy - April 2024.pdf	PDF	0		
Fair Access Policy Banner.png	PNG	0		

Email Campaigns

 $Information\ regarding\ your\ email\ campaigns,\ your\ total\ campaigns,\ the\ total\ number\ of\ recipients,\ and\ your\ top\ campaigns\ by\ click-through$ rate (clicks as a percentage of total recipients).







Top email campaigns that have activity in your selection, ordered by click-through rate (clicks as a percentage of total recipients).

Campaign Name	Recipients	Clicks	Click-through Rate
Fair Access Policy and Action Plan	3	0	0%

FILE NO: P37

2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN

Recommendation

That Council:

- 1. Thank the community members who provided feedback on the Draft Yarrawonga West Catchment Drainage Masterplan in writing and advise the outcome;
- 2. Note the feedback received from the public consultation on the Yarrawonga West Catchment Drainage Masterplan and refers this feedback to officers to inform the next stage of project planning for the delivery of infrastructure included in the Masterplan;
- 3. Adopt the Yarrawonga West Catchment Drainage Masterplan, as shown in Attachment 1; and
- 4. Note that Officers will continue to seek external funding contributions for delivery of the Masterplan.

1. Executive Summary

This report is seeking Council adoption of the Yarrawonga West Catchment Drainage Masterplan.

This Masterplan will provide clear guidance in delivering necessary flood mitigation, storm water treatment and drainage infrastructure to be constructed in Yarrawonga West to alleviate current storm water management issues within the catchment and provide necessary infrastructure for future growth within the catchment.

The Masterplan will impact future planning decisions made by Council in development and growth in the subject area.

2. Conflict of interest declaration

The report author has made the necessary checks and advises that they do not have a real or perceived conflict of interest in the development or adoption of this strategy.

FILE NO: P37 2. A DIVERSE AND DYNAMIC ECONOMY	ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN
	HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

3. Background & Context

At the Scheduled Meeting of Council on 22 May 2024 Council considered a report on the Draft Yarrawonga West Catchment Drainage Masterplan and resolved to:

- 1. Note the recommendations in the draft Yarrawonga West Catchment Drainage Master Plan (Attachment 1).
- 2. Authorise officers to commence community engagement on the draft Yarrawonga West Catchment Drainage Master Plan for a minimum of four weeks in accordance with Council's Community Engagement Policy.
- 3. Notes that a report summarising community feedback along with a final Draft Yarrawonga West Catchment Drainage Master Plan will be presented to Council for consideration prior to adopting the final Plan.

Stakeholder Engagement

Council's Project Manager engaged directly with relevant agencies and interested parties including the Department of Energy, Environment and Climate Action, Goulburn Broken Catchment Management Authority, North East Catchment Management Authority, North East Water, CFA Region 22, Yarrawonga Police Station, Yarrawonga SES and Yorta Yorta Nation Aboriginal Corporation seeking comments on the strategy.

Table 1 provides a summary of the responses:

Stakeholder	Response
Department of Energy, Environment and Climate Action	Support proposal and have commenced process to change the use of the old Yarrawonga Sale Yard site from livestock exchange to drainage reserve.
Goulburn Broken Catchment Management Authority (GBCMA)	Support proposal.
North East Catchment Management Authority	Supportive - deferred to GBCMA.
North East Water	Supportive of strategy, will need to carry out future needs analysis of Yarrawonga regarding possibility of placement of Basin 3 in old sewerage treatment plant on Benalla Road.
CFA Region 22	Supportive – deferred to SES
Yarrawonga Police	Supportive – deferred to SES
Yarrawonga SES	Support proposal
Yorta Yorta Nation Aboriginal Corporation	No response received

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	HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

Community Consultation

Community Consultation was carried out between 3 June 2024 and 1 July 2024. Council advised of the draft strategy and seeking community responses to the strategy through an approved community engagement plan that included:

- Articles in Council's column in the Yarrawonga Chronicle.
- Posts on Council's social media pages.
- Three Drop-in sessions at the Yarrawonga Shire Hall were also held where community members could speak with Council's Project Manager directly seeking information and to discuss the strategy in detail.

A total of eight residents attended drop-in sessions with Council staff. All residents were supportive of the proposal and wanted clarification on certain items in the strategy. Three written submissions were received and are summarised below along with Council Officer responses. Full submissions with detailed responses are included in Attachment 2.

Summary of feedback received	Officer responses
Request to change the outfall from Basin 2 from Oaten Street to Reillys Road Drain. (2 submissions)	Approval of outfall from Basin 2 will be subject to planning permit conditions and approval of subdivision engineering drawings by Council's Engineering department. If an alternative plan that discharges to the Reillys Road drain is prepared, maintains performance requirements and is acceptable to Council it may be considered at that time.
Concern about use of land currently zoned PPRZ (Public Open Space) for Basin 4. (2 submissions)	The area in question is currently zoned as Public Park & Recreation Zone. While this is different from the normal Public Use Zone that Retention Basins are normally zoned as there is nothing in the planning scheme that prohibits them being constructed within a PPRZ. Land zoned PPRZ is suitable for retention basins if the design conforms to the features of an "Informal outdoor recreation area" and can be used for passive recreation.
Concern about using McNamara Track to pump from Basin 4 to Basin 3	The width of the walking track along McNamara Walk is sufficient to install the proposed 300mm outfall pipe between Basin 4 and Basin 3 to avoid tree removal and any works will include, at a minimum, reinstatement of the path to the current standards.

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2. A DIVERSE AND DYNAMIC ECONOMY

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YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

The feedback received is valid and well considered, however officers are recommending the Draft Strategy remains unchanged as suggestions raised during the exhibition period will be resolved when the Strategy moves into the detailed design stage.

4. Issues

This strategy will address ongoing community concerns relating to storm water and flood management in Yarrawonga West.

5. Strategic Alignment

Council Plan Pillar 1: A diverse and dynamic economy

2.04 We advocate for the provision of essential infrastructure including energy supply, digital connectivity and transport services

Drainage systems are essential infrastructure and necessary for the delivery of that essential infrastructure listed above.

2.05 We plan for sustainable development and growth which balances economic, environmental and social considerations Drainage strategy will allow for growth in the Yarrawonga West area

Pillar 3: A clean green environment

3.05 We will adapt and advocate for climate change and identify and respond to environmental challenges

Climate change will impact the frequency and volume of flooding and storm events. Infrastructure will be designed to mitigate these impacts.

3.07 We will work with floodplain management partners to improve the flood resilience of the catchment's people, infrastructure, land, water and biodiversity Proposed Infrastructure is flood mitigation and storm water management and will be developed in consultation with floodplain management partners as required.

FILE NO: P37

2. A DIVERSE AND DYNAMIC ECONOMY

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(PROJECT MANAGER, CONSTRUCTION

AND ASSETS, PAUL DIFFEY)

(DIRECTOR INFRASTRUCTURE JUSTIN

HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

6. Internal & External Engagement

Engagement (who did you engage with?)

External Yarrawonga Community

Feedback

Refer Section 2

Moira Community Department of Energy, Environment and above

Climate Action

Goulburn Broken Catchment Management Authority

(GBCMA)

North East Catchment Management Authority

North East Water CFA Region 22 Yarrawonga Police Yarrawonga SES

Yorta Yorta Nation Aboriginal Corporation

Internal Engineering Feedback

Sustainability incorporated into Operations the draft Master Planning

Operations

7. Budget / Financial Considerations

An indicative breakdown of costs is included below per the report from the Scheduled Meeting of Council on 22 May 2024

Indicative Budget and Cost Breakdown

The table below provides an indication of the programming of works and the associated funding required to deliver the Draft Plan subject to it being approved by Council.

Financial Year	Internal Funding	External Funding	Total	Deliverable
2023/24	\$160,000		\$160,000	Development of Yarrawonga West Drainage Draft Master Plan
2024/25	\$100,000			Carried forward from 23/24 for planning and design works.
2025/26	\$1,801,000	\$3,149,000	\$4,950,000	Stage 1 design Stage 1 Construction Stage 2 design Stage 3 design
2026/27	\$1,252,350	\$2,542,650	\$3,795,000	Stage 2 Construction Stage 3 – Construction
2027/28	S4 - \$200,000 S5 - \$50,000		\$250,000	Stage 4 & 5 – Design
2028/29	S4 - \$1,600,00		\$1,600,000	Stage 4 Construction
2029/30	S5 - \$800,000		\$800,000	Stage 5 Construction
Total	\$4,513,350	\$5,691,650	\$11,805,000	

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

This cost breakdown does not include expansions required for development or future S173/DCP charges on developers in the catchment for Basins 2, 3 & 4. The Development Contribution Scheme investment for Basins 2, 3 & 4 from Reillys Road, Chicken Hill, 84 Benalla Road and 102 Old Wilby Road development is estimated at \$3,000,000.

Note: Internal funding is subject to Moira Shire Council's formal process for preparing a capital works program within the Council Budget and external funding is unconfirmed.

8. Risk & Mitigation

Infrastructure delivered in this masterplan will address risks associated with storm water management within the Yarrawonga West catchment.

The masterplan will provide guidance for development in the area to ensure that developers have a clear understanding of Council's expectations for Storm Water Management in the Yarrawonga West catchment.

A project risk identification plan has been prepared and included within the project business case.

9. Conclusion

It is recommended that Council adopt the Yarrawonga West Catchment Drainage Masterplan.

Should the plan be adopted, it is recommended that Council continue to investigate future sources of external funding to support delivery of works contained in the Draft Masterplan.

Attachments

- 1 Yarrawonga West Catchment Drainage Masterplan
- 2 Summary of feedback received with officer recommendations

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [1] - Yarrawonga West Catchment Drainage Masterplan

carried out three drop-in sessions at Yarrawonga Shire Hall on 14/6/2024, 21/6/2024 and 28/6/2024 allowing residents to speak with Method – Submissions were invited through Council's Social Pinpoint Moira matters website opening on 3 June 2024 and closing on sought through advertising in Council's column in the Yarrawonga Chronicle and on Council's Social Media pages. Council staff also 1 July 2024. Alternatively, residents could write to Council, phone in to discuss or email Council with feedback. Comments were Council's project manager directly to discuss matters concerning storm water management in Yarrawonga.

Background – Moira Shire Council's Engineering Department have now completed the community engagement seeking feedback on

the Draft Yarrawonga West Catchment Drainage Masterplan

Submission Summary – Yarrawonga West Catchment Drainage Masterplan

and wanted clarification on certain items in the strategy. Three written submissions were received and their feedback is summarised Feedback- A total of eight residents attended drop-in sessions with Council staff. Overall residents were supportive of the proposal below:

Moira Shire Engineering Department response.	As Basin 2 is to be provided by the developer at 63 Reilys Road the ultimate approval of outfall from Basin 2 will be subject to planning permit conditions and approval of subdivision engineering drawings by Council's Engineering department. If the developer provides an alternative plan that is acceptable to Council and in line with the performance requirements of Basin 2 that discharges to the Reilys Road drain then that can be approved instead of the proposed Oaten Street outfall.	Same as item 1 above
Summary of item	Proposed outfall of Basin 2 be changed from Oaten Street to discharge to Reilys Road Drain and use syphon located between Reilys Road and Brownings Road for discharge to the Ultimate approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of permit conditions and approval of outfall from Basubject to planning permit conditions and approval of permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of outfall from Basubject to planning permit conditions and approval of the permit conditions and the permit conditions and approval of the permit conditions and the permit conditions are permit conditions.	Same as item 1 above
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FILE NO: P37 2. A DIVERSE AND DYNAMIC ECONOMY ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [1] - Yarrawonga West Catchment Drainage Masterplan

Strategy (Alluvium, 2019) the existing drainage characteristics development will need to drain to Basin 2 and final discharge Public Use Zone that Retention Basins are normally zoned as previous Yarrawonga Framework Plan: Stormwater Drainage to the Murray River will be as per storm water management there is nothing in the planning scheme that prohibits them The effect of the PPRZ will cause either of the following two This Masterplan is a strategic document only. Final decisior Based on Council consultant advice in this strategy and the of the Catchment C, of which this is a sub-catchment, drain on drainage approvals if the site undergoes subdivision will Department. It is noted that under this masterplan and the recreation area" that will be permissible under the subdivision engineering drawings by Council's Engineering incorporates the features of an "Informal outdoor current approved development plan for the area the subbe up to the planning permit conditions and approval of The area in question is currently zoned as Public Park & Recreation Zone. While this is different from the normal Ensure that the design of the retention basin towards the rail line along Oaten Street to the east. catchment is to drain into Basin 2 for retention and decisions to be made during detailed design phase: treatment prior discharge. Therefore, any future Moira Shire Engineering Department response Rezone the land to Public Use Zone being constructed within a PPRZ. Seek an alternative site planning scheme requirements of Basin2. က် water storage and not accessible for public open space use. If Open Space I believe, to extend the area to 100% devoted to would the equivalent of the amount of land in the same area The proposal for Basin 4, which is currently existing Public Can catchment shaded in Yellow drain to the Reilys Road this land is rezoned to 100% water storage, then where be allocated for Public Open Space? drain instead of Oaten Street Summary of item Number ltem Submission Number m

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2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.1
(PROJECT MANAGER, CONSTRUCTION
AND ASSETS, PAUL DIFFEY)
(DIRECTOR INFRASTRUCTURE JUSTIN
HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [1] - Yarrawonga West Catchment Drainage Masterplan

At present option 3 is most likely, however this will be subject will be put to public consultation as per Council's Community document is a masterplan only and final locations and layout Prior to completing the detailed design, the proposed route minimised. The width of the walking track along McNamara have some merit and will be considered during the detailed Walk is considered by Council's Engineering Department to Environment Due Diligence assessment will be undertaken The proposed alternative option along Benalla Road does during the design phase to determine the impact on the be sufficient to install the proposed 300mm outfall pipe environment during construction works. Due to this an of infrastructure will be subject to further investigation trees and ensure that disturbance and tree removal is Environmental Duty to minimise impact to the natural Engagement Policy seeking feedback at the time. This Under current EPA regulations Council has a General between Basin 4 and Basin 3 to avoid tree removal. Moira Shire Engineering Department response to detailed design at a later date, native vegetation and the habitat of Koalas and other species along Benalla Rd to either NEH proposed Basin 3 or the Basin regenerate to what it is today and this area was allocated to made, also open disclosure to the members of the public as put a pipe through here with the heavy machinery required that live in this area will be occur by accessing this area to There is a proposal for Basin 4 is to pump to Basin 3 along years after implementation. At the least an Environmental An alternative would be pumping station at Basin 4 down Impact study should be completed prior to any decisions I have concerns that damage to and destruction of trees, be bushland, not access for water drainage to be dug up 3 along McNamara Walk, less trees and native flora and It would take a minimum of 10-20 years for this area to fauna to impact upon their environment Channel Rd and down McNamara Walk to the specifics of planning. to put the pipe in. Summary of item Numbe ltem Ŋ Submission

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [1] - Yarrawonga West Catchment Drainage Masterplan

4 of 4

Suhmission	Hom	Summary of item	Moira Chira Engineering Department recognes
Number			Mona Jine cugineering Department response.
	ø	If Basin 4 is altered from Public Open Space where would this be reallocated??? Otherwise SoM (Shire of Moira) would be reducing land used for Public Open Space, going against its own policy and planning for an increasing population. If there storage, I'm sure this would be welcomed by ratepayers. Storage, I'm sure this would be welcomed by ratepayers. If Basin 4 is alrend from 4 Council can use PPR zoned land for features of a retention basins if the design conforms to the features of a "Informal outdoor recreation area" and can be used for passive recreation. Council is currently preparing to develop an Open Space storage, I'm sure this would be welcomed by ratepayers. Strategy that will consider the current and proposed uses oall public recreation reserves in the Shire. If this site is surplet to needs, then there would be less issues with rezoning the	As mentioned in item 4 Council can use PPR zoned land for retention basins if the design conforms to the features of an "Informal outdoor recreation area" and can be used for passive recreation. Council is currently preparing to develop an Open Space Strategy that will consider the current and proposed uses of all public recreation reserves in the Shire. If this site is surplus to needs, then there would be less issues with rezoning the
			site to Public Utility Zone for use as a drainage reserve. If the site is considered to be necessary Public Open Space then Council will either: 1. Incorporate "Informal outdoor recreation area" features into the design of the basin to ensure that it can continue to be used as a passive recreation area
			 Find an alternative location for the basin Create a similar PPRZ in Yarrawonga near the existing reserve Invest in Open Space improvements in Yarrawonga to the equivalent socio-economic value of the reserve

Submission Summary – Yarrawonga West Catchment Drainage Masterplan

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [2] - Summary of feedback received with officer recommendations

carried out three drop-in sessions at Yarrawonga Shire Hall on 14/6/2024, 21/6/2024 and 28/6/2024 allowing residents to speak with Method - Submissions were invited through Council's Social Pinpoint Moira matters website opening on 3 June 2024 and closing on sought through advertising in Council's column in the Yarrawonga Chronicle and on Council's Social Media pages. Council staff also 1 July 2024. Alternatively, residents could write to Council, phone in to discuss or email Council with feedback. Comments were Council's project manager directly to discuss matters concerning storm water management in Yarrawonga.

Background - Moira Shire Council's Engineering Department have now completed the community engagement seeking feedback on

the Draft Yarrawonga West Catchment Drainage Masterplan.

Submission Summary – Yarrawonga West Catchment Drainage Masterplan

and wanted clarification on certain items in the strategy. Three written submissions were received and their feedback is summarised Feedback- A total of eight residents attended drop-in sessions with Council staff. Overall residents were supportive of the proposal below:

Submission Item	Item	Summary of item	Moira Shire Engineering Department response.
Number	Number		
н	1	Proposed outfall of Basin 2 be changed from Oaten Street to discharge to Reilys Road Drain and use syphon located between Reilys Road and Brownings Road for discharge to the Ultimate approval of outfall from Basubiect to planning permit conditions and apply subject to planning permit conditions are provided and apply subject to planning permit conditions are provided and apply subject to planning permit conditions are provided and apply subject to planning p	This Masterplan is a strategic document only. As Basin 2 is to be provided by the developer at 63 Reilys Road the ultimate approval of outfall from Basin 2 will be subject to planning permit conditions and approval of subdivision engineering drawings by Council's Engineering department. If the developer provides an alternative plan that is acceptable to Council and in line with the performance requirements of Basin 2 that discharges to the Reilys Road drain then that can be approved instead of the proposed Oaten Street outfall.
2	2	Same as item 1 above	Same as item 1 above

FILE NO: P37
2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [2] - Summary of feedback received with officer recommendations

Strategy (Alluvium, 2019) the existing drainage characteristics development will need to drain to Basin 2 and final discharge Public Use Zone that Retention Basins are normally zoned as previous Yarrawonga Framework Plan: Stormwater Drainage to the Murray River will be as per storm water management there is nothing in the planning scheme that prohibits them The effect of the PPRZ will cause either of the following two This Masterplan is a strategic document only. Final decision Based on Council consultant advice in this strategy and the of the Catchment C, of which this is a sub-catchment, drain on drainage approvals if the site undergoes subdivision will Department. It is noted that under this masterplan and the recreation area" that will be permissible under the subdivision engineering drawings by Council's Engineering incorporates the features of an "Informal outdoor current approved development plan for the area the subbe up to the planning permit conditions and approval of Recreation Zone. While this is different from the normal The area in question is currently zoned as Public Park & Ensure that the design of the retention basin towards the rail line along Oaten Street to the east. catchment is to drain into Basin 2 for retention and decisions to be made during detailed design phase: treatment prior discharge. Therefore, any future Moira Shire Engineering Department response. Rezone the land to Public Use Zone being constructed within a PPRZ. Seek an alternative site planning scheme. requirements of Basin2. ij 5 water storage and not accessible for public open space use. If would the equivalent of the amount of land in the same area Open Space I believe, to extend the area to 100% devoted to The proposal for Basin 4, which is currently existing Public Can catchment shaded in Yellow drain to the Reilys Road this land is rezoned to 100% water storage, then where be allocated for Public Open Space? drain instead of Oaten Street Summary of item Numbe ltem Submission Number

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2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [2] - Summary of feedback received with officer recommendations

Submission Number	Item Number	Summary of item	Moira Shire Engineering Department response.
			At present option 3 is most likely, however this will be subject to detailed design at a later date.
	S	There is a proposal for Basin 4 is to pump to Basin 3 along Channel Rd and down McNamara Walk.	Under current EPA regulations Council has a General Environmental Duty to minimise impact to the natural environment during construction works. Due to this an
		I have concerns that damage to and destruction of trees, native vegetation and the habitat of Koalas and other species that live in this area will be occur by accessing this area to put a pipe through here with the heavy machinery required to put the pipe in.	Environment Due Diligence assessment will be undertaken during the design phase to determine the impact on the trees and ensure that disturbance and tree removal is minimised. The width of the walking track along McNamara Walk is considered by Council's Engineering Department to be sufficient to install the proposed 300mm outfall pine.
		It would take a minimum of 10-20 years for this area to regenerate to what it is today and this area was allocated to be bushland, not access for water drainage to be dug up years after implementation. At the least an Environmental Impact study should be completed prior to any decisions made, also open disclosure to the members of the public as to the specifics of planning. An alternative would be pumping station at Basin 4 down along Benalla Rd to either NEH proposed Basin 3 or the Basin	between Basin 4 and Basin 3 to avoid tree removal. The proposed alternative option along Benalla Road does have some merit and will be considered during the detailed design. Prior to completing the detailed design, the proposed route will be put to public consultation as per Council's Community Engagement Policy seeking feedback at the time. This document is a masterplan only and final locations and layout
		s along intrvamara want, less trees and native nota and fauna to impact upon their environment.	of infrastructure will be subject to further investigation.

FILE NO: P37
2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.1 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE JUSTIN HANRAHAN)

YARRAWONGA WEST CATCHMENT DRAINAGE MASTERPLAN (cont'd)

ATTACHMENT No [2] - Summary of feedback received with officer recommendations

Submission Item Number Num	Item Number	Summary of item	Moira Shire Engineering Department response.
	9	If Basin 4 is altered from Public Open Space where would this be reallocated??? Otherwise SoM (Shire of Moira) would be retention basins if the design conforms to the features of an retention basins if the design conforms to the features of an area and can be used for was a way to amalgamate Public Open Space with water storage, I'm sure this would be welcomed by ratepayers. As mentioned in item 4 Council can use PPR zoned land for extension and can be used for passive recreation. "Informal outdoor recreation area" and can be used for passive recreation. Council is currently preparing to develop an Open Space Strategy that will consider the current and proposed uses o	As mentioned in item 4 Council can use PPR zoned land for retention basins if the design conforms to the features of an "Informal outdoor recreation area" and can be used for passive recreation. Council is currently preparing to develop an Open Space Strategy that will consider the current and proposed uses of
			all public recreation reserves in the Shire. If this site is surplus to needs, then there would be less issues with rezoning the site to Public Utility Zone for use as a drainage reserve.
			If the site is considered to be necessary Public Open Space then Council will either: 1. Incorporate "Informal outdoor recreation area"
			reatures into the design of the basin to ensure that it can continue to be used as a passive recreation area 2. Find an alternative location for the basin 2. Create a cimilar PBPZ in Varramona near the existing
			reserve 4. Invest in Open Space improvements in Yarrawonga to the equivalent socio-economic value of the reserve

FILE NO: P44

2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION

Recommendation

That Council:

- 1. Note the recommendations in the draft Numurkah North East Storm Water Management Strategy, as shown in Attachment 1.
- 2. Authorise officers to commence community engagement on the draft Numurkah North East Storm Water Management Strategy, as show in Attachment 1, for a minimum of 28 days in accordance with Council's Community Engagement Policy.
- 3. Note that a report summarising community feedback along with a final Draft Numurkah North East Storm Water Management Strategy will be presented to Council for consideration prior to adopting the final Plan.
- 4. Note that the Strategy, once adopted will inform both the Lake Numurkah Strategy and the Lake Numurkah Master Plan.

1. Executive Summary

This report considers the Draft Storm Water Management Strategy (SWMS) for Numurkah North East – defined as the area between Wattle Drive, Kinnairds Road, 6/6 irrigation channel and Maple Crescent, as shown in Attachment 2

Council officers have been developing an integrated drainage strategy to guide development in the Numurkah Northeast sub catchment area over the past 18 months with Spiire Property & Infrastructure Consultants

A final draft of the Numurkah North East Storm Water Management Strategy has now been developed, as shown in Attachment 1. This strategy has been endorsed by internal Council stakeholders and existing developers in the subject stormwater catchment. Prior to adoption further stakeholder engagement will be required.

Subject to Council endorsing the Strategy, the subject area would then be unlocked for urban development which is expected to increase housing supply in Numurkah Township by more than 300 lots.

2. Conflict of interest declaration

The report author has made the relevant checks and advises that they do not have any real or perceived conflicts of interest.

3. Background & Context

The catchment covers an area of 45.4 Ha in Numurkah northeast bound by Wattle Drive, Maple Drive, Kinnairds Road and the number 6/6 irrigation channel north of Pine Street.

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

Historically the area has been irrigated farmland, however, urban development has started encroaching into the area with the remaining farmland identified as future residential subdivision in Moira Shires Numurkah development plan, as shown in Attachment 3. As part of forward planning for Numurkah Township, it is envisioned that the whole catchment will be developed as residential subdivision over the next 5-10 years based on growth rates and sales from the nearby Settlers Run development.

At a development lot yield of ten lots per hectare (i.e., standard residential), development within the full catchment area will provide opportunity for an additional 454 residential allotments which would accommodate an estimated 1,090 new residents for Numurkah township based on ABS figures of 2.4 residents per household in Numurkah.

To meet the Victorian State Government's draft 2051 housing target, Council will need to enable development of an additional 4,300 lots shire wide, meaning development in the Numurkah northeast catchment will meet more than ten percent of Council's target.

The Numurkah Northeast catchment forms a sub-catchment of the Lake Numurkah stormwater catchment and developing a drainage design for this sub-catchment will enable Council understand performance requirements enabling progress into the Lake Numurkah Strategy (under development).

The site is currently on five separate parcels, as shown in Attachment 2. The five parcels are:

- Permit 1 (south of Pine Street)
- Permit 2 (south-west of the site)
- Permit 3 (south-east of the site)
- Two parcels North of Pine Street (future growth area)

At the time of writing, the Permit 1 area has received planning approval which is contingent on an endorsed SWMS. To avoid fragmented assets which can result in poor outcomes, Moira Shire Council engaged Spiire to undertake an overarching SWMS that considers the Growth Area in entirety. This SMWS will be used to inform the development of future site-specific SWMS.

Permit 1 is anticipated to be the first development to occur, therefore this SWMS considers three stages:

- Permit 1 only developed.
- Permit 1, 2 and 3 developed.
- Full catchment developed

The future growth area to the north of Pine Street is anticipated to be developed later, but given it contributes to the study area, has been considered as part of this SWMS. Permit areas 1, 2 and 3 have been rezoned to General Residential (GRZ1) and are the focus of this SWMS. The future growth area north of Pine Street is currently categorized as Farming Zone (FZ1) and while included in the SWMS, is considered in less detail.

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

Background

The section of the catchment south of Pine Street was identified for growth in the Numurkah Development Plan in 2006. In early 2022 Council was successful in a grant application from the VGA Streamlining for Growth Program for \$50,000 to develop an integrated Storm Water Management Strategy for development in Numurkah North East.

Council received an initial Opportunities and Constraints Assessment report in September 2022, as shown in Attachment 4. This report considered four options, following consideration by Council staff from the Engineering & Operations Departments as well as consultation with affected developers it was recommended to adopt Option 3 for discharge into Lake Numurkah via an easement to be established through 52 Wattle Drive as the preferred option. The owner of 52 Wattle Street (who is one of the developers) indicated support of the proposal.

Further investigations identified the area needed to be extended to the north as the initial investigation area did not consider the full catchment and future development north of Pine Street to the 6/6 Irrigation channel and possible need to direct water in the two catchments between the 6/6 channel and Naring Road to the north.

This was developed between Spiire and Council officers through 2023 and early 2024 and is incorporated into the draft strategy.

Draft Numurkah North East Storm Water Management Strategy (SWMS)

The Draft SWMS considers three main aspects:

- Flow conveyance through the site and downstream discharge.
- Water treatment using Water Sensitive Urban Design (WSUD).
- Flood management.

To meet the three main objectives listed above, the SWMS has been developed to manage stormwater using the following:

- Pipes to convey 20% AEP flows
- Roads to convey gap flows (between 1% AEP and 20% AEP)
- Centralised drainage reserve with co-located sediment basin, wetland and retarding basin to treat storm water to reduce pollutant levels including:
 - o 800 m² Sediment Basin
 - o 5,000 m² Wetland
 - o 42,000 m³ Retarding Basin
- 100 L/s Outlet Pump Station and rising main discharging to Lake Numurkah
- Ancillary flow path through 52 Wattle Drive to Lake Numurkah
- Walking paths and public realm enhancement in the drainage infrastructure
- A future drainage reserve north of Pine Street to provide water quality and retardation for the future growth area. A gravity main drain will convey flows from the Pine Street retarding basin to the site retarding basin. This has been allowed for at a high level, to be considered in more detail as part of the future growth area SWMS.

FILE NO: P44

2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

The proposed SWMS layout is presented in the report and Urban Design Plan, as shown in Attachment 5. Each aspect of the SWMS is described in more detail in subsequent sections of the attached report.



4. Issues

Council officers from the Planning, Engineering, Project Delivery, Parks & Facilities and Operations departments have been involved in the development of and assessed the draft SWMS. All concerns raised by internal stakeholders in development of the strategy have been addressed.

Council officers have engaged with the current developers in the catchment who have indicated conditional support for the strategy as discussed below.

5. Strategic Alignment

Council Plan

2. A diverse and dynamic economy

2.02 We identify and provide shovel-ready projects in order to respond promptly to funding opportunities

2.04 We advocate for the provision of essential infrastructure including energy supply, digital connectivity and transport services

2.05 We plan for sustainable development and growth which balances economic, environmental and social considerations

FILE NO: P44

2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.2

(PROJECT MANAGER, CONSTRUCTION

AND ASSETS, PAUL DIFFEY)

(DIRECTOR INFRASTRUCTURE, JUSTIN

HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

3. A Clean Green Environment 3.06 Our natural and outdoor spaces will provide quality

habitat for plants and animals as well as be places for

people to enjoy

3.07 We will work with floodplain management partners to improve the flood resilience of the catchment's people, infrastructure, land, water and biodiversity

4. Customer Focused and 4.06 To provide, renew and maintain a diverse network

of assets that are safe, efficient and accessible 5.06 We will strive to provide a safe, compliant, and well-planned built environment based on a sound

strategic platform

Council strategies:

Responsive

Governance

Numurkah Development Plan

5. Transparent and Accountable

Lake Numurkah Strategy (Draft)

6. Internal & External Engagement

Engagement (who did you engage with?)

Internal Planning Department

(Project owner) Engineering

Operations

Parks & Facilities

External Permit 1 - Developer of 60-62

Pine Street (Gaage)

Feedback to date

Supportive of integrated Storm Water Management Strategy for development. Confirm that the draft strategy conforms to Council's design requirements as per the IDM

No issues with the strategy Supportive of proposal

In agreeance with strategy subject to:

Assistance with updating permit conditions relating to on site drainage

Ensure costs are equitably split between

developersAssistance with development of the access

easements through Permit 3 area

In principal support strategy.

Had questions on the timing of the levee project

Need to amend DP to align with Storm Water

Management Strategy

Permit 3 – Holiday Concepts Have given verbal support for the proposal. Am

awaiting in principle support in writing

Permit 2 – Developer on

Maple Crescent (Urban

Design & Management)

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

Prior to adopting the strategy, the Draft Strategy would be subject to an exhibition period. This will see a specialist online feedback form to be created on moira matters social pinpoint site.

Alternatively, stakeholders can either write into Council or send through an email to the project manager. To assist with stakeholder feedback the following engagement will occur:

- Engagement with developers and landowners in the catchment
- Writing to key stakeholders such as GBCMA, Numurkah SES and other emergency services, DEECA, and Yorta Yorta Nation Aboriginal Corporation requesting feedback
- advertisement on Councils website and social media
- included in Council's column in the Numurkah Leader
- Copies of the draft strategy will be available at the Numurkah Civic Centre, and
- Drop-in sessions available with Council staff at Numurkah Civic Centre for in person engagement on nominated dates.

All feedback will be considered by officers and incorporated into the Final Draft where appropriate before the Final Draft is considered for endorsement by Council in the second half of 2024.

7. Budget / Financial Considerations

All works will be developer funded for delivery as part of permit conditions.

Council could support and accelerate development by applying for funding for all or part of the strategy deliverables through the priority works stream of the commonwealth Housing Support Fund. This will contribute to and streamline delivery of the strategy unlocking additional land for growth.

8. Risk & Mitigation

There are no direct risks identified with exhibiting the Draft Strategy for comment It is possible that the Draft Strategy could elicit feedback from the community seeking greater urgency from Council on improvements to Lake Numurkah. This will need to be managed via the Communications Plan associated with the exhibition period.

9. Conclusion

The Draft Strategy has been developed in consultation with internal Council stakeholders and in conversation with developers in the area. All three active developers in the catchment have indicated in principle support for the Draft Strategy.

The Numurkah Northeast Storm Water Management Strategy will enable Council to provide clear guidance to property developers in Numurkah and unlock land that will provide an estimated 450 residential allotments when fully developed. This is over ten percent of Moira Shires draft target for new homes by 2051 as set by the Victorian Government.

All proposed works to deliver the strategy will be funded by developers as conditions of permit either through a developer contribution scheme or S173 agreement.

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(DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

Feedback received during the consultation period will be considered and incorporated into the Draft Strategy where appropriate. The Final Strategy will be presented to Council for endorsement in late 2024.

Attachments

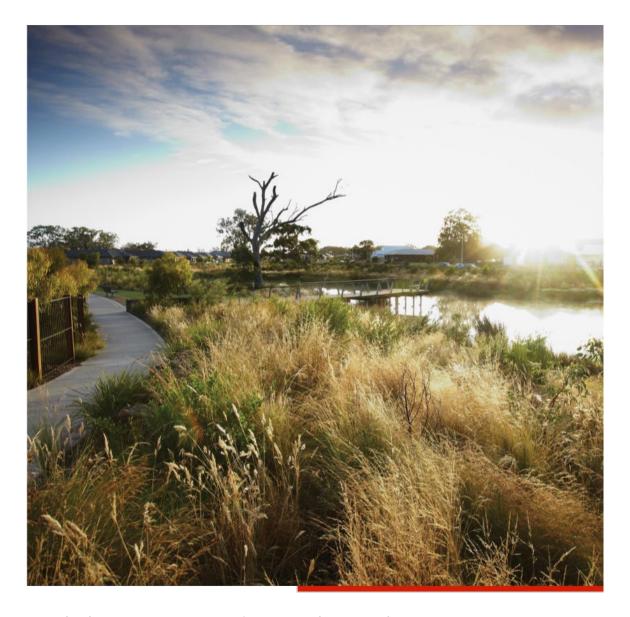
- 1 Draft Numurkah NE Storm Water Management Strategy
- 2 Locality Plan
- 3 Numurkah Development Plan
- 4 Opportunities and Options Assessment
- 5 Numurkah NE Urban Design

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy





STORMWATER MANAGEMENT STRATEGY

NUMURKAH MAY 2024

PREPARED FOR MOIRA SHIRE COUNCIL

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION **AND ASSETS, PAUL DIFFEY)** (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy

This report has been prepared by the office of Spiire Level 2, 10 Moorabool Street PO Box 4032 Geelong Victoria 3220

Acknowledgements and Recognition

Paul Diffey - Moira Shire Council

Issue Date	Rev No	Authors	Checked	Approved
24/04/2024	01	M. DODGSHUN	A. DAVIDSON	A. BROWN
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Spiire Job Number: 310429

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ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



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ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



1. INTRODUCTION

1.1 SCOPE OF WORKS

Spiire has been engaged by Moira Shire Council to complete a Stormwater Management Strategy (SMWS) for a parcel of land located north of Wattle Drive, Numurkah "The Growth Area". This growth area is proposed for future residential development.

The scope of works which has been undertaken in the SWMS is:

- Prepare Concept Urban Design
- ▶ Develop Catchment Plans for existing and developed conditions
- Design flow estimation (using RORB software package)
- ▶ Hydraulic calculations to ensure flow conveyance capacities
- MUSIC modelling for water quality
- Concept Drainage Strategy plans

A SWMS was previously completed by Spiire in September 2023. That SWMS investigated a drainage solution that was consistent with the previous development plan and utilised a gravity drainage solution. Adopting a gravity drainage solution induced a considerable volume of fill onsite and was not preferred by council. This revised SWMS adopts a retarding basin and pumped outlet to minimise the required volume of fill onsite and provide a more practical solution to develop the site. Location

The growth area is located north of Wattle Drive in Numurkah as shown in Figure 1. The eastern boundary of the growth area is located adjacent to an existing Goulburn Murray Water (GMW) open irrigation channel. The western boundary of the growth area is located adjacent to existing residential development. Pine Street bounds the growth area to the north.

The growth area is proposed to be developed in 4 separate parcels:

- Permit 1, bounding Pine Street to the south.
- Permit 2. in the southwest of the site.
- Permit 3, in the southeast of the site.
- North of Pine Street (Future Growth Area)

The combination of the Permit 1, Permit 2 and Permit 3 development will hereby be referred to as "The subject site" or "The site" and has an area of 26.5 ha. The development of these parcels is described in detail in Section 0.

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy





Figure 1: Growth Area Location

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ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



2. EXISTING SITE CONDITIONS

2.1 SITE DRAINAGE

The growth area is approximately 43.3 ha and has limited grade (around 1 in 1000) across the site to convey overland flows. The future growth area north of Pine Street (approximately 19 ha) drains south and south-east before overtopping Pine Street at an existing low point. Flows are then conveyed west along an existing swale that runs on the south of Pine Street, before turning south. Flows travel south from the site and go through the property at 52 Wattle Drive as shown in Figure 2. From here, flows continue southwards to discharge to Lake Numurkah.

The property in the south-east (Permit 3) drains south through an unmade road reserve between properties on Wattle Drive. Once flow is conveyed to Wattle Drive, underground pipes convey flow which outlets into the northern part of Lake Numurkah.

Refer to the existing conditions plan in Appendix A for more details.



Figure 2: Existing Conditions Plan

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



2.2 LAKE NUMURKAH

Lake Numurkah is located south of the growth area. Lake Numurkah fills during periods of rainfall, however, being oversized in relation to the connecting catchment, dries out during summer months. During dry out periods water reduces to only a few permanent pools located in the low points of the lake.

The lake drains at the southwest corner to Broken Creek through box culverts. It is understood that during high rainfall events, Broken Creek can backwater through those culverts and fill Lake Numurkah. Penstocks are installed to the outlet culvert to prevent this backwatering occurring. It is also understood that 1% AEP overland flows from Broken Creek enter Lake Numurkah, with flood extents described below.

Spiire have recently completed community consultation for a landscape masterplan for Lake Numurkah (Spiire, 2022). The assessment of this masterplan included an investigation of possible modifications to the existing lake system based on water balance modelling to improve the lake's functionality and enhance the area from an aesthetic, water quality and environmental perspective.

For more information on Lake Numurkah, refer to Lake Numurkah Analysis and Opportunities (Spiire, 2022).

2.3 EXISTING FLOODING

The growth area is currently subjected to inundation from Broken Creek in a 1% Annual Exceedance Probability (AEP) flood event to depths up to approximately 0.5 – 1 metre (Water Technology, 2017). Water Technology has completed a flood plain management study to inform Moira Shire council and Goulburn Broken Catchment Management Authority (CMA) on existing 1% AEP flooding in Broken Creek – Figure 3.

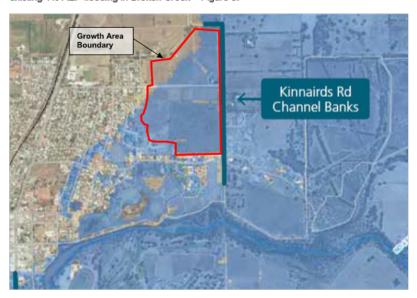


Figure 3: Existing conditions 1% AEP flooding conditions (extracted from Water Technology, 2017)

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ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



It is understood that Moira Shire are planning to implement recommendations from the Water Technology 2017 report, with regards to flood mitigation works. This will entail the construction of a flood levee running down the western side of Kinnairds Road, as shown in Figure 4. It is essential that the construction of this flood levee by Council will be completed to provide complete 1% AEP flood immunity for the subject site. This includes an appropriate outfall arrangement from Lake Numurkah to prevent Broken Creek from backwatering into Lake Numurkah.

For more details around the proposed flood mitigation works, refer to Water Technology 2017.



Figure 4: Original Mitigation Package Option (extracted from Water Technology 2017)

2.4 GOULBURN MURRAY WATER IRRIGATION CHANNEL NO 6/6

Irrigation channel No 6/6 is a GMW asset which distributes irrigation water from the Murray River (to the north) through the landscape. As shown in Figure 5, Irrigation channel No 6/6 extends from north of Pine Street before running west of and parallel to Kinnairds Road. Irrigation channel No 6/6 runs southwards along this alignment before discharging to Broken Creek, approximately 450m downstream of the subject site.

A decommissioned section of irrigation channel is shown in Figure 5. This previously conveyed water westwards, however it is no longer required due to this western area now being developed. It is understood that the irrigation system has been modified such that the decommissioned channel is no longer part of this system.

Council have advised that the reach of Irrigation Channel No 6/6 in the vicinity of the subject site will ultimately be piped, in the same location as the existing channel. A future easement will be created for this pipe, in favour of GMW.

A key assumption of this SWMS is that the future piping of Irrigation channel No 6/6 will negate any flood risk from the irrigation system to the future development, including backwatering from Broken Creek. It is outside the scope of this study to assess potential concept design options of the future pipe arrangement, together with associated flood risk. It

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ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



is critical that flood risk management to the future development from the future piped irrigation system is fully addressed during relevant future design phases, including consideration of any surcharge or emergency spillway considerations.

A number of relatively small irrigation channels run from Irrigation Channel 6/6 on the eastern site boundary through the site. These were previously used for agricultural purposes, are no longer required and will be decommissioned as part of the future development.

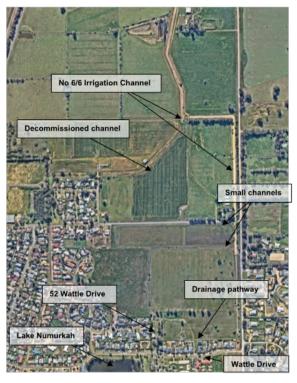


Figure 5. Existing irrigation channels (Nearmap, August 2023)

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



3. PREVIOUS INVESTIGATIONS

Previous investigations relevant to the site have been introduced in the existing conditions section above. Additional relevant investigations are discussed below.

3.1 OPPORTUNITIES AND CONSTRAINTS ASSESSMENT, NUMURKAH DRAINAGE STRATEGY (SPIIRE. 2022)

This assessment undertook a review of site existing conditions and presented four conceptual drainage strategy options for the site.

- Option 1: Site drains via a pumped retarding basin/raingarden to existing GMW irrigation channel to the east of the site. Drains to Broken Creek crossing at Kinnard's Rd.
- Option 2: Site drains via a pumped retarding basin/raingarden to Wattle Drive via new road between 68 and 70 Wattle Drive. Option requires approximately 440m of new underground stormwater pipe from the retarding basin.
- Option 3: Site drains via a pumped retarding basin/raingarden to Wattle Drive via new drainage easement through 52 Wattle Drive. Option requires approximately 200m of stormwater pipe from the retarding basin.
- Option 4: Site drains via a pumped retarding basin/raingarden to Maple Crescent with flows conveyed via 340m of pipe from the retarding basin to Lake Numurkah. 230m of this pipe is along Maple Crescent and Cedar Drive.

The assessment identified a preferred drainage option (Option 3) which is progressed as part of this SWMS.

3.2 DEVELOPMENT PLAN

A development plan was produced for the Numurkah site for the Moria Shire Council by EarthTech in 2006. The development plan gave a high level overview of the urban layout including road layout, drainage asset locations and open space, and lot layout as seen in Figure 6.

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



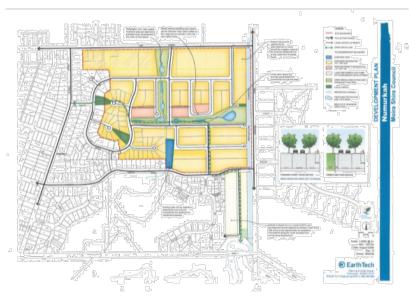


Figure 6: Numurkah Development Plan (Moira Shire Council / EarthTech, 2006)

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



PROPOSED DEVELOPMENT

The site is proposed to be developed in 4 separate parcels, as shown in Figure 1 (page 5). The four parcels are:

- Permit 1 (south of Pine Street)
- Permit 2 (south-west of the site)
- Permit 3 (south-east of the site)
- North of Pine Street (future growth area)

At the time of writing, the Permit 1 area has received planning approval which is contingent on an endorsed SWMS. In order to avoid fragmented assets which can result in poor outcomes, the Moira Shire Council has engaged Spiire to undertake an overarching SWMS (this report) that considers the Growth Area in entirety. This SMWS will be used to inform the development of future site specific SWMS.

Permit 1 is anticipated to be the first development to occur, therefore this SWMS considers two stages:

- Permit 1 only developed.
- Permit 1, 2 and 3 developed.

The future growth area to the north of Pine Street is anticipated to be developed at a later date, but given it contributes to the study area, has been considered as part of this SWMS. Permit areas 1, 2 and 3 have been rezoned to General Residential (GRZ1) and are the focus of this SWMS. The future growth area north of Pine Street is currently categorised as Farming Zone (FZ1) and while included in the SWMS, is considered in less detail.

At the request of the Moira Shire Council, Spiire have updated the development objectives from that outlined in the development plan (Figure 6). The new development objectives to be adopted in the updated urban design and SWMS are:

- Integration with the approved Permit 1 (refer Figure 7)
- Road connectivity to Poplar Drive, Cedar Drive and Wattle Drive through the road reserve between 68-70 Wattle Drive
- Green spine and shared used path (min 10m wide) running east-west through the development connecting the reserve on Poplar Drive, the proposed WSUD assets and Kinnairds Road.
- One central WSUD asset within a retarding basin evenly split between the Permit 2 and 3.
- Green open space surrounding the drainage reserve, split as 5% of the permit area for each of Permit 2 and Permit 3. The green open space should be above the 20% AEP.
 - Permit 2 green open space = 0.33 ha
 - Permit 3 green open space = 0.72 ha
- Permit 2 lot density of 465m² and Permit 3 lot density of 780m².

STORMWATER MANAGEMENT STRATEGY NUMURKAH

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



- Preferred batter slopes of 1 in 6 within the drainage reserve, with an absolute maximum of 1 in 4.
- Retention of the existing café on 52 Wattle Drive, however the property can be used for an outfall pipe and ancillary flow path (easement likely to be created to contain pipe and ancillary flow channel).

These development objectives have been incorporated into an urban design which is shown in Figure 8 and Appendix C and forms the basis of the SWMS.

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



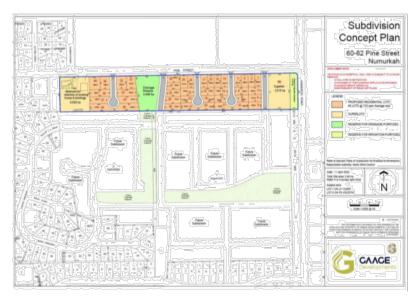


Figure 7: Permit 1 Concept Subdivision Plan (Gaage Developments, 2022)



Figure 8: Urban Design (Spiire, Feb 2024)

STORMWATER MANAGEMENT STRATEGY NUMURKAH

FILE NO: P44

2. A DIVERSE AND DYNAMIC ECONOMY

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



STORMWATER MANAGEMENT STRATEGY

The SWMS considers three main aspects:

- Flow conveyance through the site and downstream discharge.
- Water treatment using Water Sensitive Urban Design (WSUD).
- Flood management.

To meet the three main objectives listed above, the SWMS has been developed to manage stormwater using the following:

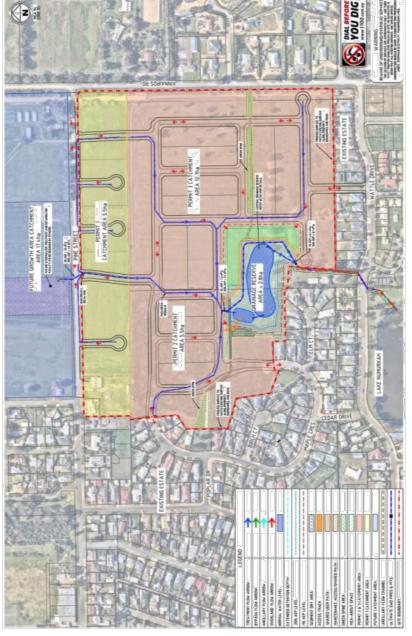
- Pipes to convey 20% AEP flows
- Roads to convey gap flows (between 1% AEP and 20% AEP)
- Centralised drainage reserve with co-located sediment basin, wetland and retarding basin
 - 800 m² Sediment Basin
 - 5,000 m² Wetland
 - 42,000 m³ Retarding Basin
- ▶ 100 L/s Outlet Pump Station and rising main discharging to Lake Numurkah
- Ancillary flow path through 52 Wattle Drive to Lake Numurkah
- A future drainage reserve north of Pine Street to provide water quality and retardation for the future growth area. A gravity main drain will convey flows from the Pine Street retarding basin to the site retarding basin. This has been allowed for at a high level, to be considered in more detail as part of the future growth area SWMS.

The proposed SWMS layout is presented in the plans located in Appendix A, and also in Figure 9. Each aspect of the SWMS is described in more detail in subsequent sections of this report.

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HYDROLOGICAL ASSESSMENT

A hydrologic analysis using a RORB model has been undertaken to inform the SWMS. The purpose of the RORB model is to:

- ▶ Assess existing and developed conditions flows in the 1% and 20% AEP events
- ▶ Determine the retarding basin storage capacities in the 1% and 20% AEP events

This section outlines a summary of the results from the hydrological analysis. For further details of model build and assumptions see Appendix B.

6.1 EXISTING CONDITIONS

Flows have been calculated under existing conditions using a fraction impervious of 0.1 for all catchments. The RORB model catchment plan is shown in Figure 10.

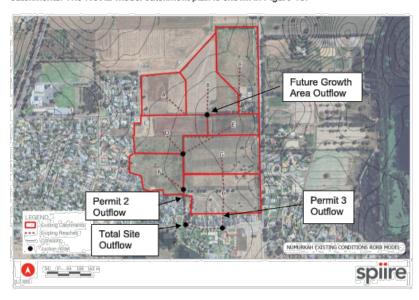


Figure 10: Existing Conditions RORB model

The 1% AEP storm event results at various critical locations for the existing conditions RORB Model is shown in Table 1. The flows in Table 1 are for the temporal pattern one above calculated median for the critical duration at the respective location.

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Table 1: Existing Conditions RORB Model Results

Location	1% AEP Flow (m³/s)	20% AEP Flow (m³/s)	
Future Growth	1.0	0.3	
Area Outflow (Pine St)	1.5-hr TP22	3-hr TP8	
Dame it a continue	0.9	0.3	
Permit 2 Outflow	6-hr TP27	4.5-hr TP4	
Down it a Costano	0.7	0.2	
Permit 3 Outflow	1.5-hr TP22	3-hr TP6	
Site Outfall (Total	1.6	0.4	
outflows combined)	3-hr TP29	4.5-hr TP4	

6.2 DEVELOPED CONDITIONS

Spiire have noted that the future growth area north of Pine Street will eventually be developed. A key assumption of the strategy is, that development upstream of Pine Street will retard flows back to the existing conditions discharge rates and therefore contribute peak flows no greater than that derived under existing conditions. It should be noted that the assumption under this SWMS is that the Pine Street basin retards back to 1% AEP existing conditions peak flows (1,000 L/s). This is considered to be a conservative assumption, both from main drain sizing and also on site retarding basin sizing. While a levels assessment has shown that a gravity basin north of Pine Street is possible, should this basin be designed as a pumped system, sizing of both the main drain and on site retarding basin can be reduced. This will be assessed in more detail in future drainage studies for the development north of Pine Street.

RORB modelling has been completed using a fraction impervious of 0.75 for developed catchments and 0.1 for open space/drainage reserves. The developed conditions catchment plan is shown in Figure 11.

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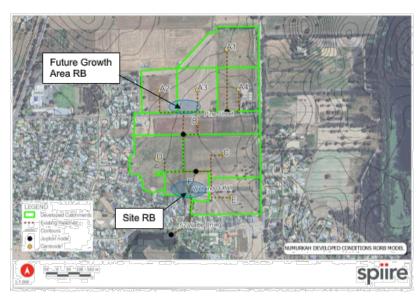


Figure 11: Developed Conditions RORB model

6.3 RESULTS

6.3.1 DEVELOPED CONDITIONS

The developed conditions RORB model has been run for the 1% and 20% AEP storm events at key locations and the results shown in Table 2.

Table 2: Developed Conditions RORB Model Results

Location	1% AEP Flow (m³/s)	20% AEP Flow (m³/s)	
Future Growth	4.0	2.0	
Area RB Inflow	15-min TP24	30-min TP5	
Future Growth	1.0	1.0	
Area RB Outflow	10-min TP21	10-min TP1	
Site RB Inflow	7.3	3.7	
Olfe LD ILIIOM	25-min TP25	30-min TP1	
Site RB Outflow	0.1	0.1	
Site RB Outriow	48-hr TP27	12-hr TP2	
Total Site Outflow	0.1	0.1	

STORMWATER MANAGEMENT STRATEGY NUMURKAH

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48-hr TP27

12-hr TP2

The required storage volume was calculated for the 1% and 20% representative event, with the 1% AEP volume derived from the 24-hour storm with no outfall condition (pump offline) as per clause 18.3 in the Infrastructure Design Manual (2022). The required storage volumes and corresponding peak levels are:

- 20% AEP 12,000 m³ (105.6m AHD)
- 1% AEP 42,000 m³ (107.0m AHD)

This design criteria is the controlling factor determining the retarding basin volume, and flexibility in this criteria would result in a smaller basin.

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HYDRAULIC ASSESSMENT

The hydraulic assessment has been conducted inline with the broader strategy to:

- Drain the Pine Street basin via a main drain to the site centralised drainage reserve.
- Drain the site to a centralised drainage reserve with a pumped outfall to Lake Numurkah.

7.1 ESTATE DRAINAGE, ROAD GRADING AND FILL

The key design assumption and outcomes are;

- Lake Numurkah tailwater 106.6m AHD. This was advised by Council as representative of a high water level within the lake. Note that no specific flood frequency is applied to this level.
- > 20% AEP flow conveyance in pipes
- ▶ 1% AEP flow conveyance in roadways
- ▶ 1 in 300 minimum pipe grade
- ▶ 1 in 300 minimum road grade

The subject site is low lying, flat topography as described in the existing conditions section of this report. However, given the SWMS has a pumped outlet, the basin level can be dropped to achieve the desired road and pipe grades, whilst negating or minimising the requirement for on-site filling. This is discussed in more detail below.

7.2 PUMP STATION AND OUTFALL TO LAKE NUMURKAH

The key design outcomes are;

- Pump Station controlling discharge from retarding basin, with Rising Main
 - 100 L/s Pump Station with 2m discharge head
 - 375mm Rising Main Outlet to Lake Numurkah (indicative size, subject to detailed design).
- Ancillary flow path through 52 Wattle Drive
 - Spillway from retarding basin to ancillary flow path channel set at RL 107.0.
 - Ancillary flow channel to convey spillway flows to Lake Numurkah. Indicative 1m base width and 1 in 4 batter slopes. The ancillary flow channel has not been designed to cater for a specific flow rate, but rather provide a pathway should the basin fill to above the 1% AEP event.
 - 1 in 300 longitudinal grade
 - Box culverts with an IL of 106.4m will be required to convey ancillary flows under Wattle Drive (road crest RL 108.4m AHD). These have been nominally sized at

STORMWATER MANAGEMENT STRATEGY

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1200mm (width) x 450mm (height). Note that underground services exist in Wattle Drive, including gas, water and sewer. Therefore, services proving is required to inform box culvert design.

- The downstream ancillary flow path channel connecting the proposed Wattle Street box culverts to Lake Numurkah. This will convey flows through an existing Council reserve. The outlet to Lake Numurkah will connect in at IL 106.2m AHD. This IL is below the Lake Numurkah tail water level (106.6m AHD). This would result in water backwatering into the channel and into the culverts under Wattle Drive. The channel level can be adjusted in detailed design to minimise this backwatering.
- An appropriate drainage easement (approximately 10m wide pending design flow rate and grade of channel) through 52 Wattle Drive will be required to accommodate the rising main and ancillary flow path.

A 100 L/s pumping rate has been selected as this would dewater the retarding basin in 5 days following a 24-hour event. Five days is considered to be an extended duration for the macrophtyes to be inundated – therefore a pump rate less than 100L/s (with a corresponding increase in inundation duration) is considered unacceptable. Given the extended inundation duration, appropriate macrophyte plant species selection is important for plant survival and sustainability.

As an alternative to constructing an outlet rising main to Lake Numurkah, a discharge directly to the upstream end of the ancillary channel through 52 Wattle Drive would be possible. This would avoid a large portion of rising main pipework. However, outlet velocities from the pump station would need to be properly controlled to mitigate channel erosion. This may require rock lining of the channel and may result in a larger easement being required. This can be investigated further at detailed design.

At the time of writing, it is understood that the café located within the 52 Wattle Drive property is proposed to remain. However, should plans change to remove the café as part of the overall development site, an opportunity would exist to design a larger ancillary flow and rising main outlet through the property, which would provide a more aesthetically pleasing outcome, to be integrated into the existing landscaping. This opportunity should be investigated further in the event that the café is removed from the ultimate plans.

7.3 DRAINAGE RESERVE CONCEPT DESIGN

The drainage reserve is proposed as a sediment basin and wetland treatment train, located within the base of a retarding basin, as follows:

The concept sediment basin has been designed as follows (Refer to Section 8 for key design criteria):

- ▶ Area = 800m²
- NWL = 104.5m AHD
- ▶ EDD = 104.85m AHD

The concept constructed wetland has been designed as follows (Refer to Section 8 for key design criteria):

Area = 5,000m²

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- NWL = 104.3m AHD
- EDD = 104.65m AHD
- A high flow bypass pipe has been allowed to protect the macrophte zone from scouring through high velocities. It should be noted that given this wetland is proposed in the base of a pumped outlet retarding basin, sufficient backwater effect may be present to negate high velocities. This should be investigated further at detailed design, and if appropriate, the need for a high flow bypass can be removed.

The concept retarding basin has been designed as follows:

- As outlined in Section 6, the RORB modelling determined the required retarding basin storage volume as:
 - 20% AEP 12,000 m³
 - 1% AEP 42,000 m³
- 20% AEP Level = 105.6m AHD (green open space/kick-about space set at the 20% AEP level)
- ▶ 1% AEP Level = 107.0m AHD
- Spillway Level = 107.0m AHD
- Minimum Road Level set at 107.3m AHD (300mm freeboard to 1% AEP level)
- Minimum Lot Level = 107.6m AHD (300mm freeboard to 1% AEP level), or 300mm above the local gap flow level within the road reserve, whichever is greater. Note this minimum lot level is below the surrounding estate lot levels and flow from surrounding catchments should be assessed to ensure that it does not enter the site.
- As advised by Moira Shire council, the basin was designed to have the green open space above 20% AEP. The green open space includes a 'kick-about space' and the batter slopes up to the road level (at the preferred 1 in 6 batter). The kick-about space has a flat grade and can be designed as a sporting area or playground in subsequent design phases.

The retarding basin spillway is located at the south of the drainage reserve adjacent to the outlet pump station. Once the retarding basin reaches the 1% AEP level, flows will overtop the spillway and enter the ancillary flow path channel to Lake Numurkah.

The retarding basin height-volume relationship is presented in Table 3, with a concept wetland/retarding basin cross section shown in Figure 12.

Table 3: Retarding Basin Height-Volume Relationship

Height (m)	Volume (m3)
104.5	0
105	5166
105.5	11033

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106	20086
106.5	30652
107	42280

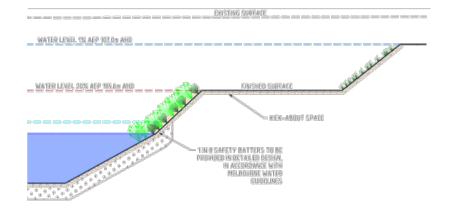


Figure 12: Drainage Reserve Detailed Section

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WATER QUALITY TREATMENT

WSUD is an approach to integrating the urban water cycle into urban planning and design and mitigating the impacts of urbanisation on waterways. Key principles of WSUD as outlined by Victorian Stormwater Committee (1999) in the Best Practice Environmental Management Guidelines (BPEMG) are to:

- Protect and enhance natural water systems within urban environments.
- Integrate stormwater treatment into the landscape, maximising the visual and recreational amenity of developments.
- Improve the quality of water draining from urban developments into receiving environments.
- Reduce runoff and peak flows from urban developments by increasing local detention times and minimising impervious areas; and
- Minimise drainage infrastructure costs of development due to reduced runoff and peak flows.

8.1 WATER QUALITY OBJECTIVES

Guidelines for urban stormwater quality management in Victoria are contained in Urban Stormwater Best Practice Environmental Management Guidelines (BPEMG). These guidelines are included in all municipal planning schemes as State Policy. The guidelines seek to minimise the detrimental effects of urbanisation on receiving waterways. Table 4 lists the water quality objectives.

Table 4: Best Practice Stormwater Management Objectives

Pollutant	Water Quality Objectives
Total Suspended Solids (TSS)	80% retention of the typical urban load
Total Phosphorus (TP)	45% retention of the typical urban load
Total Nitrogen (TN)	45% retention of the typical urban load
Litter¹/Gross Pollutants (GP)	70% retention of the typical urban load

Note 1 – Litter is defined as anthropogenic material larger than five millimetres (Source: Victorian Stormwater Committee, 1999)

Model for Urban Stormwater Improvement Conceptualisation v6.2.1 (MUSIC) has been used to determine the indicative size of treatment infrastructure required to ensure the stormwater runoff from the proposed development is treated to the appropriate standard defined in BPEMG targets.

The closest rainfall station to the site is Cobram. Therefore, Cobram rainfall data for the reference period from 1957-2010 (53 years) with a 6-minute time step has been input into MUSIC, with other parameters adopted in accordance with Melbourne Water MUSIC Guidelines (Melbourne Water, 2018). The average annual rainfall using this template is 422mm.

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8.2 WSUD CONCEPT DESIGN

The proposed water quality treatment strategy is to provide a centralised drainage reserve, with a sediment basin and wetland. The sediment basin is designed to remove suspended solids, while the wetland is designed to remove nitrogen and phosphorus. The treatment train was modelled in MUSIC as shown in Figure 13. Proposed sediment basin and wetland treatment sizes are presented in Table 5 and Table 6.

Flows greater than the 4EY event are designed to bypass around the sediment basin and wetland. Bypass pipework will convey flows to the pump station outlet and other surcharge pits which will surcharge flows into the wetland at strategic locations to minimise the impact of high flows on the wetland macrophyte plant species. We recommend that the high flow bypass should be reviewed in detailed design to assess how the velocities through the wetland can be managed.

The concept is designed to have a baffle pit and sidewinding penstock which controls the outlet flow rate from the wetland. This sidewinding penstock should be adjusted to achieve the desired 72-hour residence time in the wetland. To achieve the 72-hour residence time, the opening size of the penstock may be too small and pose a blockage risk. A compromise might need to be struck between residence time and opening size of the outlet. This can be assessed at the detailed design stage.

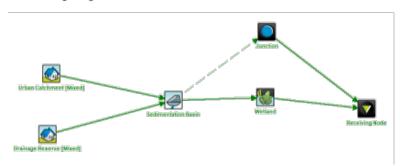


Figure 13: MUSIC model configuration

Table 5: Sediment Basin Specifications

Catchment Area (ha)	Treatment Area (m²)	Minimum Width (m)	Length (m)	Extended Detention Depth (m)	Permanent Pool Volume (m³)	Dry- Out Area (m²)	Clean Out Frequency
26.5	800	20	40	0.35	551	488	5 years

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Table 6: Wetland Specifications

Catchment Area (ha)	Treatment Area (m²)	Minimum Width (m)	Length (m)	Extended Detention Depth (m)
26.5	5,000	43	140	0.35

The maximum velocities in the wetland and sediment basin have been checked against Melbourne Water design guidelines as shown in Table 7 and are deemed to comply.

Table 7: Velocity Checks

Asset	4EY Flow (m³/s)	Actual Width (m)	EDD (m)	Velocity (m/s)	Velocity Threshold (m²/s)	Check
Sediment Basin	0.76	20	0.35	0.1	0.5	Okay
Wetland	0.76	43	0.35	0.05	0.05	Okay

It is recognised that due to small catchment areas, there is risk of wetlands drying out, particularly during the summer months. Therefore, appropriate macrophyte plant species selection will be critical, to ensure the planting is sustainable in both periods of dry and extended inundation (refer Section 7.2). It is also imperative to ensure species are surviving during establishment and irrigation may be required to accommodate this. A spells analysis should be completed in subsequent design phases to ensure appropriate water levels in the wetland and inform plant selection.

8.3 RESULTS

The results at the 'Receiving Node' of the MUSIC model are shown in Table 8. The 'Receiving Node' corresponds to the pump station outlet to Lake Numurkah.

Table 8: MUSIC Treatment Train Performance Results

	Sources (kg/yr)	Residual Load (kg/yr)	% Reduction
Total Suspended Solids	13,100	2,510	80.9
Total Phosphorus	27.1	8.24	69.6
Total Nitrogen	189	100	47.1
Gross Pollutants	2,610	128	95.1

The results show that the proposed layout will meet BPEMG water quality objectives. The Melbourne Water Auditor tool was applied and shows in Figure 14 that the effective water level (50% of time exceeded) is within 50mm of normal water level and is therefore deemed to comply, with 72-hour residence time has been achieved.

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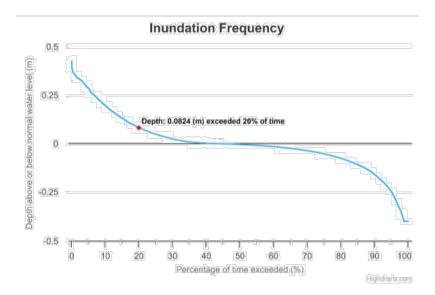


Figure 14: Melbourne Water Wetland Inundation Frequency

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PERMIT 1 DEVELOPMENT

The permit 1 development is likely to occur prior to the permit 2 and 3 development. Therefore, a staged stormwater management approach is proposed to allow early development of this parcel. The Permit 1 SWMS concept is shown in Figure 15 and Appendix A. The key features of the Permit 1 SWMS are:

- Bulk earthworks of the ultimate retarding basin, down to Normal Water Level (NWL) of 104.3m AHD. This will provide temporary sedimentation. No requirement for clay liner or planting until the ultimate basin is constructed.
- Retarding basin to be excavated in-line with the ultimate design to provide the ultimate retardation volume. However, there will be opportunity for the Permit 1 SWMS to refine (reduce) the retardation volume to satisfy Permit 1 only, thus reducing the Permit 1 temporary basin size. This can be considered as part of the detailed design phase, to the satisfaction of Council.
- Ultimate 20% AEP main drain which discharges to a temporary open channel which conveys flows to the temporary basin.
- Ultimate pump station, rising main and outlet configuration to Lake Numurkah.
- Ultimate ancillary flow channel through the property at 52 Wattle Drive, proposed culverts under Wattle Drive and ancillary flow channel on south side of Wattle Drive.

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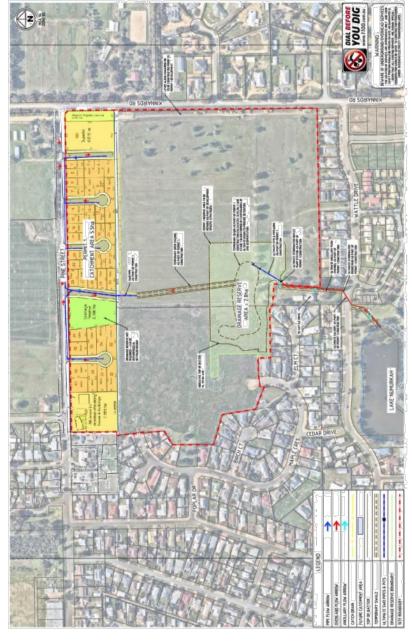


Figure 15: Permit 1 SWMS concept design

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10. SUMMARY AND RECOMMENDATIONS

A SWMS has been prepared for the proposed development north of Wattle Drive, Numurkah. In summary:

- Internal pipes convey the 20% AEP flows, with flows up to the 1% AEP conveyed in the roadway.
- 1050mm main drain from future growth area basin to drainage reserve.
- The ultimate design has one centralised drainage reserve, containing:
 - Sediment Basin = 800 m²
 - Wetland = 5,000 m²
 - Retarding Basin = 42,200 m³
- A 100 L/s outlet pump station is required to discharge water to Lake Numurkah.
- Ancillary flow path from basin to Lake Numurkah, in the form of a channel.
- Box culverts under Wattle Drive indicatively sized as 1200mm x 450mm.
- Open space within basin above the 20% AEP level (105.6m AHD).
- ▶ 1% AEP level in the basin at 107.0m AHD.
- Retarding Basin in future growth area to retard flows to 1% AEP existing conditions flow (1,000 L/s).

The SWMS identifies the following recommendations for further works during the detailed design phase:

- It is essential that the future levee (understood to be planned for construction by Council) is constructed along Kinnairds Road and northern bank of Broken Creek to provide appropriate flood mitigation for the site. This is critical for the site given it sits within the existing 1% AEP floodplain.
- Finished surface of estate should interface to existing surface level of surrounding lots/roads.
- Size temporary sediment basin and retarding basin for Permit 1, to the satisfaction of Council.
- Ensure appropriate macrophyte plant selection which can withstand dry periods and consider irrigation requirements during establishment phase. The macrophyte plants should also be of suitable species to tolerate durations of extended duration when the retarding basin is engaged.
- Undertake services proving of Wattle Drive to inform design of proposed culverts, required to facilitate an ancillary flow path from the basin to Lake Numurkah.

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- The future growth area north of Pine Street is assumed to retard flows to the existing 1% AEP peak flow rate. There is an opportunity to refine this basin outflow in detailed design.
- Regrading of Pine St is required to create low point for emergency overflow for the basin in the future growth area.
- No CHMP, biodiversity assessment, geotechnical nor groundwater investigations have been conducted onsite and therefore has not been considered in the design. These assessments should be undertaken to confirm the proposed stormwater management solution is viable.
- It is understood that the Irrigation Channel No 6/6 will be piped and located in a future easement, under future works. It must be ensured that these future works and designed to provide flood immunity to the future development area, including backwater/surcharge from Broken Creek.
- The design solution uses the property at 52 Wattle Drive as a drainage easement for the rising main and ancillary flow path. This is subject to detailed design.
- The proposed channel that runs from 52 Wattle Drive to Lake Numurkah with proposed box culvert under Wattle Drive has been conceptually designed to convey ancillary flows. Detailed design must consider interface with existing assets, potential service clashes, level constraints and the outfall design to Lake Numurkah.
- During detailed design the outlet location of the rising main can be investigated further. There is an alternative option is to discharge directly into the ancillary channel through 52 Wattle Drive instead of constructing the rising main to Lake Numurkah.

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



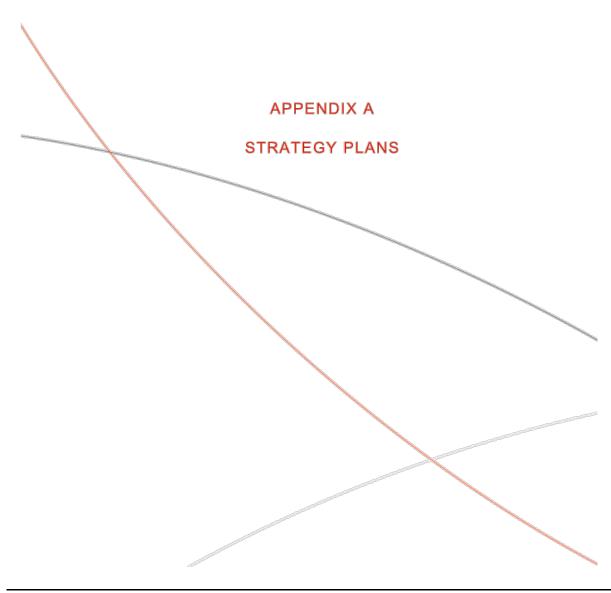
11. REFERENCES

- Wattle Drive Numurkah, VIC 3630 Site Plan.
- EarthTech. (2006, August). Development Plan, Numurkah, Moira Shire Council.
- ▶ EPA Victoria. (2021). Urban Stormwater Management Guidance.
- Local Government Infrastructure Design Association . (2020). Infrastructure Design Manual.
- ▶ Melbourne Water. (2018). MUSIC Modelling Guidelines.
- Melbourne Water. (2020). Wetland Design Manual.
- Sinclair Knight Merz. (1998, July). Urban Drainage Strategy, Township of Numurkah.
- Spiire. (2022, March 2). Lake Numurkah Analysis and Opportunities Community Consultation.
- Spiire. (2023, September). Numurkah Stormwater Management Strategy
- Stormy Water Solutions. (2020). Drainage Analysis Numurkah.
- Water Technology. (2017). Numurkah Floodplain Management Study and Plan Study Report.

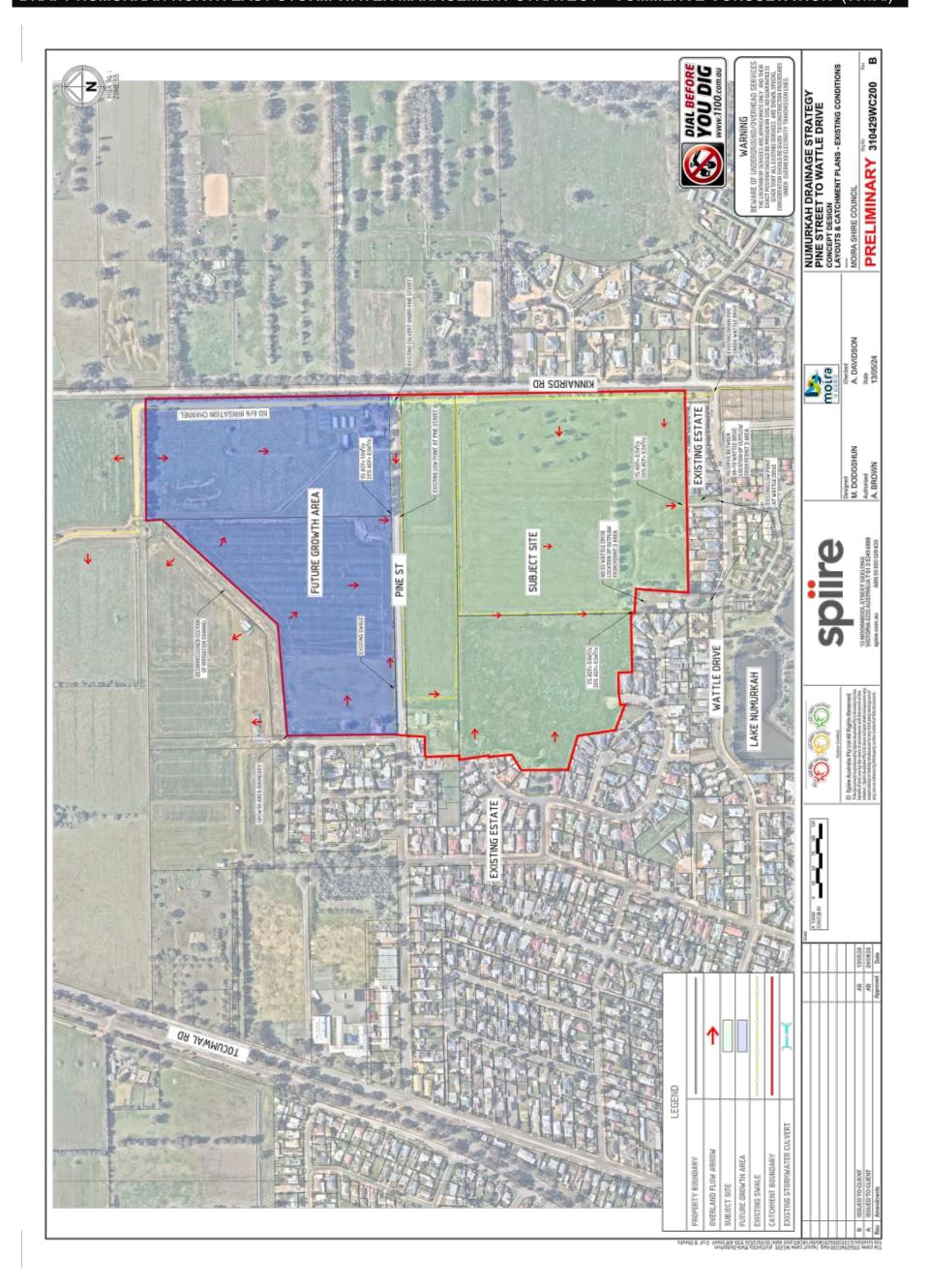
ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

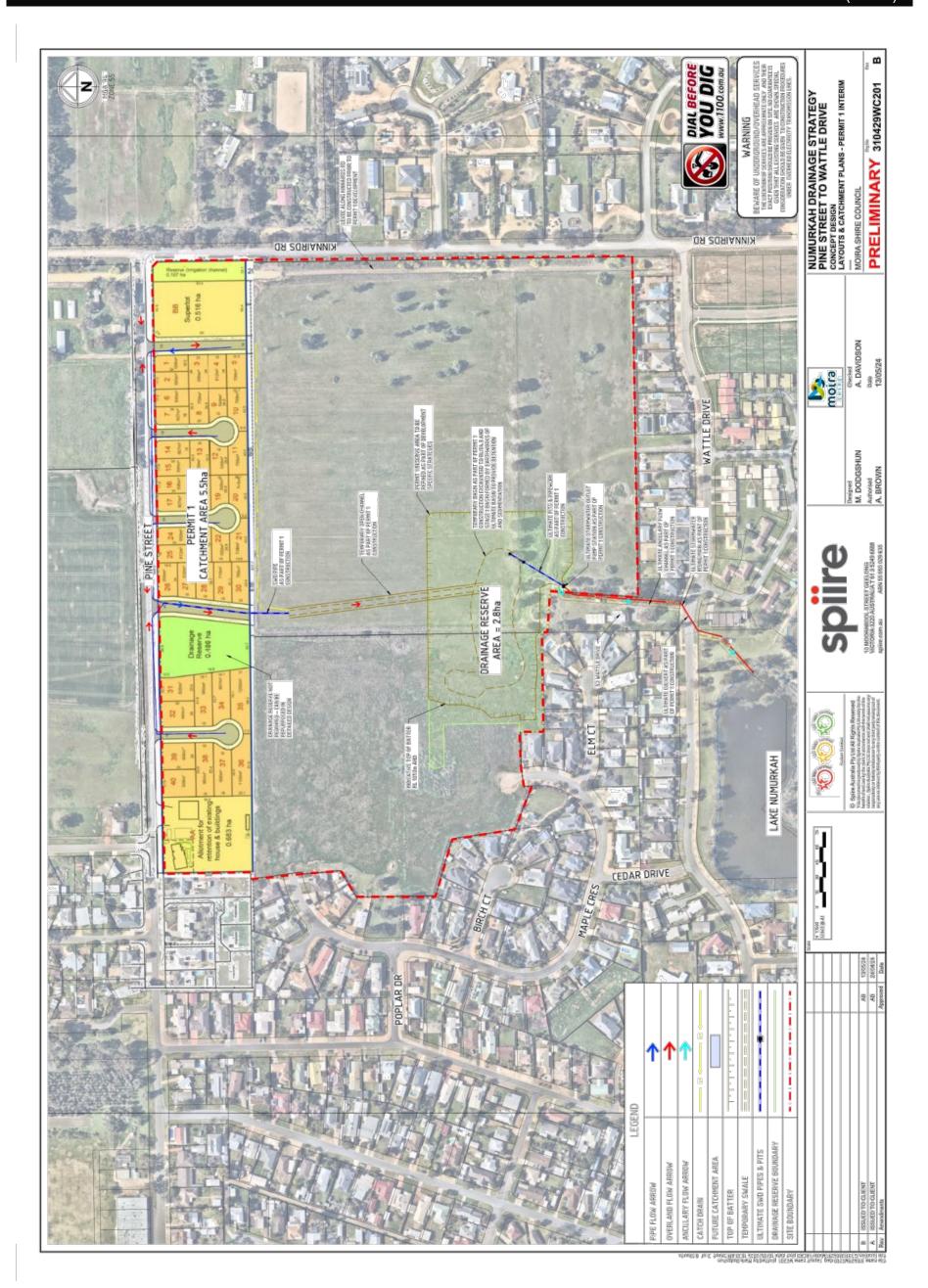
ATTACHMENT No [1] - Draft Numurkah NE Storm Water Management Strategy



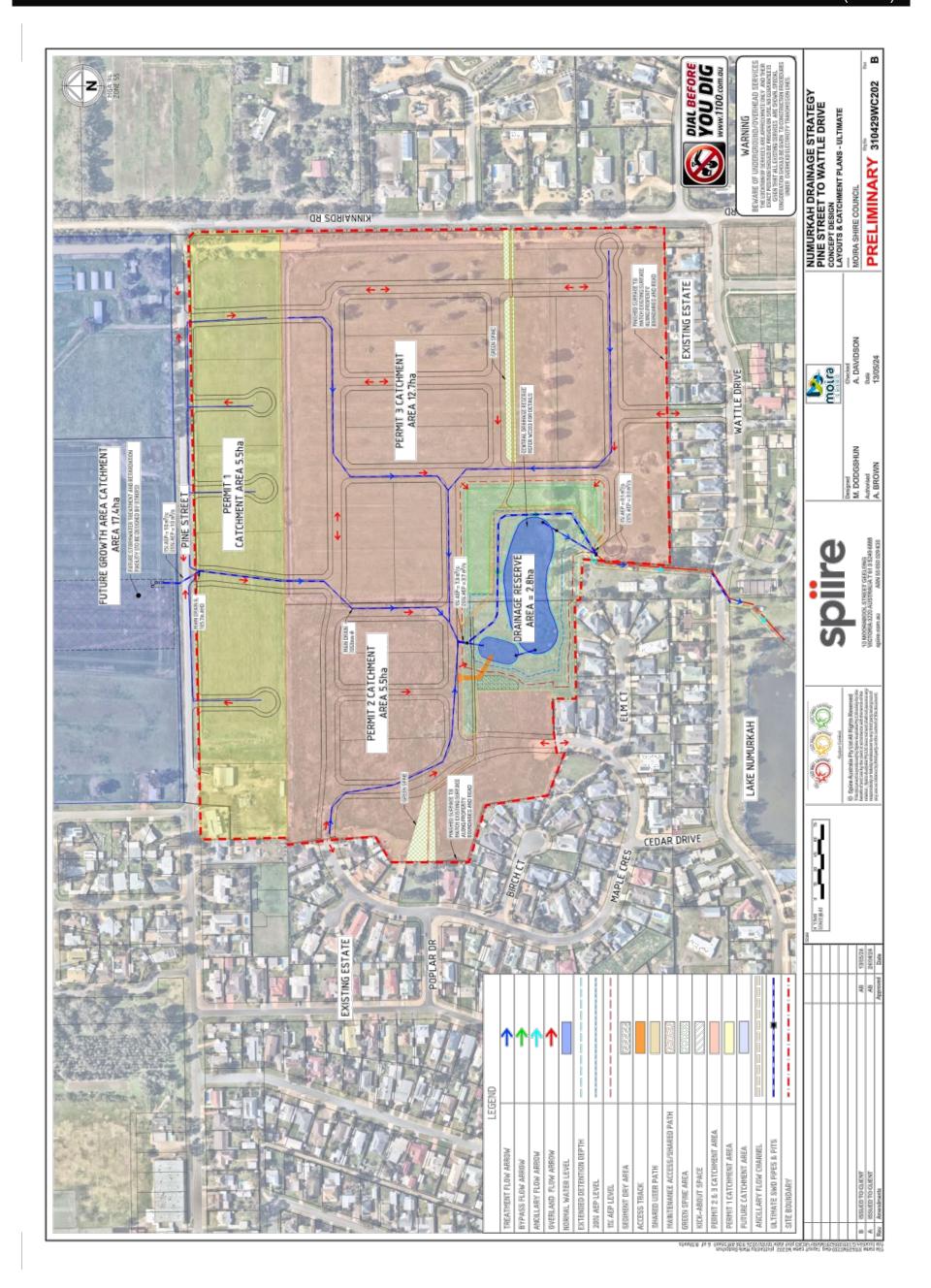
ITEM NO: 9.4.2
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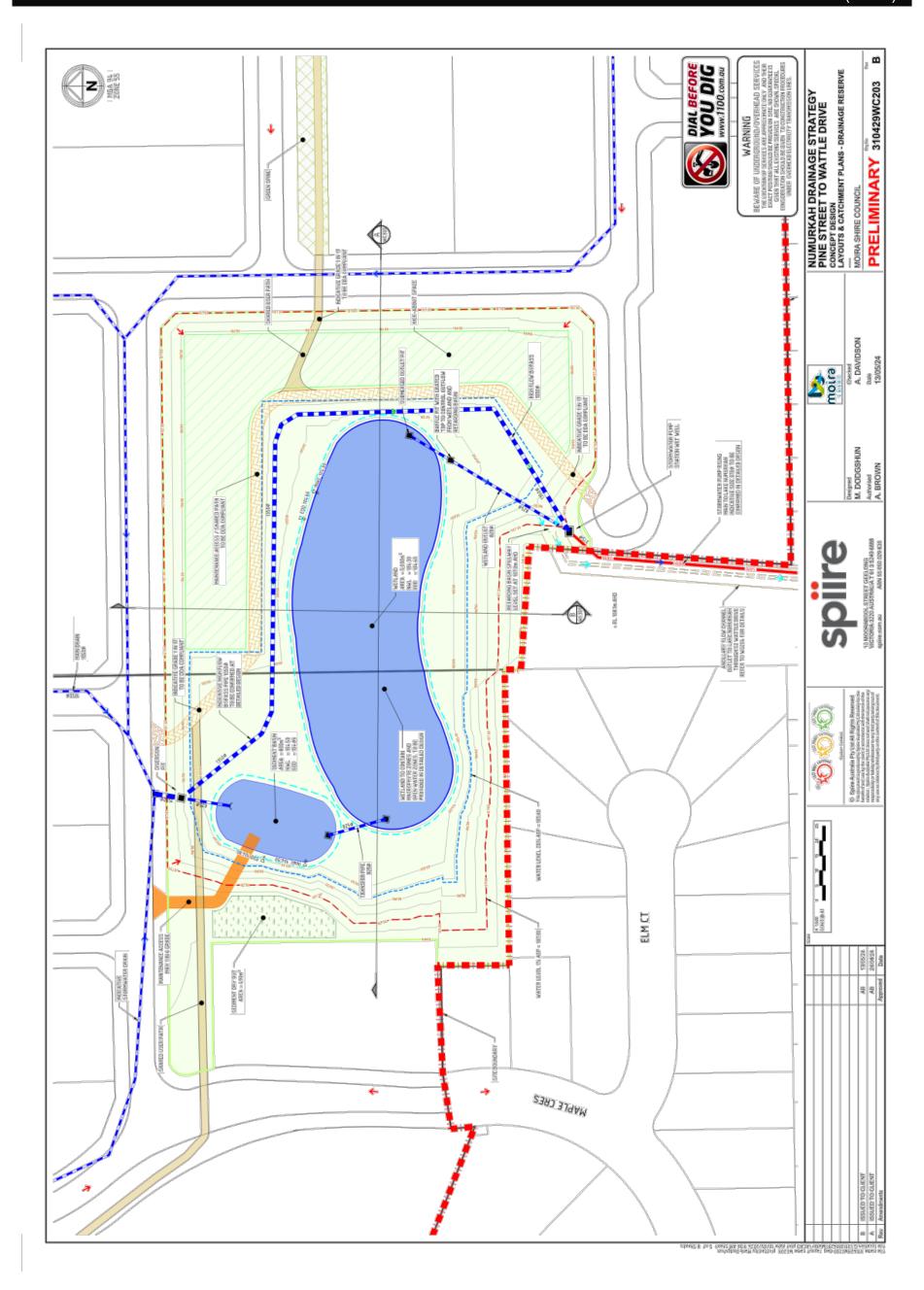
ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)



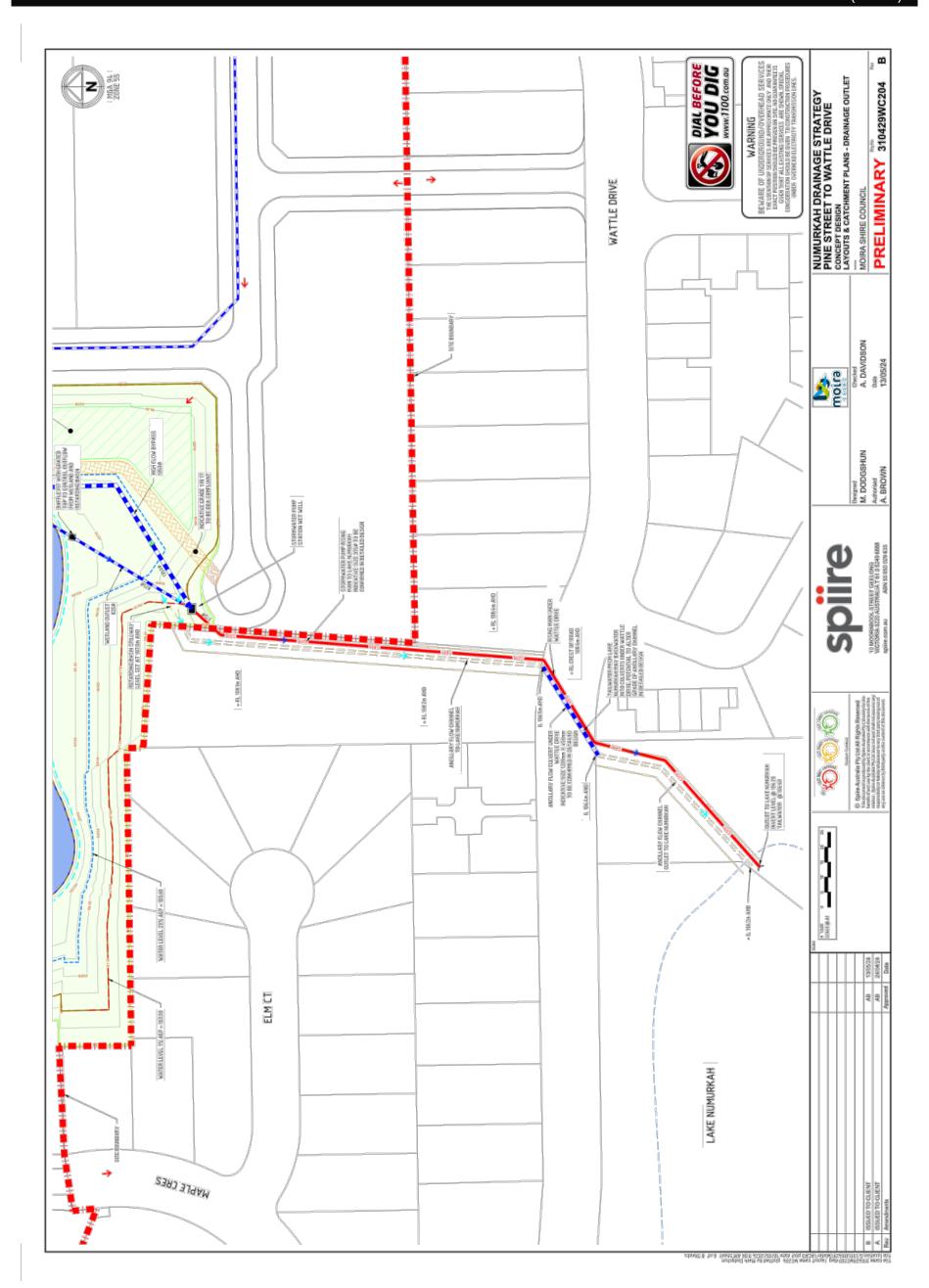
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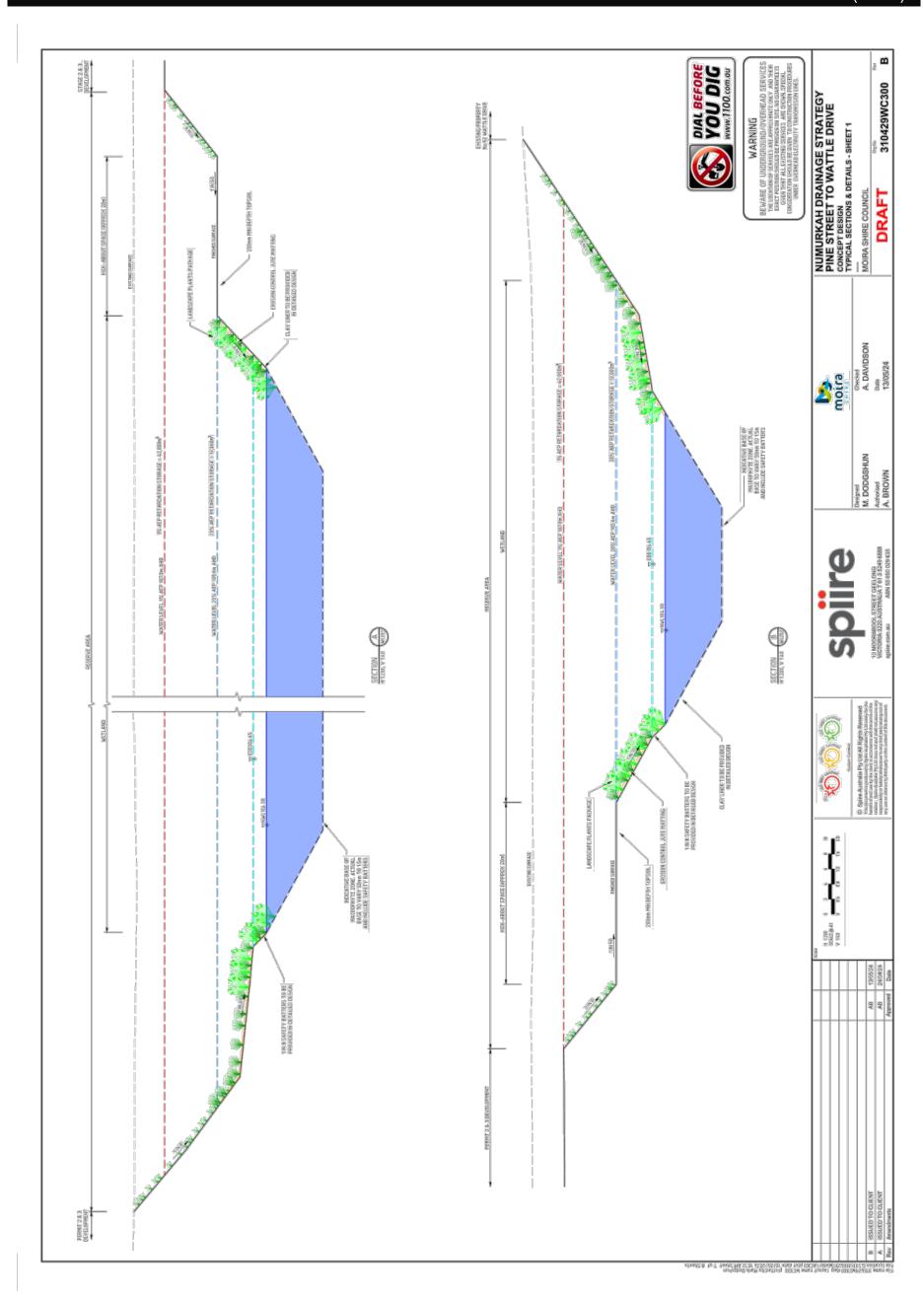
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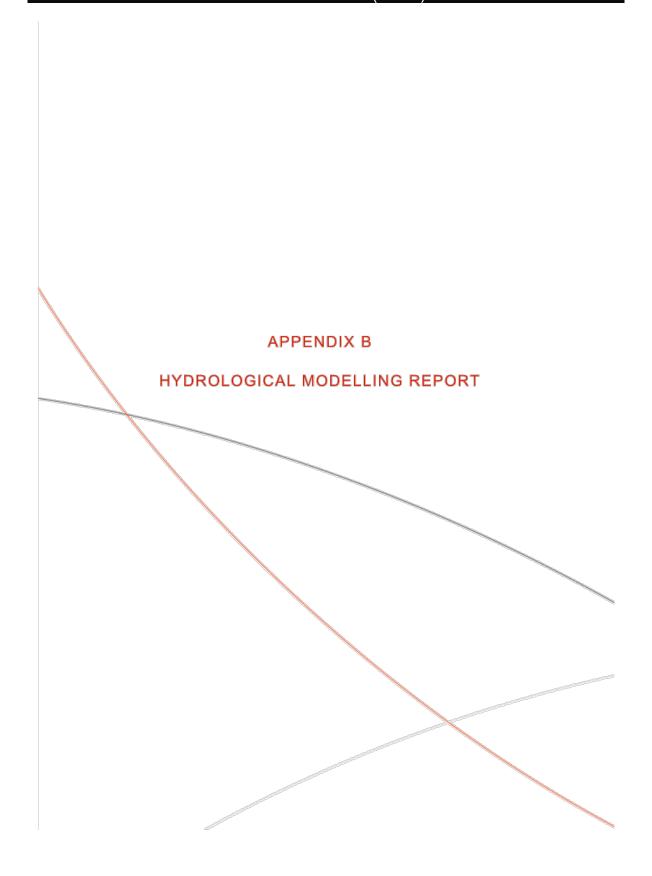
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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



1. INTRODUCTION

As a part of Numurkah Stormwater Management Strategy, a hydrologic analysis has been completed to inform the strategy. Figure 1 below shows the site context, with the subject site located to the north of Wattle Drive and south of Pine Street. There is also a future growth area north of Pine Street which is considered to be developed in the developed conditions model.

RORB modelling has been undertaken in order to:

- Assess existing and developed conditions flows in the 1% and 20% AEP events
- ▶ Determine the required retarding basin storage capacities in the 1% and 20% AEP events



Figure 1: Site Context

FILE NO: P44

2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.2

(PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY)

(DIRECTOR INFRASTRUCTURE, JUSTIN

HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



2. HYDROLOGY

2.1 MODELLING INPUTS

2.1.1 LIDAR

LIDAR data was provided by Moira Shire Council April 2023 as a 20m x 20m grid in raster format.

2.1.2 RAINFALL DEPTH

Rainfall depths have been adopted from information available via the Bureau of Meteorology (Bureau of Meteorology, 2023). Rainfall depths for a range of AEP's are shown in Table 1.

Table 1: Rainfall Depths

		Annu	al Exceedance	e Probability		
Duration	50%	20%	10%	5%	2%	1%
10 min	8.46	12	14.5	16.9	20.3	23
15 min	10.3	14.7	17.7	20.8	24.9	28.2
20 min	11.7	16.6	20.1	23.5	28.2	32
25 min	12.8	18.2	21.9	25.7	30.8	34.9
30 min	13.7	19.4	23.4	27.4	32.9	37.2
45 min	15.7	22.1	26.7	31.2	37.4	42.3
1 hour	17.2	24.1	29	33.9	40.5	45.8
1.5 hour	19.3	26.9	32.3	37.7	45	50.8
2 hour	20.9	29.1	34.8	40.5	48.3	54.5
3 hour	23.5	32.3	38.6	44.9	53.4	60.2
4.5 hour	26.4	36.1	43	49.9	59.4	66.9
6 hour	28.7	39.2	46.6	54.1	64.3	72.4
9 hour	32.4	44.2	52.5	61	72.6	81.8
12 hour	35.3	48.2	57.4	66.7	79.6	89.8
18 hour	39.9	54.7	65.3	76.1	91.1	103
24 hour	43.3	59.8	71.6	83.6	100	114
30 hour	46.1	63.9	76.8	89.9	108	123
36 hour	48.3	67.4	81.1	95.2	115	131
48 hour	51.7	72.8	88	104	126	144
72 hour	56.1	79.7	97	115	140	161

2.1.3 LOSSES

An initial and continuing loss has been adopted from the Australian Rainfall and Runoff 2019 Data (J, Ball; Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, 2019).

- Initial Loss (IL) = 23 mm
- ► Continuing Loss (CL) = 2.6 mm

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



2.1.4 PRE-BURST DEPTHS

Median pre-burst depths were adopted from the Australian Rainfall and Runoff Data Hub. The initial loss was adjusted to account for pre-burst for each storm duration. For durations where a median pre-burst depth was not available a depth was interpolated from the previously shorter and next longer durations. For all durations less than 60 minutes the median pre-burst depth for the 60-minute duration was adopted. The median-pre-burst depths and corresponding adjusted initial losses are shown in Table 2.

Table 2: 1% and 20% AEP median pre-burst depths and adjusted initial losses

	1% AEP			20% AEP			
Duration (hrs)	Median Pre-burst depth (mm)	Adjusted Initial Loss (mm)	Loss Factor	Median Pre-burst depth (mm)	Adjusted Initial Loss (mm)	Loss Factor	
1	1.0	22.0	0.96	2.7	20.3	0.88	
1.5	1.1	21.9	0.95	0.8	22.2	0.97	
2	0.4	22.6	0.98	1.5	21.5	0.93	
3	1.0	22.0	0.96	3.4	19.6	0.85	
4.5	2.1	20.9	0.91	2.7	20.4	0.88	
6	3.2	19.8	0.86	1.9	21.1	0.92	
9	2.7	20.4	0.88	1.2	21.8	0.95	
12	2.1	20.9	0.91	0.5	22.5	0.98	
18	1.7	21.3	0.93	0.1	22.9	1.00	
24	0.2	22.8	0.99	0.1	22.9	1.00	
30.00	0.1	22.9	1.00	0.0	23.0	1.00	
36.00	0.0	23.0	1.00	0.0	23.0	1.00	
48.00	0.0	23.0	1.00	0.0	23.0	1.00	
72.00	0.0	23.0	1.00	0.0	23.0	1.00	

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



2.1.5 TEMPORAL PATTERNS

Temporal patterns were adopted from the Australian Rainfall and Runoff 2019 Data Hub (J, Ball; Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, 2019). The catchment is in the Southern Slopes Mainland temporal pattern region.

2.1.6 AREAL REDUCTION FACTORS

Areal reduction factors (ARF) were adopted from the Australian Rainfall and Runoff 2019 Data Hub (J, Ball; Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, 2019). ARF parameters were adopted for the Southern semi-arid zone. The parameters adopted in RORB are shown in Table 3

Table 3: ARF factors CHECK data

a	0.254
b	0.247
С	0.403
d	0.351
e	0.0013
f	0.302
g	0.058
h	0
i	0

2.2 EXISTING CONDITIONS MODEL

2.2.1 SUB CATCHMENTS AND REACHES

The RORB sub-catchments have been delineated using available LIDAR data. Since the catchment has largely undefined flow paths, the natural reach type was selected in RORB. The existing conditions RORB model layout is shown in Figure 2.

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



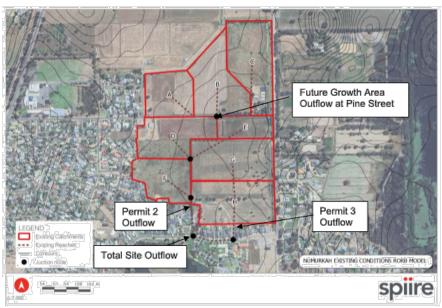


Figure 2: Existing Conditions RORB Model

2.2.2 FRACTION IMPERVIOUS

The fraction impervious for each sub-catchment has been determined based Melbourne Water MUSIC Modelling Guideline (October 2023). An aerial interrogation of the catchment shows that the entire catchment is a farming zone with no buildings except for a small section on the corner of Pine Street and Kinniards Road. The also a Pine Street which runs east-west through the catchment. Given the roads and buildings contribute less than 1% of the total catchment, there impact would be negligible on the runoff in the catchment and therefore the whole catchment has been denoted as a farming zone with a 0.1 fraction impervious.

Table 4: Sub-Catchment Parameters

Sub-Catchment	Sub-Catchment Area (ha)	FI
Α	4.4	0.1
В	6.6	0.1
С	7.1	0.1
D	5.6	0.1

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



Sub-Catchment	Sub-Catchment Area (ha)	FI
E	2.6	0.1
F	4.4	0.1
G	7.0	0.1
н	6.9	0.1
TOTAL	44.6	0.1

2.2.3 VALIDATION

Flow estimates have been determined through the Regional Flood Frequency Estimation (RFFE) and rational calculations as shown in Table 5. These flow estimates have been compared to the RORB model using various Kc estimates in order to determine an appropriate Kc for the model.

Table 5: Existing Conditions Model Validation

Location	RFFE and Rational Flow Estimate (m³/s)			RORB Flow Estimate (m³/s)				
	¹ Regional Flood Frequency Estimation (RFFE)	Strict Method with Adams Tc (Rational Rural Calculation)	Strict Rational Method with Bransby Williams Tc	Default Kc = 1.47	Vic MAR < 800mm Kc = 0.29	Vic Data Pearse et al, 2002 Kc = 0.82	Aus Wide Dyer, 1994 Kc = 0.75	Aus Wide Yu, 1989 Kc = 0.63
Numurkah Outfall	2.6	0.6	0.4	1.6	4.7	3.0	3.1	3.5

The default Kc was determined the most representative for the model as this produced a flow rate that was close to the mid-point of the RFFE and rational calculation flow estimates. Therefore, the catchment parameters that have been adopted for the existing conditions RORB model are:

- ▶ m = 0.8
- ► Kc = 1.47

2.2.4 EXISTING CONDITIONS RESULTS

The existing conditions RORB model has been run for the 1% and 20% AEP storm events at key locations and the results shown in Table 6. The flows in Table 6 are for the temporal pattern one above calculated median for the critical duration at the respective location.

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¹ Regional Flood Frequency Estimation (Dr. Ataur Rahman, 2019)

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Table 6: Existing Conditions RORB Model Results

Location	1% AEP Flow (m ³ /s)	20% AEP Flow (m ³ /s)
Future Growth	1.0	0.3
Area Outflow at Pine Street	1.5-hr TP22	3-hr TP8
Permit 2 Outflow	0.9	0.3
	6-hr TP27	4.5-hr TP4
Permit 3 Outflow	0.7	0.2
	1.5-hr TP22	3-hr TP6
T-4-1 C#- O#-!!	1.6	0.4
Total Site Outfall	3-hr TP29	4.5-hr TP4

2.3 DEVELOPED CONDITIONS MODEL

2.3.1 SUB CATCHMENTS AND REACHES

The RORB sub-catchments have been delineated based on the Urban Design (Spiire, Feb 2024) as seen in Figure 3. Reach types have been selected as "lined channel or pipe" with an assumed grade of 1 in 300 and reach lengths follow the road alignments. The developed conditions RORB model layout is shown in Figure 4.

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Figure 3: Urban Design (Spiire, Feb 2024)

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



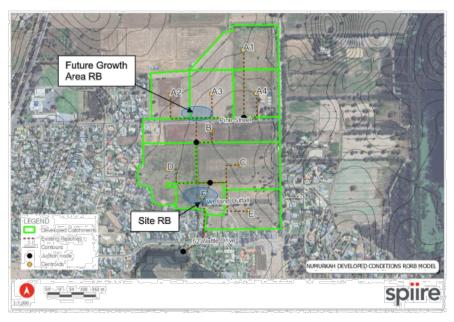


Figure 4: Developed Conditions RORB Model

2.3.2 FRACTION IMPERVIOUS

The fraction impervious for each sub-catchment has been determined based Melbourne Water MUSIC Modelling Guideline (October 2023). Council advised that the assumed lot densities for the development should be 465m² for Permit 2 (western portion of site) and 780m² for Permit 3 (eastern portion of site). To be conservative a fraction impervious of 0.75 which corresponds to a lot density between 300m^2 to 600m^2 was adopted for the entire development.

Table 7: Sub-Catchment Parameters

atchment Sub-Catchment Area (ha) FI	
6.01	0.75
3.64	0.75
4.21	0.75
4.34	0.75
	6.01 3.64 4.21

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



Sub-Catchment	Sub-Catchment Area (ha)	FI
В	6.71	0.75
С	7.58	0.75
D	5.53	0.75
E	5.05	0.75
F	2.80	0.1
TOTAL	45.9	0.71

2.3.3 Future Growth Area

For modelling purposes. The retarding basin servicing the future growth area north of Pine St is assumed to retard flows back to the 1% AEP existing condition flow (1.0m³/s) under gravity. This assumption is considered conservative for sizing of the main drain (which conveys flows from the Pine Street basin to the basin on site) and also the on site retarding basin.

Through development of a site specific SWMS for the future growth area, should the requirement for a pumped outfall be identified for the Pine Street basin, this would result in a lower basin peak discharge than the assumed 1,000L/s, due to limited pumping capacities. In this instance, the size of the main drain, together with required capacity of the site retarding basin can be reduced, subject to Council approvals.

2.3.4 VALIDATION

The Kc for the developed conditions has been adjusted by the average reach length and the formula:

$$\frac{\mathbf{k}_{c} \; (developed)}{d_{av} \; (developed)} = \frac{\mathbf{k}_{c} \; (existing)}{d_{av} \; (existing)}$$

Inputting the known parameters produces a Kc value as:

$$\frac{\mathbf{k}_c \; (developed)}{0.79} = \frac{1.47}{0.66}$$

 $k_c (developed) = 1.76$

Therefore, the developed case Kc value was adjusted to 1.76.

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



3. RESULTS

3.1 Run Log

A run log has been provided in Table 8 which outlines the modelling assumptions for each run. The model was run to determine the basin volume and key flow rates under 1% and 20% AEP events. Sensitivity runs were also undertaken to verify the results.

Table 8: Developed conditions RORB run log

Run	Purpose	Modelling Assumption	Run Duration
1	1% AEP Basin maximum volume, simulating pump failure	 Site RB pump offline Future growth area outlet at 1,000 L/s 	24-hours
2	20% AEP Basin volume and flow rates	 Site RB pump at 100 L/s Future growth area outlet at 1,000 L/s 	All durations
3	1% AEP flow rates and basin volume under normal pumping operation	 Site RB pump at 100 L/s Future growth area outlet at 1,000 L/s 	All durations

3.2 Retarding Basin Design

The required storage volume was calculated for the 1% AEP and 20% AEP representative event. With the 1% AEP volume derived from the 24-hour storm with no outfall condition (pump offline) as per clause 18.3 in the Infrastructure Design Manual (2022) – refer Run 1 in Table 8 above.

The required storage volumes are:

- 20% AEP − 12,000 m³ (~105.6m AHD) − based on Run 2 (Table 8)
- ▶ 1% AEP 42,000 m³ (~107.0m AHD) based on Run 1 (Table 8)
- 1% AEP 36,200 m³ (~106.7 AHD) based on Run 3 (Table 8)

The retarding basin spillway is designed to have a crest level of 107.0m AHD and will therefore be engaged when the basin reaches the 1% AEP level. The retarding basin height-volume relationship as derived from 3D modelling is shown in Table 9, and is based on the concept design presented in this SWMS. Note that basin has been designed to provide slightly more storage volumes for the 20% and 1% AEP required volumes shown above and is subject to refinement through design progression.

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Table 9: Retarding Basin Height-Volume Relationship

Height (m)	Volume (m3)
104.5	0
105.0	5166
105.5	11033
105.6 (20% AEP level)	12360
106.0	20086
106.5	30652
107.0 (1% AEP level)	42280

The retarding basin for the future growth area was input into the model with a dummy storage volume. This volume is arbitrary so long as the model contains the 1% AEP flows within that retarding basin – which would be the design criteria for the future growth area.

3.3 Developed Conditions RORB Results

The developed conditions RORB model has been run for the 1% and 20% AEP storm events at key locations and the results shown in Table 10. The pump station for the site with 100 L/s capacity was input into the model to determine the key flow rates.

Table 10: Developed Conditions RORB Model Results

Location	1% AEP Flow (m ³ /s)	20% AEP Flow (m ³ /s)
Future Growth	4.0	2.0
Area RB Inflow	15-min TP24	30-min TP5
Future Growth	1.0	1.0
Area RB Outflow	10-min TP21	10-min TP1
Site RB Inflow	7.3	3.7
	25-min TP25	30-min TP1
Oit- DD O-H	0.1	0.1
Site RB Outflow	48-hr TP27	12-hr TP2
T-1-1-11	0.1	0.1
Total site outflow	48-hr TP27	12-hr TP2

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



4. REFERENCES

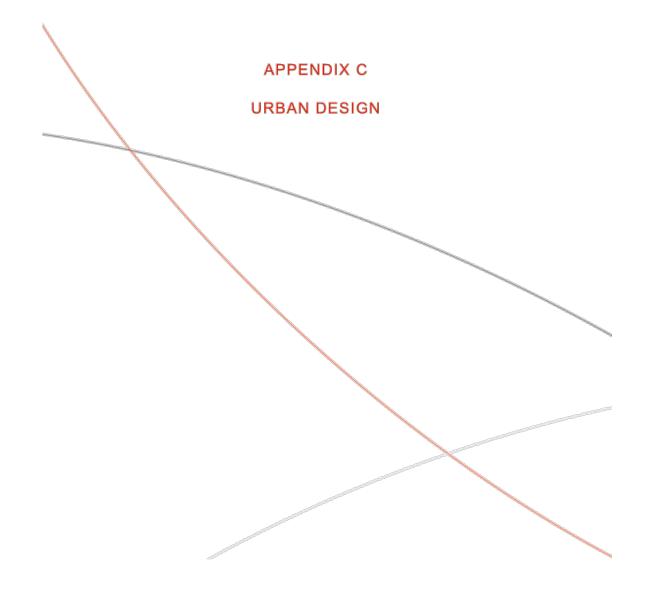
Bureau of Meteorology. (2023). Retrieved from http://www.bom.gov.au
Dr. Ataur Rahman, D. K. (2019). Regional Flood Frequency Estimation (RFFE), 4. Retrieved from Australian Rainfall and Runoff.

J, Ball; Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I. (2019). Australian Rainfall and Runoff Data Hub.

Melbourne Water. (2021). AM STA 6200 Flood Mapping Projects Specification. Melbourne Water. R.B. Grayson, R. A. (2006). Hydrological Recipes.

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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

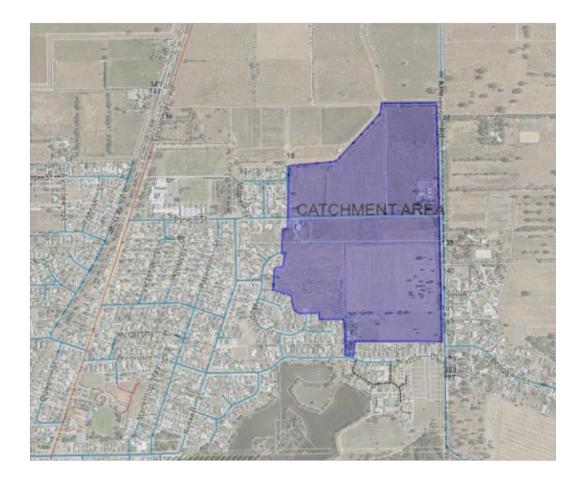


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DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [2] - Locality Plan

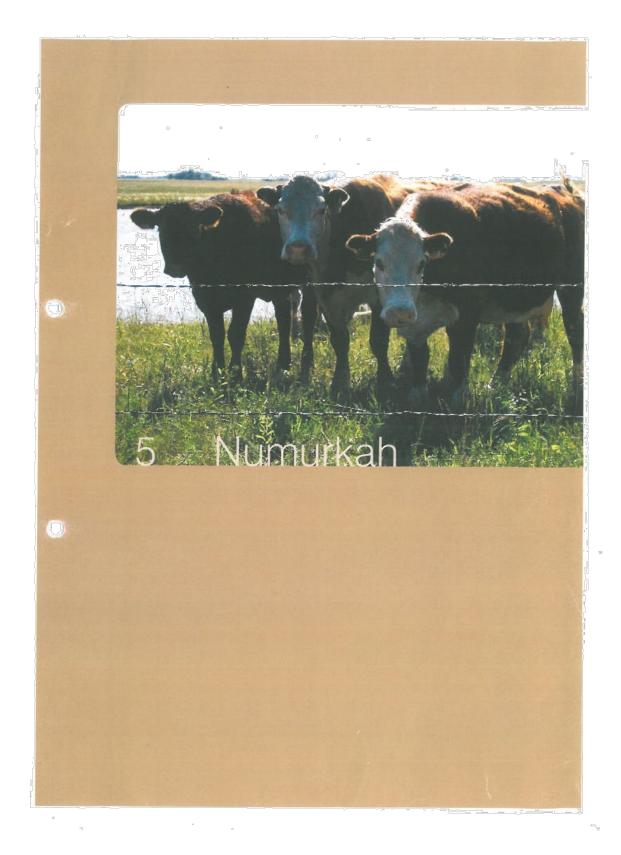
NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY INVESTIGATION AREA



ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [3] - Numurkah Development Plan



ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [3] - Numurkah Development Plan

05

Numurkah

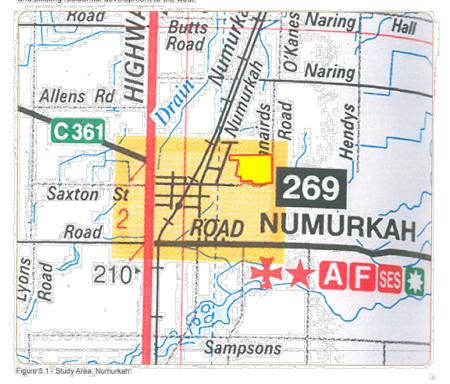
5.1 Study Area

This section considers the Numurkah Study Area as shown in Figure 5.1 below

It covers an area of approximately 32ha and is generally bounded by Pine Street to the north. Kinnairds Road to the east, Wattle Drive to the south and existing residential development to the west.

5.2 Site Analysis

The Site Analysis Plan is included as Attachment 5.2. An aerial photo of the Study Area is also included with this attachment. This section summarises the key features; opportunities and constraints, traffic issues, and infrastructure issues of the Study Area.



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5.2.1 Key features & opportunities & constraints

Key features and the opportunities and constraints of the Study Area include:

- The study area comprises four main separately owned titles with a combined approximate area of 33ha.
- Kinnairds Road and Pine Street form the areas major road network. Wattle Drive also provides an important road function.
- Potential road connections exist in four key locations.
 - Southern connection from Rine Street
 - Northern connection from Wattle Drive between the two lots already existing in this location.
 - Eastern extension of Maple Drive at both its southern and northern ends.
- A connection from Kinnairds Road is not possible due to the irrigation channel.
- Open space in the area is limited. A small local reserve exists to the direct west of the Study Area off Maple Drive, whilst more significant open space exists to the south adjacent to the lake and through to Kinnairds Wetland. A new local reserve is also proposed at the end of Birch Court to connect through to Maple Drive.
- Potential open space links exist to both the west and south
 - 1 Eastern extension of the Maple Drive reserve.
 - 2. Provision of reserve between Birch Court and
 - Maple Drive (as proposed)
 - 3. Connection to lake
 - Southern connection to Wattle Drive potentially through to Kinnairds Wetland.
- The site is approximately 2.5kms north-east of the Numurkah Town Centre
- Three schools exist in the area being Street.
 Josephs School and the Numurkah Primary School approximately 1km south-west of the site and Numurkah Secondary College adjoining the site to the north-west.



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- There are mature existing trees in the eastern half of the site which have the potential to be incorporated into a suitable public open space.
- An irrigation channel exists within the Study Area running parallel to Kinnairds Road.
- A cafe/ milk bar on Wattle Drive provides local retail services.

These features, opportunities and constraints significantly influence the layout of the Development Plan. How they influence the DP is discussed further below in Section 5.4.1.

5.2.2 Infrastructure issues

Electricity

Powercor Australia Ltd is the network service provider for the study area.

The existing overhead infrastructure in the vicinity of the study area can be utilised to supply the proposed development.

In the event that the existing high voltage lines need reconductoring or extending as a consequence of a detailed assessment of the loading demands within the study area. Powercor's current policies dictate this work generally be completed at Powercor's cost, but Developers should confirm specific requirements and conditions by formal application to Powercor.

The usual strategy of High Voltage underground cable extensions to substations sited as appropriate throughout the development with Low Voltage domestic underground cable reticulation to the lots would apply.

In relation to development costs, current policy conforms to the statutory requirement for Powercor to allow, construction to be carried out comprising a mixl of non-competitive works (ie works to be done by the Network service provider) and competitive works (ie works to be done by accredited contractors). Powercor will provide a fee offer and procedural conditions upon formal application.

Telecommunications

Telstra is the network service provider and they advise that they have a statutory responsibility to provide a network service to the respective property boundaries of the sites within the study area. The usual developer shared trenching conditions would apply within the proposed development (i.e. developer to fund shared trenching).

Telstra has existing assets in the vicinity of the study area. The need or otherwise to upgrade their network assets would be investigated in detail at the time of application for a Planning Permit.

Sewerage

Goulburn Valley Region Water Authority (GV Water) is the responsible sewerage authority GV Water has existing assets in the vicinity of the study area.

GV Water advises that the study area can be fully serviced. The servicing can be achieved in part by extensions to their existing gravity sewerage reticulation mains and in part via the construction of new sewage pumping stations; rising mains and gravity reticulation mains.

The cost of new works would have to be borne by either the Developer(s) or GV Water in accordance with the statutory guidelines of the Essential Services Commission, Victoria (ESC), Generally, non-shared reticulation assets within a Developer's landholding that are 225mm or less in diameter are to be fully funded by the Developer. Larger trunk mains or shared distribution assets are to be fully funded by GV Water or otherwise by agreement between GV Water and the Developer(s) with ESC consent. There are formulae that apply to the funding of shared distribution assets whereby in the event that the said asset is not reasonably expected to be funded within GV Water's financial forward planning, then the Developer is required to contribute to the cost of the works. GV Water have indicated that they are very interested in negotiating with the respective landowners within the study area in an



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effort to maximise the overall benefit to the respective landowners and minimise the overall costs as a consequence of constructing new infrastructure.

GV. Water requires Developers to enter into a "Deed" of Agreement For Developer Constructed Works."

Detailed conditions relating to the required "Developer constructed works" are subject to an appraisal of an investigation report to be submitted to GV. Water by the Developer's accredited consultant.

Potable Water

Goulburn Valley Region Water Authority (GV Water) is the responsible water authority. GV Water has existing assets in the vicinity of the study area.

GV Water advises that the study area can be fully serviced. The servicing can be achieved by the construction of water reticulation main extensions throughout the study area and connecting to the existing nearby assets.

The cost of new works would have to be borne by either the Developer(s) or GV. Water in accordance with the statutory guidelines of the Essential Services Commission, Victoria (ESC). Generally, non-shared reticulation water mains within a Developer's landholding that are 150mm or less in diameter are to be fully funded by the Developer. Larger trunk mains or shared distribution assets are to be fully funded by GV. Water or otherwise by agreement between GV. Water and the Developer(s) with ESC consent. There are formulae that apply to the funding of shared distribution assets whereby in the event that the said asset is not reasonably expected to be funded within GV. Water's financial forward planning, then the Developer is required to contribute to the cost of the works.

GV Water requires Developers to enter into a Deed of Agreement For Developer Constructed Works. Detailed conditions relating to the required Developer constructed works are subject to an appraisal of an investigation report to be submitted by the Developer's accredited consultant.

Drainage

Moira Shire Council is the responsible drainage authority for the study area and the receiving water of the stormwater, runoff from the study area is the Broken Creek. The stormwater will discharge to the Broken Creek via a series of existing and proposed retarding basins, wetlands, pumping stations, rising mains, underground piped and open stormwater outfall drains.

Moira Shire is desirous of the stormwater drainage, works within the study area being designed to accord with the current best practice principles contained in Urban Stormwater Best Practice Environmental Guidelines CSRIO 1999

As such the post construction performance objective of the drainage system is to achieve 80% retention of the typical urban load of suspended solids, 45% retention of the typical urban load of total phosphorus, 45% retention of the typical urban load of total introgen and 70% retention of the typical urban load of litter. Furthermore, flows from the study area need to be retarded such that they do not exceed the gredevelopment discharge that would result from a storm having an average recurrence interval of once every 1.5 years. Moita Shire will also require retardation to cater for the 1 in 100 year event.

Development will also have to accord with the construction phase performance objectives of limiting and preventing sediment, little and other pollutants from entering the receiving waters.

Consequently, Development within the study area will have to accord with the "Best Practice Guidelines" and Developers will have to consider the adoption of "Water Sensitive Urban Design (WSUD)" principles.

Costs for drainage works including water quality improvement and retardation will be borne by the Developers.

Based on general drainage computations, 8 10% of the land area will be required to retard and freat stormwater on site. If it is to be appropriately integrated with open space areas.



FILE NO: P44

2. A DIVERSE AND DYNAMIC ECONOMY

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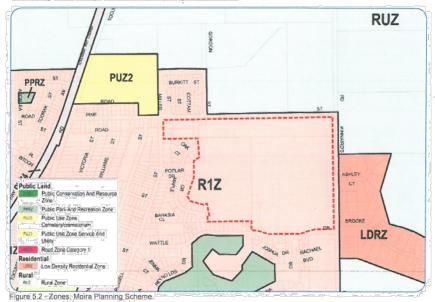
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5.3 Planning Context

5.3.1 Zoning

The zoning of the Study Area is illustrated in Figure 5.2 below.



The Study Area is included within the Residential 1. Zone (R1Z): The purposes of the R1Z are:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To provide for residential development at a range of densities with a variety of dwellings to meet the housing needs of all households.
- To encourage residential development that respects the neighbourhood character.
- In appropriate locations, to allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs.

A planning permit is required to subdivide land. The subdivision must be in accordance with Clause 56 of the Moira Planning Scheme.



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5.3.2 Overlays

The Development Plan Overlay 1 (DPO1) applies to land zoned R1Z within the Study Area

The DPO1 is named. Land North of Murray Valley
Highway, Cobram, Land West of Weir Road, Nathalia,
Land Adjoining Goulburn Valley Highway and Trengrove
Street, Numurkah, Land South of Pine Street,
Numurkah, and Land North of Elliots Road, Bundalond

The DPO1 specifies that a Development Plan for this area must describe

- The means of servicing to loss including the provision of reticulated water and sewerage to all residential lots.
- Layout of connector roads and the impact on the surrounding road system;
- The design and make up of residential lot density in a manner that reflects demand of the area.
- The need for open space and any other community, infrastructure as considered necessary by the responsible authority, and
- The impact of the development on any sites of flora for fauna significance, archaeological significance or significant views that may affect the land.

A permit may be granted before a Development Plan has been prepared to the satisfaction of the responsible authority for the purposes of subdivision.



5.4 Development Plan

The Development Plan is included as Attachment 5.5. It provides the development, road and open space networks for the Study Area and has been developed, cognisant of the issues outlined at Section 5.2. This section identifies the key influences on the development of the plan and then discusses its key features.

5.4.1 Key influences

The following issues have significantly influenced the development of the Development Plan:

- The need to provide appropriate interfaces to existing development and infrastructure.
- The need to provide a connected and permeable movement network
- The need to provide appropriate water quality treatment, shared between landowners
- The need to provide integrated and useable public open space
- The need to provide a diversity of lot and dwelling opportunities.

Appropriate development interfaces

Section 5.2 outlines the site's interfaces, including each of these impacts upon the adjacent land uses proposed in the Development Plan, as outlined below.

The main access to the site occurs along Pine Street; to the north and Wattle Drive to the south. Due to the location of the town centre to the south, Wattle Drive is likely to be the most used access point, with traffic volumes along it potentially increasing:

Being connected to existing residential development, the site is almost considered infill development. The proposed lot layout and road network connects to the existing Maple Drive network to the west and links.



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it to a north - south/east - west orientated network which provides for an appropriately orientated lot layout. The lot layout will thus be able to comply with standards outlined in clause 56 and will provide for solar efficient design for dwellings, better utilisation of existing and future services and view lines from Pine Street to the proposed open space network!

Existing nearby open spaces include the lake. Broken Creek and Kinnairds Wetlands, all south of the site. The proposed public open space network provides for green links through the site, north-south from Pine Street and east-west from Russell Street. The link strategically adjoins existing development and provides for public open space within walking distance of all future idevelopment.

The location of the impation channel limits access to Kinnairds Road. As there is the possibility of this channel being removed in the future, an appropriate design response is required to

- 1- Address GMW's required building setbacks, and
- Allow for the lots to be further subdivided in the future should the channel be decommissioned and the opportunity for lots to front Kinnairds Road to be provided.

The existing cafe/milk bar services a limited area, and has changed ownership relatively frequently in recent times. However, with future development of the study area providing demand, it may be appropriate for the small local business site to be provided with a second road frontage to facilitate subdivision and development should that be desired.

A connected and permeable movement network

Numurkah's population increased by over 24% between 1981 and 2001. In accordance with State Planning Policy, a minimum 10 years of residential land supply should be maintained in Numurkah.

In terms of Numurkah's longer term growth, areas north of Pine Street and west of Wallace Street are likely to be considered. It is appropriate to consider

the basic development implication of any development north of Pine Street as the structure of the DP for the Study Area should be designed cognisant of this long term potential.

Pine Street provides an alternative access to the fown centre to Wattle Drive. It is also potentially a more direct route with more appropriate reservation widths. To this end connections to Pine Street from the Study area should be encouraged to disperse its traffic movements.

Connections through Maple Drive should be provided, though be local in nature to ensure the amenity of existing residents in this area is retained.

Whilst the Development Plan cannot provide new east-west connections through existing developments, it can provide a network that disperses the traffic and thus reduces the impact of future development on the existing road network. Important in this is capitalising on the limited opportunities identified in the Site Analysis stage, and ensuring new development within the Study Area adopts a connected, permeable network. Opportunities have been identified for east-west through onections for pedestrians with green through links providing access to Russell Street.

Water Quality Treatment

Drainage issues exist across the study area and require a minimum of 8 × 10% of the study area to manage these issues, and probably more if deep retarding basins are to be avoided or at least softened. This includes both the water component useable open space, and thus cannot be included in the open space contribution. Depending on the surrounding lands, usability as result of detailed design, it may be included in the open space contribution.

As a general principle the design outcomes achieved by older retarding basins (i.e. a hole in the ground where it is necessary to fence the entire area and consequently there is no integration with surrounds) are to be avoided.



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Water quality controls are now such that deep water bodies will not deliver adequate quality of discharge to otherwaterbodies. Where practical, open space has been combined with the drainage retardation and water quality control measures, to ensure that an integrated approach to water retardation and quality treatment is undertaken, and that the area surrounding these functions is usable open space.

Virtually all drainage and open space areas have street frontage on all sides. This is to ensure that passive surveillance is always present, and will also generate amenity benefits for land that is proximate to the open space.

Useable and accessible open spaces

Section 5.2 identified a number of open spaces adjacent to the study area, and opportunities for them to be developed to create useable, accessible spaces.

The provision of open space in Numurkah, and indeed all towns studied during this project; is generally ad hoc and does not meet the requirements of the community. The smaller spaces identified in Section 4.2 are generally small, left over pockets of land that the subdivision developer has reluctantly provided to meet their obligations of the Subdivision Act 1988.

The Subdivision Act 1988 requires developments to provide a maximum of 5% of the developable land for open space. This may be provided in land or the cash equivalent. (Many metropolitan Councils, particularly) those in growth areas require a higher minimum percentage of open space for new developments. Clause 52 0.1 of the Moira Planning Scheme provides for this, though requires a planning scheme amendment to be enforced. This in turn requires an open space strategy to be produced and justification for a higher contribution provided.

In addition, many of these Councils do not accept lencumbered open space as part of the 5% contribution. Encumbered open space is that space used for another purpose (e.g. required for drainage



purposes, is subject to inundation) and thus may not be useable at all times. Clauses 12 and 56 of the Moira Planning Scheme provide specific objectives for open space and the provision of encumbered and generally does not meet these.

With an approximate area of 33ha, the Study Area should provide approximately 1 65ha of open space.

The primary open space opportunity is to provide linkages to the lake, Broken Creek and the Kinnairds: Wetlands to the south. This link may incorporate the site's required drainage functions plus the existing vegetation in the eastern portion of the site.



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A key opportunity exists to integrate the two spaces within the Maple Drive subdivision with this link, thus providing an integrated space for both new and existing residents.

As noted previously it is also appropriate for a link through to Pine Street to be developed to accommodate any future residential development north of the Study Area.

An advantage of a Development Plan is that this space can be equitably distributed across the area. Equity in this sense refers to the need to take account of land ownership patterns and ensure that one landholder does not provide all the open space with no compensation from others. This requires consideration by a development contributions plan.

Diversity of development options

With an approximate developable area of 28ha, the Study Area has the ability to provide approximately 280 lots, depending on the ultimate density of development.

As is the trend across Australia, though particularly in regional areas; our population is ageing. The number of dwellings required to accommodate this ageing population is in excess of the population growth. This is primarily attributed to the strong growth, in single people households and the general decline in household size. These factors support the argument to generally reduce lot sizes, or increase development densities. In addition, this strategy in theory should capitalise on existing infrastructure and limit the growth of our unfortentials. State Planning Policy strongly encourages a better utilisation of our infrastructure and is a strong advocate for increased development densities across the State.

What an increased development density means is particular to a town, suburb or region. As per most traditional subdivision developments, the existing average lot size in Numurkah is likely to be 800 to 1200sqm. Newer developments are likely to be 150 to 150 to

The Development Plan does not provide a lot layout though will specify areas of development density — standard, "low and 'medium" and average lot sizes. The lot layout detail is to be provided at the subdivision application level. A key purpose of the Development Plan is, however, to provide a flexible movement and open space network that will provide for a range of lot layouts and general development densities. A grid based network is most efficient in this regard, and also encourages a lot layout which promotes a high level of solar efficiency.

The location of medium density development should be dictated by the location of open space and good access to potential public transport routes. Medium density lots should achieve an average size of 500sgm. Being located adjacent to public parkland provides these lots with added amenity and space that the lot is otherwise not able to provide. Importantly, these lots should front onto the space to provide the added benefit of passive surveillance.

Standard density lots should achieve an average of size of 800sqm, though their design and end density will depend upon particular site constraints.

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5.4.2 Development Plan features

This section provides detail of the key elements of the Development Plan:

Development Analysis

NUMURKAH DEVELOPMENT ANALYSIS			
			% G. D. Area
Site Area	32.7	Ha	
Encumbered Open Space	1.1	На	
Irrigation Channel	1.1	На	
Gross Developable Area	31.6	На	
Public Open Space	3.5	На	11.1%
Local Parks & Linear Links	0.4	На	1.3%
Open Space for Drainage & Water Treatment	3.1	На	9.8%
Net Developable Area	28.1	Ha	
Neighbourhood Convenience Centre	0.5	ha	
Roads	6.1	Ha	19.3%
Net Residential Area (undeveloped)	21.5	Ha	68.0%
Higher Density Area	1.1	На	
Standard Density Area	20.4	На	
Potential Development Yields			SI SASSIFIED
			% Total Yield
Higher Density Area (average lot size 500 sqm)	22	lots	8%
Standard Density Area (average lot size 800 sqm)	255	lots	92%
Estimated Total Yield	277	lots	100%

Open Space

The Development Analysis identifies approximately.
3.5ha of land for open space in two key spaces.

- East-west reserve with through green links to
 Kinnairds Road and Russell Street
- 2. North south reserve linking with Pine Street.
 Both reserves provide for more than the 5% open space requirements at present. However as previously discussed the reserve will also perform a drainage and water quality treatment function reducing the total area of public open space. The exact percentage of these requirements are currently unknown but due to the ample provision of space are likely to allow for the 5% unencumbered public open space requirements, with the other linear links provided.

The general objectives for the drainage measures required are outlined further below but specific detail and areas will need to be determined at the subdivision application stage. This will need to consider what land is encumbered and unencumbered and thus what can be attributed towards the open space contribution.

In addition to providing the Study Area's drainage functions, the reserves also provide increased amenity in the public open space with the drainage reserves having the ability to act as aesthetic lakes and wetlands. This will ensure the reserves are clean used, safe and pleasant and not merely holes in the ground.



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The central east west reserve and local pocket park links residents to the main road along Russell Street and provides an appropriate outlook and interface with the adjacent proposed medium density area.

Home-based business

The Business areas located within the study area are extremely local in nature and are designed to encourage home occupation business along Pine. Street, Because of the limited nature of home-based business, rezoning will not be required. Lots larger than standard lots are recommended to allow for increased amenity in these areas and to accommodate the additional on-site buildings/storage areas required.

A home occupation must meet the following requirements (refer to clause 52.11 of the Moira Planning Scheme):

- The person conducting the home occupation must use the dwelling as their principal place of residence
- No more than one person who does not live in the
- The gross floor area used in conducting the occupation including the storage of any materials or goods must not exceed 50 square metres or one-third of the gross floor area of the dwelling, whichever is the lesser
- The occupation must not impose a load on any utility greater than normally required for domestic use
- The occupation must not adversely affect the amenity of the neighbourhood in any way including:
 - The appearance of any building, works or materials used
 - The parking of motor vehicles
 - The transporting of materials or goods to or from the dwelling
 - The hours of operation
- Electrical interference

- The storage of chemicals, gasses or other hazardous materials
- Emissions from the site
- No motor vehicle may be serviced or repaired for gain
- Only one commercial vehicle (a commercial goods) vehicle, commercial passenger vehicle of tow truck within the meaning of the Transport Act 1983), not exceeding 2 tonnes capacity and with or without a trailer registered to a resident of the dwelling may be present at any time. The vehicle must not be fuelled or repaired on the site.
- No goods other than goods manufactured or serviced in the home occupation may be offered for sale
- Materials used or goods manufactured, serviced or repaired in the home occupation must be stored within a building
- No goods manufactured, serviced or repaired may be displayed so that they are visible from outside the site.

Movement network

Due to development to the west of the site, and the imigation channel to the east, external access is primarily provided in an east-west direction along Pine Street and Wattle Drive. Two new connections are proposed to Pine Street and one to Wattle Drive ensuring external access is sufficiently provided.

There is the opportunity to provide more east-west connections to the site across the irrigation channel should it be under grounded or decommissioned. This would help create a more permeable road network. Provision has been made for this in the plan.

The internal road network is primarily east west and north-south. The local road network generally follows the grid structure of the proposed key roads.

The Development Plan area provides around 280 dwellings at the most likely development density of 10 dwellings per hectare. Additional traffic generation is likely to be in accordance with figure 5.4.



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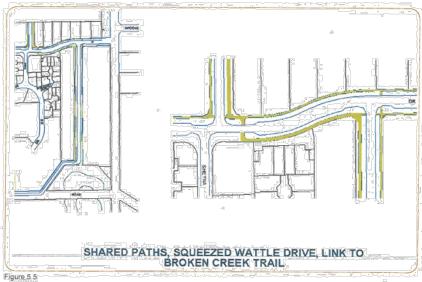
Wattle Drive has been designed as a connector street and therefore can accommodate the additional traffic.

Internal streets should be "Access Street" in accordance with Clause 56 of the Moira Planning Scheme, which means 7.2 metre carriageways in reservations at least 16 metres width:

At Wattle Street near Sheyna Drive the open space link will need to cross Wattle Drive. To preserve pedestrian safety and amenity we proposed an arrangement as shown in figure 5.5.

The Development Plan provides a well connected movement that can be used for public transport should. that be provided.







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Residential development

Over 28ha of residential land will be provided by this Study Area; Previous discussion refers to the need to provide a diversity of development options. This is achieved in this Study Area by identifying areas of standard, Imedium and low densities. The vast majority is standard and it is anticipated these areas will achieve a lot size of between 700sqm and 1000sqm, and an average of 800sqm. The road network provides the flexibility, however, for alternative averages to be achieved if so desired.

Pockets of medium density development are identified throughout the Study Area. These are all located adjacent to open space to provide either added lot, amenity or critical mass. It is anticipated these areas will achieve an average lot size of 500sqm, though flexibility in the road network provides for alternative averages to be achieved if so desired.

Vegetation

Areas of the scattered vegetation identified in the site analysis plan need further flora and fauna and arboricultural assessments before their potential for retention can be determined. At present the mature trees in the eastern section of the site may be unhealthy, and thus their viability, and chances of survival are unknown, and as such not specifically included in the development plan:

An arboricultural assessment of these trees should be included with any subdivision planning permit application, and if identified as viable; should be retained within open space. A planning permit may be required for their removal.





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5.5 Development Contributions

It is important that the cost of providing open space and key infrastructure items is equitably distributed. Ideally, these matters would be considered as part of a Development Contributions Plan (DCP), though a DP can provide the same level of guidance without the statutory requirements of the DCP.

5.5.1 Open Space

Approximately 3.5ha of public open space is to be provided across the Study Area. Of this, 0.4ha is to be provided as local parks, and thus is considered unencumbered, and 3.1ha is to be provided for drainage and water quality treatment purposes, and thus is considered encumbered.

The public open space is distributed as follows:

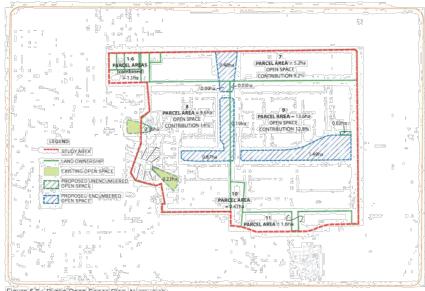


Figure 5.6 - Public Open Space Plan, Nurmurkah

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Land Parcel No.	Parcel Area (ha)	Unencumbered POS	Encumbered POS	Total land to be provided (ha)
1 to 6	1.1	0.00	0.00	0.00
7	5.2	0.00	0.48	0.48
8	9.6	0.39	0.87	1.26
9	13.6	0.03	1.71	1.74
10	0.47	0.00	0.00	0.00
11	1.6	0.00	0.00	0.00
	31.57	0.42	3.06	3.48

Table 5.1 - POS Distribution

"The table 5.1 provides a more detailed breakdown of open space in the Study Area."

Clearly some land parcels provide in excess of their statutory requirements, whilst others provide little or nil. A system of development contributions needs to be sought to equalise contributions ensuring all developers contribute to the public open space used.

The location of unencumbered open space has been determined via a thorough design process and meets the requirements of the Moira Planning Scheme (including ResCode). It should generally be provided in accordance with the size and location shown in the DP.

The encumbered open space relates folland primarily required for drainage and water quality treatment purposes. As this is its primary use, and will be developed as such, it is not considered to be useable open space and thus does not count towards a tots public open space contribution. The figures provided in table 5.1 for the encumbered public open space are indicative only. They may increase or decrease depending upon the specific drainage strategy; proposed. Clearly if the land area required for drainage and water quality treatment purposes decreases then the developable area of the site increases.

All landholdings should provide 5% public open space; either via a land or cash in lieu contribution. This table outlines the public open space requirements for each landholding (subject to drainage requirements).

The cash in lieu contributions should be used to develop the open space in the DP area. Alternative uses for the contribution should be in accordance with the requirements of the Subdivision Act 1988 and Moira Planning Scheme, though may be put lowards the development/improvement of other spaces within Numurkah that are likely to be used by the new residents of the Study Area.



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ATTACHMENT No [3] - Numurkah Development Plan

05

Land Parcel No.	Parcel Area (ha)	Unencumbered POS (ha)	% of POS to be provided	POS requirement
1 to 6	1.1	0.00	0.0%	5% cash in lieu
7	5.2	0.00	0.0%	5% cash in lieu
8	9.6	0.39	4.1%	0.39ha (4.1%) in land, 0.9% cash in lieu
9	13.6	0.03	0.2%	0.03ha (0.2%) in land, 4.8% cash in lieu
10	0.47	0.00	0.0%	5% cash in lieu
11	1.6	0.00	0.0%	5% cash in lieu
	31.57	0.42	1.3%	

Table 5.2 - POS Contributions

5.5.2 Utility Infrastructure

Funding of Water and Sewerage "Shared Distribution Assets" is to accord with the statutory guidelines of the Essential Services Commission, Mictoria

Developer contributions for the shared drainage assets including shared underground drainage pipes , and compensation, retardation basins, pumps, rising mains, wetlands and outfall infrastructure is yet to be determined.

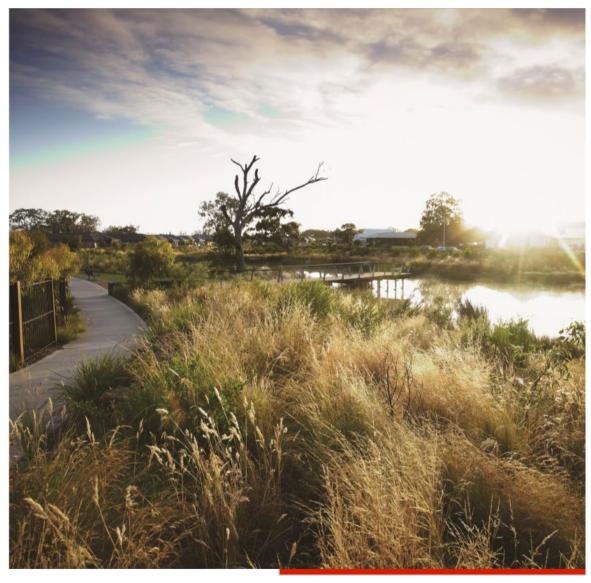


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ATTACHMENT No [4] - Opportunities and Options Assessment





OPPORTUNITIES AND CONSTRAINTS ASSESSMENT

NUMURKAH DRAINAGE STRATEGY SEPTEMBER 2022

PREPARED FOR MOIRA SHIRE



ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

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ATTACHMENT No [4] - Opportunities and Options Assessment



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2. A DIVERSE AND DYNAMIC ECONOMY

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ATTACHMENT No [4] - Opportunities and Options Assessment



1. INTRODUCTION

Spiire has been engaged by Moira Shire Council to complete an opportunities and constraints assessment with the objective of developing a concept drainage strategy for a parcel of land located between Pine Street and Wattle Drive in Numurkah. This parcel of land is proposed for future development. This opportunities and constraints assessment has identified four conceptual drainage strategy options as follows:

- Option 1: site drainage to the Goulburn Murray Water (GMW) open channel drain
- Option 2: site drainage via new road between 68 and 70 Wattle Dr
- Option 3: site drainage via an easement at 52 Wattle Dr
- Option 4: site drainage via Maple Cres and Cedar Dr.

Following a review of these options by Moira Shire Council a preferred option will be identified. The preferred option will progress into a more detailed assessment.

The parcel of land is shown in Figure 1 below. The parcel is located between Pine Street and Wattle Drive in Numurkah. The eastern boundary of the site is located adjacent to an existing Goulburn Murray Water (GMW) open channel drain. The western boundary of the site is located adjacent to existing residential development.



Figure 1: Site location

Lake Numurkah is located south of the site. Lake Numurkah drains south west to Broken Creek. Spiire have recently completed community consultation for a landscape masterplan for Lake Numurkah (Spiire, 2022). The assessment of this masterplan included an investigation of possible modifications to the existing lake system to improve its functionality and enhance the area from an aesthetic and environmental perspective. The proposed modifications include introducing a sediment basin and wetland into the existing lake footprint and reducing the overall permanent lake area. Following engagement with the community, Council is currently reviewing the proposed Landscape Masterplan.

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2. METHODOLOGY

The following methodology was adopted to complete the opportunities and constraints assessment:

- Project inception meeting with Moira Shire Council to confirm scope of work
- Site walkover with Moira Shire Council, completed 24 August 2022
- Gather available data (see Section 2.1)
- Undertake an analysis of available data
- Complete preliminary hydrologic calculations to size conceptual stormwater detention infrastructure
- Complete preliminary stormwater quality modelling to size conceptual stormwater treatment infrastructure
- Identify opportunities and constraints
- Engage with Spiire's Urban Design team to identify and potential conceptual urban design based on opportunities and constraints
- Develop conceptual drainage strategy option plans.

2.1 Inputs

The following inputs where adopted to inform this opportunities and constraints assessment:

- LIDAR (accuracy unknown) provided by Moira Shire Council 12 August 2022
- Drainage Analysis Numurkah (Stormy Water Solutions, 2020) provided by Moira Shire Council 15 August 2022
- Urban Drainage Strategy, Township of Numurkah (Sinclair Knight Merz, 1998) provided by Moira Shire Council 15 August 2022
- Numurkah Floodplain Management Study and Plan Report (Water Technology, 2017)
- Moira Shire stormwater pit and pipe shapefile data provided by Moira Shire Council 12 August 2022
- Numurkah Development Plan (EarthTech, 2006) provided by Moira Shire Council March 2022.
- Lake Numurkah Landscape Master Plan (Spiire, 2021).

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3. PRELIMINARY MODELLING

Spiire has completed preliminary hydrologic and stormwater quality modelling for the site to determine conceptual sizing of stormwater assets to meet best practice for stormwater quantity and quality management (refer to section 3.2 for current best practice targets for water quality). Conceptual sizing has been completed for the following stormwater infrastructure:

- Retarding basin
- Sediment basin
- Raingarden (bioretention).

The conceptual footprint of each of these assets has been used to inform the potential location of stormwater assets within the site for a total of four drainage strategy options. Refer to Appendix A for layout plans of each option.

3.1 Stormwater flows and detention

3.1.1 Estimation of peak flows

An estimation of 1% Annual Exceedance Probability (AEP) pre- and post-development peak flows for the site has been completed using the rational method. The results are summarised in Table 1 below.

Table 1 Estimate of site pre- and post-development peak flows for the 1% AEP

Case	Fraction Impervious	Estimated 1% AEP peak flow (m³/s)
Pre-developed site	0.03*	0.2
Developed site	0.55+	4.6

For this assessment it has been assumed that no external catchments flow through the site based on the following available information:

- The Numurkah Drainage Analysis (Stormy Water Solutions, 2020) indicates that existing residential development to the north west of the site flows around the site.
- Catch drains were observed along Pine St during the walkover (24 August 2022). It is assumed that the catch drains have sufficient capacity to convey runoff from the north of the site. The size and capacity of these drains will need to be confirmed by capture of feature survey. If the land to the north of Pine Street is proposed for future development further investigation may be required, and sizing of stormwater infrastructure will need to be re-assessed if future development is proposed to drain through the site south of Pine Street.

3.1.2 Major and minor drainage systems

Minor stormwater flows (20% AEP) would be conveyed through the site via underground pipe drainage as per section 16.6 of the Infrastructure Design Manual (IDM) (Local Government Infrastructure Design Association, 2020). It is expected that that minimum grade of stormwater pipes will be 1 in 500 and subject to a minimum velocity of 0.7 metres/second (Local Government Infrastructure Design Association, 2020).

Opportunities and constraints assessment

^{*} based on ARR 1987 coefficient maps. * based on VPA value for small townships with no specific zoning structures

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Conveyance of gap flows will be assessed in further detail for a preferred drainage strategy option and urban design. Based on the magnitude of estimated peak flows (see Section 3.1.1) it is anticipated that gap flows could be managed by one of the following design scenarios:

- Scissor grading of roads to convey gap flows in the road reserve
- Oversizing stormwater drainage to the retarding basin to reduce gap flows within the road reserve
- A centralised drainage reserve to convey gap flows.

3.1.3 Stormwater detention

Development of the site may result in increased flood risk to private property and downstream receiving waters. Therefore, the drainage strategy requires a retarding basin at the site. The retarding basin would be required to maintain pre-developed flow rates up to the 1% Annual Exceedance Probability (AEP) (Local Government Infrastructure Design Association, 2020).

A conceptual retarding basin has been sized using preliminary calculations. It has been estimated that a conceptual retarding basin volume of approximately 9400m³ could be adequate to manage stormwater runoff from the proposed development¹. It is estimated that an outlet with maximum flow rate of 0.2 m³/s would retard flows back to pre-developed conditions for the 1% AEP (see Section 3.1.1). Detailed calculations for the preferred option will be provided together with the future detailed assessment.

Due to the site topography, it is anticipated that the outlet configuration of the retarding basin would include a pump station and rising main. This is due to minimal grade available across the site (approximately 0.1%). If the basin was to be excavated below existing surface, the invert of the retarding basin (approximately 105.3 m AHD) would likely be below the invert of Lake Numurkah.

In addition to piped drainage from the site (rising main from the retarding basin), an auxiliary flow path would be required to cater for overland flows if drainage within the site is blocked, if the retarding basin outfall pump is not operational due to failure, if a storm with a frequency rarer than a 1% AEP occurs and the design capacity of the retarding basin is exceeded, or if multiple significant storm events occur across the period that while the retarding basin is still being pumped to empty. The capacities of the surrounding roads have not been investigated to determine capability to convey overland flows from these scenarios, however, the following has been identified:

- To outfall auxiliary flows to the GMW drain the entire site would need to be in fill as the existing drain is surrounded by a bund. It is assumed the bund cannot be altered due to the risk of the GMW drain spilling into the subject site if running at capacity. Further consultation with GMW is required if this option is to be considered.
- Based on available LIDAR information Cedar Drive is defined by a local high point in the topography and is not suitable to convey auxiliary flows without regrading. Further investigation is required to determine feasibility of regrading.
- An auxiliary flow path to Wattle Drive is anticipated to be the most feasible option as flows can be directed to Lake Numurkah. Options could include:
 - A drainage easement through 52 Wattle Drive. This would require an easement through private property and negotiation with the land holder at 52 Wattle Drive.
 - A new road between 68 and 70 Wattle Drive as a part of access to the development.
 Regrading works along Wattle Drive would need to be undertaken for this option to work

Opportunities and constraints assessment

¹ Note that the 9400m³ storage does not consider additional capacity required if the pump is non-operational during a storm event. This would be the case for Option 1 (see Section 4) as GMW require outflow to start 24 hours post storm event when discharging to a GMW drain, or could be the case if the pump station fails.

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and it may be difficult to redirect flows away from Lakeside Country Club located on the south side of Wattle Drive.

3.2 Stormwater quality

Recommendations for urban stormwater quality management in Victoria are provided in Urban Stormwater Management Guidance (EPA Victoria, 2021). Current best practice performance objectives are required are provided in Table 2.

Table 2: Quantitative performance objectives for urban stormwater (EPA Victoria, 2021)

Pollutant	Current Best Practice Performance Objectives
Suspended Solids (SS)	80%
Total phosphorus (TP)	45%
Total Nitrogen (TN)	45%
Litter¹ / Gross Pollutants (GP)	70%

To meet these objectives a treatment train consisting of a sediment basin and a raingarden system is the preferred option to manage stormwater quality. A description of these systems is provided below:

- <u>Sediment Basin</u>: Sediment basins are specifically employed to remove (by settling) sediments before discharging into tertiary treatment, such as a wetland or raingarden. A single sediment basin has been proposed.
- Raingarden: Raingardens use a biofiltration media to filter fine particulates together with ephemeral plants to uptake nutrients and remove pollutants from stormwater. The raingarden is proposed to be lined with a submerged zone and carbon present to improve efficiency.

Functionally, flows from the development area enter the sediment basin via the minor drainage network before discharging into the raingarden. The systems are recommended to be incorporated into the base of the retarding basin to minimise land take for water assets. It is also recommended that a high flow bypass is included within the retarding basin to protect plant health as raingarden vegetation may be impacted by regular storm events that submerge the plants for extended periods of time.

A raingarden is recommended at the site due to a reduced footprint in comparison to a wetland, and higher functionality for a relatively small treatment catchment.

3.2.1 MUSIC Modelling

Water quality modelling of the water quality treatment devices has been completed using the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) Version 6, developed by the Cooperative Research Centre for Catchment Hydrology (CRCCH). MUSIC conceptualises the transfer of pollutants through a stormwater drainage system and provides an aid in quantifying the effectiveness of the proposed stormwater quality management strategy.

MUSIC provides quantitative modelling for Total Suspended Solids (TSS), Total Phosphorous (TP), Total Nitrogen (TN) and Gross Pollutants (GP). The MUSIC model was setup in accordance with Melbourne Water's MUSIC Modelling Guidelines (2018).

The MUSIC model layout is shown in Figure 2 below.

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Figure 2: Conceptual MUSIC model layout for the proposed Numurkah drainage strategy

3.2.2 Rainfall Data

Rainfall data has been adopted from the rainfall station 80109 at Cobram, measured at a 6 minute time step from 1957 - 2010.

3.2.3 Source Nodes

Source nodes have been adopted as per Melbourne Water's MUSIC Modelling guidelines (Melbourne Water, 2018).

3.2.4 Treatment Nodes

The parameters adopted for each treatment node are presented below. They have been configured as per Melbourne Water MUSIC modelling guidelines (Melbourne Water, 2018).

3.2.5 Sediment Basin Nodes

The sediment basin treatment node was used to model the sediment pond. Table 3 provides the parameters adopted. The sediment basin has been sized to treat the 1 EY storm event.

Table 3: Sediment pond modelled parameters

Parameter	Sediment Basin
Modelled Surface Area (m²)	800
Extended Detention Depth (m)	0.35
Permanent Pool Volume (m³)	550
High-flow Bypass (m ³ /s)	1.45
Sediment Storage Volume (m³)	261
Sediment storage depth (m)	1.0
Clean Out Frequency	5 years
Hydraulic Efficiency (λ)	0.41
Capture efficiency %	98.75
Sediment dewatering area (m²)	521

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3.2.6 Raingarden Nodes

A bioretention treatment node was used to model the proposed raingarden. The raingarden was modelled as being lined with an underdrain and submerged zone and carbon present. Parameters are outlined in Table 4 below. The raingarden has been sized to treat the 3-month (4EY) storm event.

Table 4: Raingarden MUSIC modelling parameters

Design Components	Sediment Basin
Extended detention Depth (EDD) (m)	0.35
Surface Area (m²)	160
Saturated Hydraulic Conductivity (mm/hr)	200
Filter Depth (m)	0.50
Submerged zone depth (m)	0.45

3.3 Treatment train effectiveness

The music model was able to demonstrate the proposed treatment devices meet best practice objectives as summarised in Table 5.

Table 5: Modelled treatment train effectiveness

Pollutant	Current Best Practice Performance Objectives	Modelled Treatment Train Effectiveness
Suspended Solids (SS)	80%	82.5%
Total phosphorus (TP)	45%	46.1%
Total Nitrogen (TN)	45%	45.2%
Litter ¹ / Gross Pollutants (GP)	70%	99.2%

Note 1 – Litter is defined as anthropogenic material larger than five millimetres. (Source: Victorian Stormwater Committee, 1999)

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2. A DIVERSE AND DYNAMIC ECONOMY

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ATTACHMENT No [4] - Opportunities and Options Assessment



4. OPPORTUNITIES AND CONSTRAINTS ASSESSMENT

The opportunities and constraints assessment has identified a total of four conceptual drainage strategy options for the site. These options have been informed by the following:

- Conceptual sizing of stormwater infrastructure to meet best practice
- Opportunities and constraints described in Table 6.

A layout of each option is shown in Appendix A.

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Table 6 Opportunities and constraints

Item	Description	Opportunity	Constraint
Site wide			
Flood risk	Site is currently subject to inundation from Broken Creek in a 1% AEP flood event to depths up to approximately 0.5 – 1 metre (Water Technology, 2017)		Infrastructure works would be required to mitigate this flood risk prior to development. Preliminary investigations have been undertaken including potential levee structures (Water Technology, 2017)
Roads	Roads as overland flow paths to on site detention	Locate roads adjacent the retarding basin allows gap flows to be routed directly to the retarding basin via kerb sag points.	
Stormwater treatment	Stormwater quality treatment infrastructure	A raingarden may be a preferred option as it provides more compact footprint than a wetland. The raingarden could be located within the footprint of the proposed retarding basin.	A standard minimum offset of 15 metres from a sediment basin normal water level (NWL) to any allotment or road reserve (not including shared pathways) is required as per best practice according to Melbourne Water's Wetland Design Manual (Melbourne Water, 2020). If this condition is not met, a safety design audit would be required for any proposed design. Refer to Part A3 of Melbourne Water's (2020). Wetland Design Manual for further guidance on safety in design. (Note: all proposed conceptual options have NWL offset greater than 15m from the road reserve). Note that treatment requires healthy plants that are effective at nutrient uptake. Options that lead to the raingarden being submerged for long periods of time (eg. option 1), may affect plant health and treatment effectiveness.
Site grade	Limited grade across the site to convey flow		Based on available information all options would

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Item	Description	Opportunity	Constraint
	in pipe network and overland		require a pump station to service the retarding basin as there is not enough depth of cover to gravity drain the site. This may result in a greater
			cost to construct and would require additional considerations for maintenance. However, filling to gravity drain the site is anticipated to be impractical given the site location in relation to existing roads, residential areas, and infrastructure
Auxiliary flow path	Overland flow path/s to provide safe drainage if the proposed retarding basin is not operational		In addition to piped drainage from the site (rising main), an auxiliary flow path would be required to convey overland flows from the site in the following potential scenarios:
			 Drainage infrastructure on the site is blocked
			A storm of a frequency rarer than a 1% AEP occurs exceeding the design capacity of the retarding basin
			If the pump station fails and is not operational during a storm event
			If multiple significant storm events occur across the period that the retarding basin is being pumped to empty.
Option 1			
Outfall	Outfall into the existing GMW drain to the east of the site. Drains to Broken Greek crossing at Kinnard's Rd.	Flexibility for basin location on the site (noting this could have a cost implication)	When releasing to a GMW drain the maximum outflow rate must be limited to 1.2 L/s/ha (starting after 24 hours).
			 Total time to pump retarding basin to empty

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Item	Description	Opportunity	Constraint
-			based on pre-developed flow rate and approximate volume, would be approximately 3 to 4 days.
			 This option requires engagement with GMW to determine feasibility.
Auxiliary flow path	Auxiliary flows via drainage easement established through 52 Wattle Drive.		To outfall auxiliary flows to the GMW drain, the entire site would need to be in fill above the existing drain bund. It is assumed the bund cannot be altered due to the risk of the GMW drain spilling into the subject site when at capacity.
Retarding Basin	Risk of retarding basin overtopping		The long detention time due to outfall flow rate places the retarding basin at higher risk of overtopping during an event or subsequent events.
Maintenance	Potential impact on plant health in bioretention due to extended submersion		Extended submersion time within the retarding basin places the raingarden plants at higher risk of dying. Routine inspections would be recommended.
Services	Service crossings within the subject site.	Option does not involve pipe construction along existing road and service clashes within the subject site can be addressed in the design phase.	
Option 2			
Outfall	Site drains to Wattle Drive via new road between 68 and 70 Wattle Dr. Option requires approximately 440 metres of new underground stormwater pipe from the retarding basin.	Does not require council to establish an easement through private land. Option drains to Lake Numurkah which would result in improved baseflows into the lake. Subdivisional runoff will receive further water quality treatment with the construction of the proposed wetland as part	Option requires 190m of stormwater drain constructed along Wattle Drive. Pipe alignment will impact 5-6 driveways if constructed in the road shoulder.

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Item	Description	Opportunity	Constraint
		of Lake Numurkah works (Spiire, 2022).	
Auxiliary flow path	Auxiliary flows directed through a drainage easement established through 52 Wattle Drive. Alternative option: Auxiliary flow path via new road between 68 and 70 Wattle Drive may be achieved by positioning the retarding basin reserve along the southern boundary of the site. This option requires further investigation.		As this option may need an easement through private property and negotiation with the land holder at 52 Wattle Drive would be required. Alternative option: Regrading works along Wattle Drive would need to be considered for this option to work and it may be difficult to redirect flows away from Lakeside Country Club located to the south of the site. Feature survey is required to confirm existing road grade. This flow path may not be feasible.
Services	Service crossings along Wattle Drive.		New underground stormwater pipe along Wattle Drive would require design around existing services.
Option 3			
Outfall	Site drains to Wattle Drive via new drainage easement through 52 Wattle Drive. Option requires approximately 200 metres of stormwater pipe from the retarding basin.	 Shortest length of pipe along Wattle Drive of all options that drain to Lake Numurkah. 52 Wattle Drive is the most feasible location for an ancillary overland flow path due to the existing topography. Opportunity to colocate drainage from the site together with an overland flow path. This option could be tied into existing outfall to Lake Numurkah if there is sufficient capacity 	As this option would need an easement through private property and negotiation with the land holder at 52 Wattle Drive would be required.

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Item	Description	Opportunity	Constraint
		Option drains to Lake Numurkah which will result in improved baseflows into the lake. Subdivisional runoff will receive further water quality treatment with the construction of the proposed wetland as part of Lake Numurkah works (Spiire, 2022),	
Auxiliary flow path	Auxiliary flows directed through a drainage easement established through 52 Wattle Drive.		As this option would need an easement through private property and negotiation with the land holder at 52 Wattle Drive would be required.
Services	Service crossings along Wattle Drive.		New underground stormwater pipe along Wattle Drive would require design around existing services.
Option 4			11
Outfall	Site drains to Maple Crescent with flows conveyed via 340 metres of pipe from the retarding basin to Lake Numurkah. 230 metres of this pipe is along Maple Crescent and Cedar Drive.	Opportunity to utilize existing drainage. Capacity is unknown and is anticipated to not have any additional capacity in its existing condition. This option could be tied into existing outfall to Lake Numurkah if there is sufficient capacity.	Option would likely require augmented underground stormwater pipe along Maple Cres and Cedar Drive. Pipe alignment crosses Elm Ct and Maple Drive and could impact 4-6 driveways if constructed in the road shoulder.
		Option drains to Lake Numurkah which will result in improved baseflows into the lake. Subdivisional runoff will receive further water quality treatment with the construction of the proposed wetland as part of Lake	

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)



Item	Description	Opportunity	Constraint
		Numurkah works (Spiire, 2022).	
Services	Service crossings along Maple Cres and Cedar Drive		230m of pipe along Maple Crescent and Cedar Drive requires design around existing services.
Auxiliary flow path	Auxiliary flows directed through a drainage easement established through 52 Wattle Drive.		As this option may need an easement through private property and negotiation with the land holder at 52 Wattle Drive would be required.
			Based on available LIDAR information Cedar Drive is defined by a local high point in the topography and is not suitable to convey auxiliary flows without regrading. Further investigation is required to determine feasibility of regrading. Feature survey is required to confirm existing road grade. This flow path may not be feasible.

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [4] - Opportunities and Options Assessment



5. CONCLUSION AND RECOMMENDATIONS

Based on the assessment Spiire recommends the following:

- A retarding basin for stormwater detention on the site to treat stormwater runoff back to predeveloped conditions
- A pump and riser main to convey water from the retarding basin to the outfall
- A treatment train consisting of a sediment basin and a raingarden system within the footprint of the retarding basin to manage stormwater quality
- An auxiliary flow path to cater for overland flows if drainage within the site is blocked, if the retarding basin pump is not operational due to failure, if a storm with a frequency rarer than a 1% AEP occurs and the design capacity of the retarding basin is exceeded, or if multiple significant storm events occur across the period while the retarding basin is still being pumped to empty.

All four conceptual drainage strategy options include the above elements to manage stormwater at the site. Based on this opportunities and constraints assessment Option 3 is potentially the most feasible option for the following reasons:

- The option is not constrained by the maximum outflow rate of 1.2L/s (starting after 24 hours) as the option drains to Lake Numurkah, not the GMW open channel drain,
- the option has the shortest length of new underground pipe, and lowest potential for service clashes
- 52 Wattle Drive is the most feasible location for an ancillary overland flow path due to the existing topography. This is private property and would require an easement.
- ► The option co-locates drainage from the site together with the ancillary flow path
- The option drains to Lake Numurkah which will result in improved baseflows into the lake. Subdivisional runoff will also receive further water quality treatment with the construction of the proposed wetland as part of Lake Numurkah works.

FILE NO: P44

2. A DIVERSE AND DYNAMIC ECONOMY

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [4] - Opportunities and Options Assessment



6. ASSUMPTIONS AND LIMITITATIONS

The following assumptions and limitations apply to this assessment:

- This assessment is conceptual only and should only be used for preliminary assessment of potential drainage strategy options
- Plans provided in Appendix A should be read in conjunction with this report
- ▶ This assessment was undertaken without feature level survey for the site or surrounding area
- This assessment has assumed that no external catchments flow through the site. Due to existing catch drains conveying run off around the site
- Land to the north of Pine Road is zoned as Farming Zone (schedule one) according to the Victoria Planning Provisions. Future development has not been considered for this area and is out of the scope of this project
- ▶ This investigation has been undertaken without consulting Goulburn Murray Water
- The arrangement of stormwater assets for the chosen option is dependent on the urban design for the site. A more detailed hydraulic analysis of the site cannot be undertaken at the next stage without an agreed master plan for the site.

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [4] - Opportunities and Options Assessment



7. REFERENCES

- Bruce Mactier Building Designers. (2006, May). "Numurkah Church" Proposed extension to 52 Wattle Drive Numurkah, VIC 3630 - Site Plan.
- ▶ EarthTech. (2006, August). Development Plan, Numurkah, Moira Shire Council.
- ▶ EPA Victoria. (2021). Urban Stormwater Management Guidance. EPA Victoria.
- Local Government Infrastructure Design Association . (2020). Infrastructure Design Manual.
- ▶ Melbourne Water. (2018). MUSIC Modelling Guidelines.
- Melbourne Water. (2020). Wetland Design Manual.
- Sinclair Knight Merz. (1998, July). Urban Drainage Strategy, Township of Numurkah.
- ▶ Spiire. (2022, March 2). Lake Numurkah Analysis and Opportunities Community Consultation.
- Stormy Water Solutions. (2020). Drainage Analysis Numurkah.
- Water Technology. (2017). Numurkah Floodplain Management Study and Plan Study Report.
 Water Technology.

ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

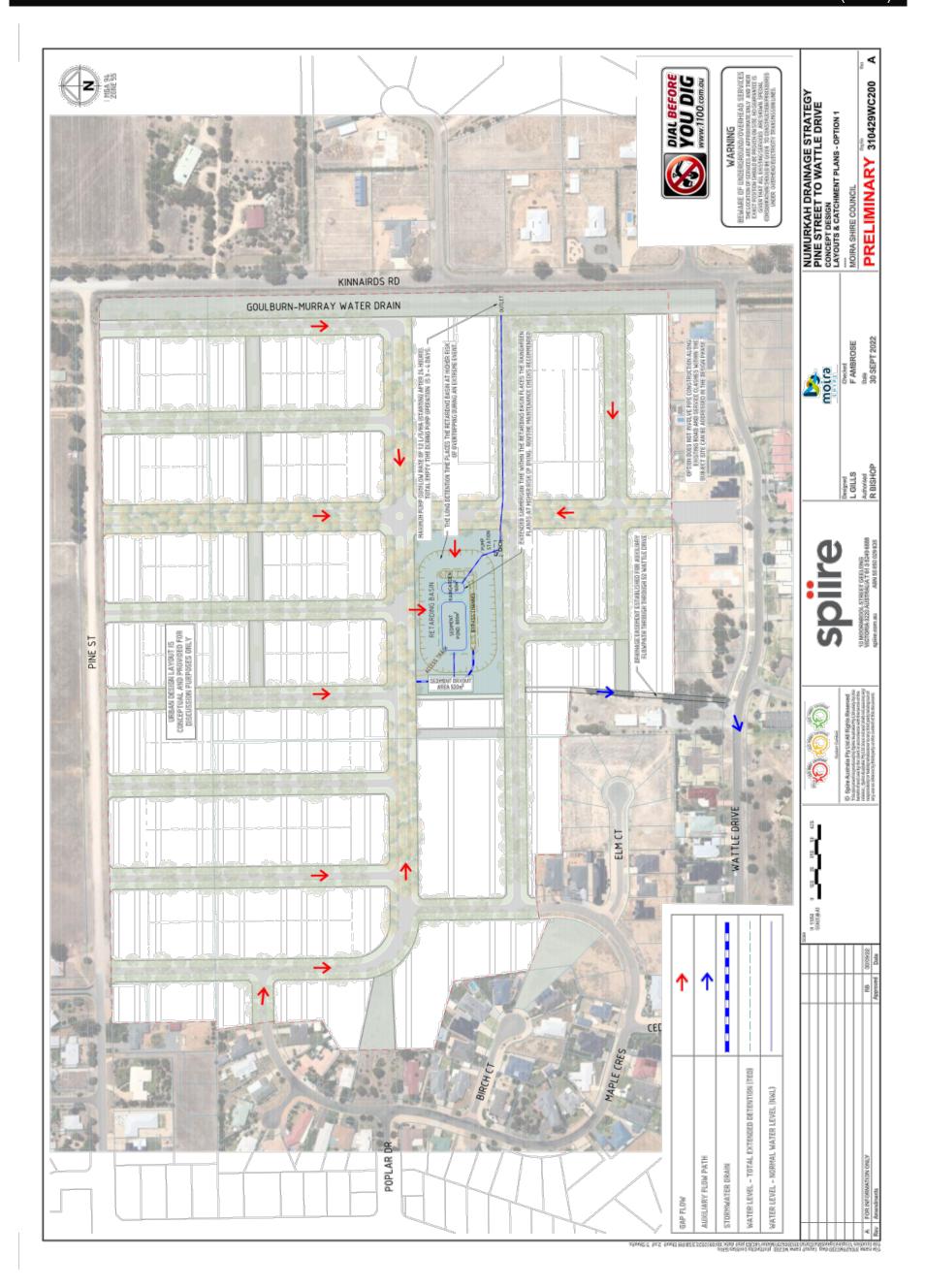
DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [4] - Opportunities and Options Assessment

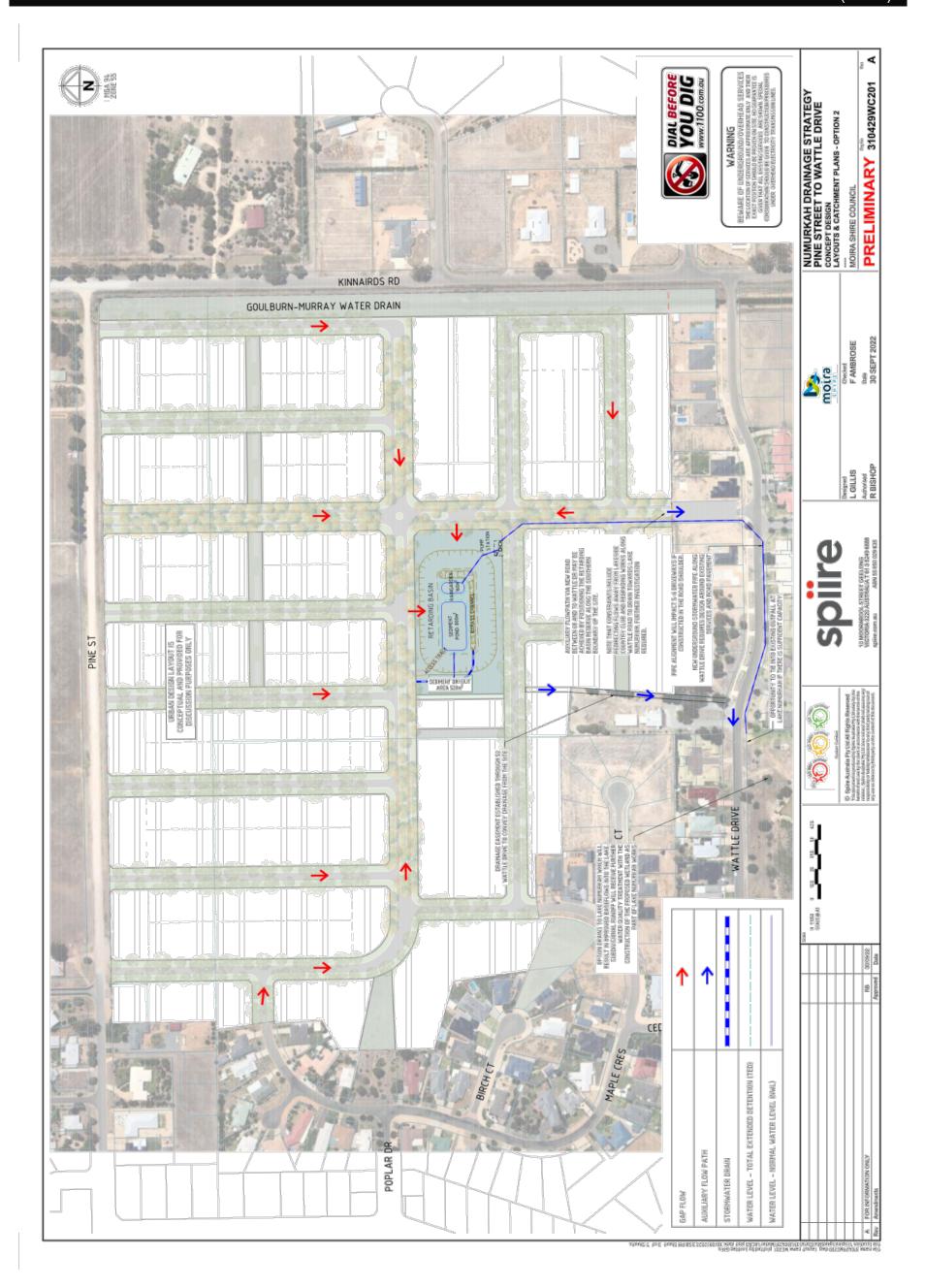


APPENDIX A: CONCEPTUAL DRAINAGE STRATEGY OPTIONS

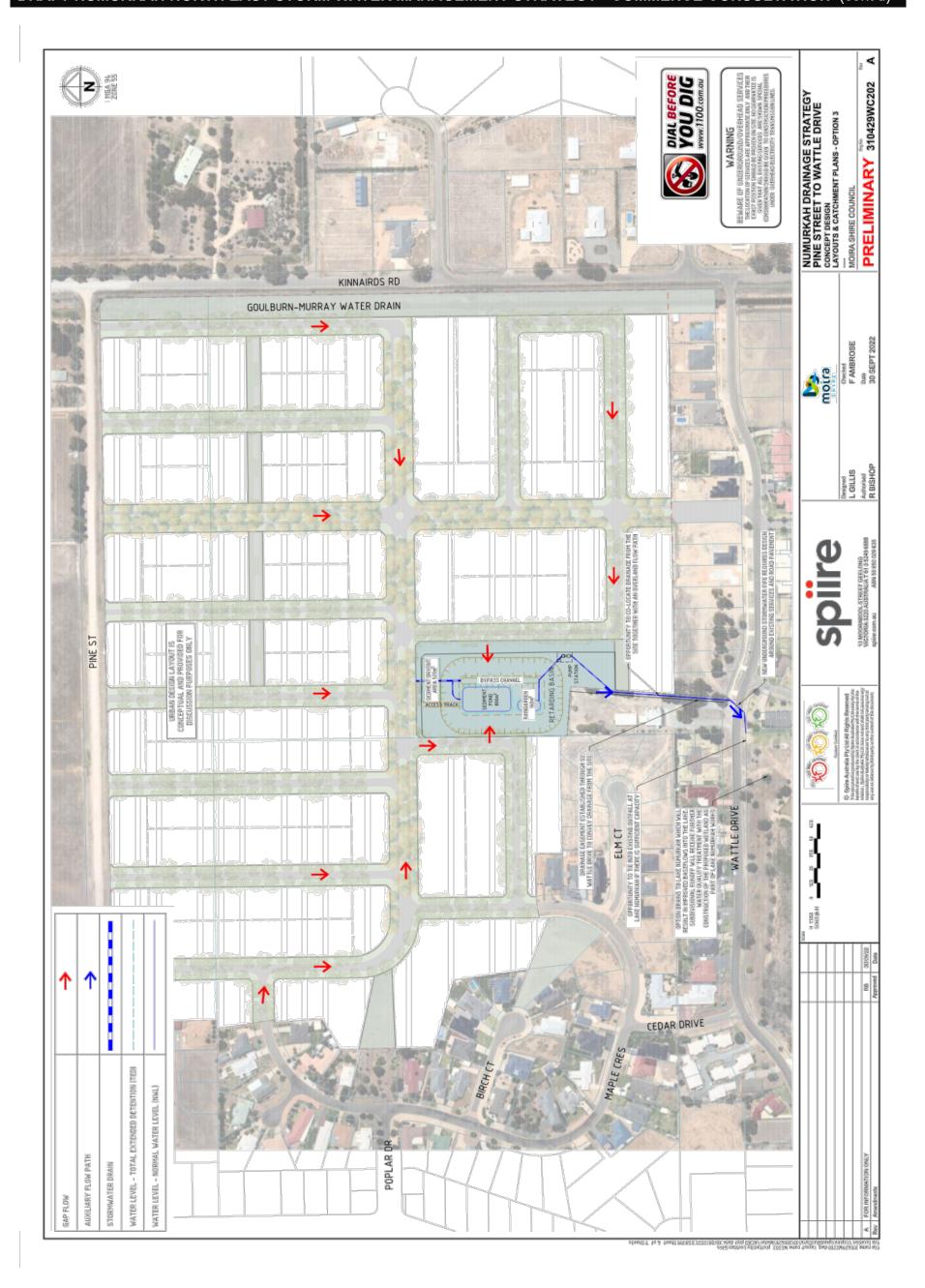
ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)



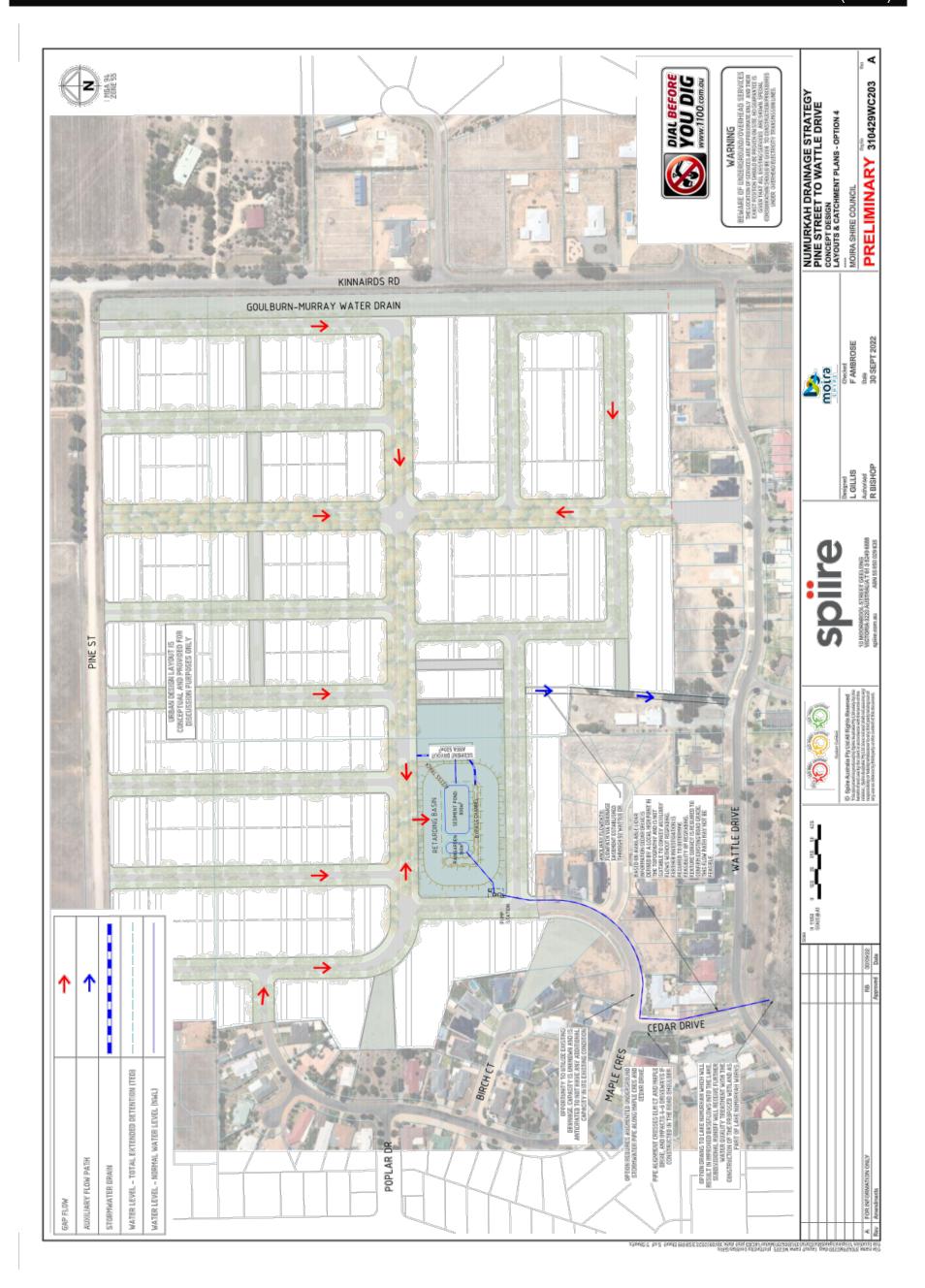
ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)



ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY) (DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)



ITEM NO: 9.4.2
(PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY)
(DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)



ITEM NO: 9.4.2 (PROJECT MANAGER, CONSTRUCTION AND ASSETS, PAUL DIFFEY)

(DIRECTOR INFRASTRUCTURE, JUSTIN HANRAHAN)

DRAFT NUMURKAH NORTH EAST STORM WATER MANAGEMENT STRATEGY - COMMENCE CONSULTATION (cont'd)

ATTACHMENT No [5] - Numurkah NE Urban Design



	AREA (Ha)	% CD Area
ETE ADEA (normits areas 2 & 2 combined)	24.33	
one Anch (permit areas 2 & 3 compined)	57.17	
Gross Developable Area	21.23	
OPENSPACE		
Public Open Space (unencumbered)	1.05	4 95
Onen Space for drainage and water treatment		
(encumbered)	1.8	8.48
NET DEVELOPABLE AREA		
roads	5.62	26.48
net residential area	12.76	60.09
	D G	
NUMURKAH DEVELOPMENT ANALYSIS:	AREA (Ha)	% GD Area
SITE AREA (permit area 2)	6.73	
Gross Developable Area	6.73	
OPENSPACE		
Public Open Space (unencumbered)	0.33	4.90
Open Space for drainage and water treatment		
(encumbered)	6.0	13.37
NET DEVELOPABLE AREA		
roads	1.74	25.80
net residential area	3.76	55.92
	_	
NUMURKAH DEVELOPMENI ANALYSIS:	AREA (Ha)	% GD Area
SITE AREA (permit area 3)	14.5	
Gross Developable Area	14.5	
OPEN SPACE		
Public Open Space (unencumbered)	0.72	4.97
Open Space for drainage and water treatment		
(encumbered)	6.0	6.21
NET DEVELOPABLE AREA		
roads	3.89	26.80
not recidential area	900	60 60

FILE NO:

5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE

ITEM NO: 10.1.1

(CHIEF EXECUTIVE OFFICER, MATTHEW

MORGAN)

(CHIEF EXECUTIVE OFFICER, MATTHEW MORGAN)

YARRAWONGA PRIMARY SCHOOL SITE

Recommendation

That Council note the update on progress with regards to the negotiations for acquisition of the former Yarrawonga Primary School site.

1. Executive Summary

Since 2019, Council has on several occasions considered the prospect of acquiring the former Yarrawonga Primary School Site located at 2 Tom Street Yarrawonga. The most recent resolution of Council on the matter (which was made publicly available) was from 25 March 2020 in which the Council determined to respond to a first right or refusal process with the state government to acquire the site.

In recent months, Council has progressed constructive talks with the state government about the prospect of Council acquiring the site under this process, including a meeting between Council Administrators Graeme Emonson and Suzanna Sheed and the Assistant Treasurer Danny Pearson on 20 June 2024.

Given the conservative estimates of approximately \$5M of investment required to make good the site and buildings for occupancy, it is critical that Council does two things through this process:

- That it secures the site on the most advantageous terms possible, noting that the intention of securing the site is for community purposes, and
- That it identifies potential future users and their capacity to invest/co-invest in the renewal and ongoing upkeep of the site.

Once Council has an acceptable agreement with the state government regarding the acquisition of the site, it is recommended that Council undertake a master plan for the site considering the heritage elements and the need for a conservation management plan, along with an expression of interest process to identify potential future users of the site.

Council will also need to undertake public consultation on the proposed acquisition prior the finalisation of the acquisition, in accordance with section 112 of the Local Government Act 2020.

2. Conflict of interest declaration

There are no conflicts to declare.

3. Background & Context

Since the closure of the school on site (relocation to a new site facilitated by a land transfer from Council) in 2018, there has been demonstrated interest from various community groups in securing the site for community use.

As well as the old school buildings, the site is home to the former Yarrawonga courthouse and the former Yarrawonga fire station.

The community interest in the site is twofold, in the sense of the social value of the site to the community, which is represented by various heritage listings at both state and local level as well

FILE NO: 5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE ITEM NO: 10.1.1 (CHIEF EXECUTIVE OFFICER, MATTHEW MORGAN) (CHIEF EXECUTIVE OFFICER, MATTHEW MORGAN)

YARRAWONGA PRIMARY SCHOOL SITE (cont'd)

as the practical need for additional space for community groups and organisations within Yarrawonga.

Council has been approached by the numerous community groups who have expressed a strong desire to secure the site since 2018 which has included a petition with over 1,000 signatures and various presentations to Council suggesting future uses of the site ranging from an adult education hub, to visitor services, to arts hub, to community centre through to passive recreation and play spaces as just some of the examples.

On the basis of this community interest, Council has committed to and is well underway with negotiations with the state government to secure the site for community use into the future.

4. Issues

The primary issue to consider in this matter is balancing the opportunistic acquisition of a strategic site in the middle of Yarrawonga for community purposes with the reality of the capital and recurrent financial commitments that Council will need to make to secure, renew and maintain the site

There are also heritage considerations at the site, both of state and local significance and it is likely that a conservation management plan will need to be developed for the site in conjunction with a master plan to ensure that future use, refurbishment and development is complimentary to the social value of the site and buildings.

The current state of buildings on site is a concern, and although estimates for refurbishment (renewal) of the buildings were completed for Council in 2021 by an independent engineer after a site inspection, a complete structural assessment was not undertaken. The estimates at that time were in the vicinity of \$3.3M without consideration for unseen damage, asbestos removal or heritage specific restoration.

Council has commissioned a structural assessment of the buildings and is awaiting the results of that assessment, however it is likely that the cost for refurbishment will be in excess of \$5M, not including any major redesign or structural changes to the existing buildings.

The various buildings and structures have fallen into disrepair with the preliminary results of the onsite engineering inspection and assessment revealed several things:

- Natural deterioration of the buildings
- Considerable structural damage due to water ingress, rising damp and pest infestations
- Presence of asbestos throughout many of the buildings
- A large amount of vandalism including illegal salvage of electrical wire (copper) throughout the buildings, damage to doors, windows and roofing.

In simple terms, the site has deteriorated significantly since closing in 2018 and requires significant investment to make the buildings serviceable.

There is opportunity through dialogue with the community to explore potential future users of the site and the ability for community investment into the site that will ensure that the site is utilised and maintained into the future with minimal impact on Councils already heavily constrained long term financial position. In order to achieve this, both Council and community need to be fully

FILE NO:
5. TRANSPARENT AND ACCOUNTABLE
GOVERNANCE

ITEM NO: 10.1.1 (CHIEF EXECUTIVE OFFICER, MATTHEW MORGAN) (CHIEF EXECUTIVE OFFICER, MATTHEW MORGAN)

YARRAWONGA PRIMARY SCHOOL SITE (cont'd)

aware of the level of investment required to make good the site and to repurpose it for the future.

5. Strategic Alignment

Council Plan

5. Transparent and accountable governance

- Our decisions will be evidence-based, financially viable, and for the longer term.
- We will communicate effectively, Council's role, capacity and achievements.
- We responsibly manage our business, health, and safety risks
- We will be transparent, inclusive, responsive and accessible when engaging with the community

6. Budget / Financial Considerations

There are no financial implications arising directly from this report.

There are however a range of considerable direct and indirect costs associated with the acquisition of the site, including the acquisition and associated costs, costs associated with planning considerations, master planning and conservation management plans, as well as the infrastructure investment required to make good the site to a serviceable condition at a minimum.

There would also be the requirement for Council to consider and incorporate into the long term financial plan both the capital and operating costs involved in maintaining the site into the future.

Any financial implications relating to the potential acquisition of the former primary school site will be presented and considered at such time that the Council makes a final determination on acquisition arrangements for the site.

7. Conclusion

There is an opportunity to acquire the former Yarrawonga Primary School site for future community use, however this requires further exploration of opportunities for co-investment into the refurbishment of the site and buildings, development of a master plan and conservation management plan and identification of future users.

It also requires development of an acceptable agreement between the state and Council as to how the land is made available for community purposes, whether by purchase, lease or dedication.

Once an acceptable agreement is in conditionally in place, Council will be able to commence further consultation with the community about the acquisition and future use of the site. It is expected that a further report with next steps will be brought to Council in August 2024.

Attachments

Nil

FILE NO: 5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE ITEM NO: 10.2.1 (PROCUREMENT COORDINATOR, LISA KNIGHT) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

CONTRACTS AWARDED UNDER DELEGATION REPORT

Recommendation

That Council note the quarterly report for contracts awarded under CEO delegation for the period 1 April 2024 – 30 June 2024.

1. Executive Summary

Council's *Instrument of Delegation to the Chief Executive Officer* was adopted on 27 October 2021 which provides a delegation to the Chief Executive Officer (CEO) to award contracts up to the value of \$350,000. This delegation was updated to \$500,000 (exc. GST) during the Council meeting held on 27 March 2024.

This report lists all contracts awarded under the CEO delegation for the period 1 April 2024 – 30 June 2024.

2. Conflict of interest declaration

There is no officer conflict of interest considerations.

3. Background & Context

In accordance with Section 108 of the *Local Government Act 2020*, Council adopted a Procurement Policy ('Policy') on 27 October 2021. One of the Policy's objectives is to achieve an outcome of 'high standards of probity, transparency, accountability and risk management'.

Council's Instrument of Delegation to the Chief Executive Officer, adopted on 27 October 2021, confirms a delegation to the CEO to award contracts up to the value of \$350,000 (exc. GST). This delegation was updated to \$500,000 (exc. GST) during the Council meeting held on 27 March 2024. As purchases between \$150,001 - \$500,000 (exc. GST) must be approved by the CEO, this report highlights contracts awarded within this delegation threshold.

Under Appendix A of the Policy, purchases between \$150,001 - \$350,000 (exc. GST) must follow an advertised Request for Quote (RFQ) process unless an eligible procurement exemption applies.

The below table lists the contracts awarded under delegation between 1 April 2024 – 30 June 2024.

Contract Number	Contract Title	Contract Value ex GST	Awarded To
C001/24	Watermain Replacement - Harcourt Street, Nathalia	\$207,721.64	Jarvis Delahey Contractors P/L
C007/24	Shoulder Re-sheet - Carmichaels Road, Bundalong	\$439,998.00	Bild Infrastructure P/L
C010/24	Supply and Delivery of Outdoor Uniforms	\$150,000.00	ST & JA Kennedy Family Trust t/a Worklocker Cobram
C012/24	Preparation of an Economic Development Strategy	\$89,120.00	Charter Keck Cramer P/L
C013/24	Retention Basin Upgrade - Paterson Street, Numurkah	\$194,236.00	BR Excavations P/L

FILE NO: 5. TRANSPARENT AND ACCOUNTABLE GOVERNANCE ITEM NO: 10.2.1 (PROCUREMENT COORDINATOR, LISA KNIGHT) (ACTING DIRECTOR CORPORATE PERFORMANCE EVA SALIB)

CONTRACTS AWARDED UNDER DELEGATION REPORT (cont'd)

Contract Number	Contract Title	Contract Value ex GST	Awarded To
C015/24	Toilet Renewal Program - Waaia Recreation Reserve	\$267,000.00	Envirodome P/L
C020/24	Supply and Delivery of 8 Litre Compostable Bags	\$96,590.00	Cardia Bioplastics P/L

4. Issues

No issues were raised within the contracts awarded under delegation.

5. Strategic Alignment

Council Plan

5. Transparent and accountable governance

This report details the advertised RFQs that have been awarded or renewed under delegated authority. Under the Strategic Objective Pillar 5, communicating decisions made under delegation allows for greater transparency.

6. Internal & External Engagement

Internal and External Consultation was not required.

7. Budget / Financial Considerations

All contracts had budget allocation to fund the works as detailed in Council's approved budget.

8. Risk & Mitigation

The Procurement Policy provides guidance to the entire organisation on procurement practices that set a tone for a framework that upholds accountability and transparency. The policy is therefore a critical component of Council's overall risk management framework.

The Instrument of Delegation to the Chief Executive Officer supports Council's management of business risk and commitment to good governance.

9. Conclusion

This report details the contracts awarded under the CEO delegation for the period 1 April 2024 – 30 June 2024.

Attachments

Nil

FILE NO: VARIOUS	ITEM NO: 15

URGENT BUSINESS

7.4. Urgent Business

- (1) If the Agenda for a Meeting makes provision for urgent business, business cannot be admitted as Urgent Business other than by resolution of Council and only then if:
- (a) It relates to or arises out of a matter which has arisen since distribution of the Agenda; and
- (b) deferring the item until the next Meeting will mean a decision on the item will not have any effect on the matter; or
- (c) the item involves a matter of urgency as determined by the Chief Executive Officer; and
- (d) it cannot be addressed through an operational service request process.
- (e) the matter does not:
 - substantially affect the levels of Council service;
 - commit Council to significant expenditure not included in the adopted budget;
 - establish or amend Council Policy; or
 - commit Council to any contractual arrangement.
- (2) A Councillor proposing a matter be admitted as urgent business must lodge it in writing to

the Chief Executive Officer four (4) hours prior to the Meeting.

(3) The Chief Executive Officer will advise the Mayor of any matter he or she determines appropriate for Council to consider admitting as urgent business.

Moira Shire Council Page 206 of 206